M S Ramaiah College of Arts, Science and Commerce

Bengaluru

COURSE BOOK

Period of the Semester : **From** 8 May 2023 **To** 14 Aug 2023

Dept-Sem-Sec: B.Com-2-B

Subject with Code: ADVANCED FINANCIAL ACCOUNTING (B.COM.2.1)

Time Slot

MON: 10:30 - 11:30	**TUE :** 11:40 - 12:40	**WED:**
THU : 13:30 - 14:30	**FRI :** 09:30 - 10:30	**SAT :**

Name of the Teacher : Mrs Roopa H S

Lesson Plan & Execution

Name of the Faculty	***Mrs Roopa H S***
Dept-Sem-Sec	***B.Com-2-B***
Date of Commencement	***8 May 2023***
Last Working Day of Semester	***14 Aug 2023***

Source Material List

REF 1	S.N. Maheshwari, and. S. K. Maheshwari. Financial Accounting. Vikas Publishing House, New Delhi, 6thEdition.
REF 2	B.S. Raman (2008), Financial Accounting Vol. I & II, United Publishers & Distributors
REF 3	S.Anil Kumar, V.Rajesh Kumar and B.MariyappaFinancial Accounting, Himalaya Publishing House, New Delhi
REF 4	SP Iyengar (2005), Advanced Accounting, Sultan Chand & Sons, Vol.1.
REF 5	Robert N Anthony, David Hawkins, Kenneth A. Merchant, (2017) Accounting: Text and Cases, McGraw,Hill Education, 13thEdition.
REF 6	Charles T. Horngren and Donna Philbrick, (2013) Introduction to Financial Accounting, Pearson Education, 11thEdition.
REF 7	J.R. Monga, Financial Accounting: Concepts and Applications. Mayur Paper Backs, New Delhi, 32ndEdition.

Course Outcome List

1	Understand & compute the amount of claims for loss of stock & loss of Profit.
2	Learn various methods of accounting for hire purchase transactions.

3	Deal with the inter,departmental transfers and their accounting treatment.
4	Prepare financial statements from incomplete records.
5	Outline the emerging trends in the field of accounting
0	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
Module 1								
1	P	8 May 2023	Meaning				Lecture	
1	E	8 May 2023	Meaning	REF 3	CO 1	REMEMBER	Lecture	1 Min Question
2	P	9 May 2023	Need and Advantages of Fire Insurance				Lecture	
2	E	9 May 2023	Need and Advantages of Fire Insurance	REF 3	CO 1	REMEMBER	Lecture	1 Min Question
3	P	11 May 2023	Special terminologies in Fire Insurance ClaimsInsurer				Lecture	
3	E	11 May 2023	Special terminologies in Fire Insurance ClaimsInsurer	REF 3	CO 1	REMEMBER	Lecture	1 Min Question
4	P	12 May 2023	Insured				Lecture	
4	E	12 May 2023	Insured	REF 3	CO 1	REMEMBER	Lecture	1 Min Question
5	P	13 May 2023	Premium, Salvage, Special terminologies in Fire Insurance ClaimsInsurer	REF 3	CO 1	REMEMBER	Lecture	1 Min Question
5	E	13 May 2023	Premium, Salvage, Special terminologies in Fire Insurance ClaimsInsurer	REF 3	CO 1	REMEMBER	Lecture	1 Min Question
6	P	15 May 2023	Premium				Lecture	
6	E	15 May 2023	Premium, Problems	REF 3	CO 1	APPLY	Lecture	Assignment
7	P	16 May 2023	Salvage				Lecture	
7	E	16 May 2023	Salvage, Problems	REF 3	CO 1	APPLY	Lecture	1 Min Question
8	P	18 May 2023	Insurance Policy				Lecture	
8	E	19 May 2023	Insurance Policy	REF 3	CO 1	APPLY	Lecture	1 Min Question
9	P	18 May 2023	Problems	REF 3	CO 1	APPLY	Lecture	1 Min Question
9	E							
10	P	19 May 2023	Sum Assured				Lecture	
10	E	19 May 2023	Sum Assured, Problems	REF 3	CO 1	APPLY	Lecture	1 Min Question
11	P	22 May 2023	Under Insurance				Lecture	
11	E	22 May 2023	Under Insurance	REF 3	CO 1	APPLY	Lecture	1 Min Question

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
12	P	23 May 2023	over insurance Average Clause				Lecture	
12	E	23 May 2023	over insurance Average Clause	REF 3	CO 1	ANALYZE	Lecture	Open Debate
13	P	25 May 2023	Claim. Problems on Ascertainment of Fire Insurance Claim including problems on abnormal line of goods				Lecture	
13	E	25 May 2023	Claim. Problems on Ascertainment of Fire Insurance Claim including problems on abnormal line of goods	REF 3	CO 1	ANALYZE	Lecture	1 Min Question
14	P	26 May 2023	Problems				Lecture	
14	E	26 May 2023	Problems	REF 3	CO 1	ANALYZE	Lecture	1 Min Question
15	E	29 May 2023	Problems	REF 3	CO 1	EVALUATE	Lecture	Revision
16	E	30 May 2023	Problems, Problems	REF 3	CO 1	EVALUATE	Lecture	Revision
Module 2								
15	P	29 May 2023	Meaning of Hire Purchase and Installment Purchase System				Lecture	
17	E	1 Jun 2023	Meaning of Hire Purchase and Installment Purchase System	REF 2	CO 2	REMEMBER	Lecture	
16	P	30 May 2023	Meaning of Hire Purchase and Installment Purchase System				Lecture	
18	E	2 Jun 2023	Meaning of Hire Purchase and Installment Purchase System	REF 3	CO 2	REMEMBER	Lecture	1 Min Question
17	P	1 Jun 2023	Meaning of Hire Purchase and Installment Purchase System				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
19	E	5 Jun 2023	difference between Hire Purchase and Installment PurchaseImportant DefinitionsHire Purchase AgreementHire Purchase PriceCash PriceHire Purchase Charges –Calculation of InterestCalculation of Cash PriceJournal Entries and Ledger Accounts in the books of Hire Purchaser only. (Asset Accrual Method only)	REF 3	CO 2	UNDERSTAND	Lecture	1 Min Question
18	P	2 Jun 2023	Meaning of Hire Purchase and Installment Purchase System				Lecture	
20	E	6 Jun 2023	difference between Hire Purchase and Installment PurchaseImportant DefinitionsHire Purchase AgreementHire Purchase PriceCash PriceHire Purchase Charges –Calculation of InterestCalculation of Cash PriceJournal Entries and Ledger Accounts in the books of Hire Purchaser only. (Asset Accrual Method only)	REF 3	CO 2	ANALYZE	Lecture	1 Min Question

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
19	P	5 Jun 2023	difference between Hire Purchase and Installment PurchaseImportant DefinitionsHire Purchase AgreementHire Purchase PriceCash PriceHire Purchase Charges –Calculation of InterestCalculation of Cash PriceJournal Entries and Ledger Accounts in the books of Hire Purchaser only. (Asset Accrual Method only)				Lecture	
21	E	8 Jun 2023	difference between Hire Purchase and Installment PurchaseImportant DefinitionsHire Purchase AgreementHire Purchase PriceCash PriceHire Purchase Charges –Calculation of InterestCalculation of Cash PriceJournal Entries and Ledger Accounts in the books of Hire Purchaser only. (Asset Accrual Method only)	REF 3	CO 2	UNDERSTAND	Lecture	1 Min Question

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
20	P	6 Jun 2023	difference between Hire Purchase and Installment PurchaseImportant DefinitionsHire Purchase AgreementHire Purchase PriceCash PriceHire Purchase Charges –Calculation of InterestCalculation of Cash PriceJournal Entries and Ledger Accounts in the books of Hire Purchaser only. (Asset Accrual Method only)				Lecture	
22	E	9 Jun 2023	difference between Hire Purchase and Installment PurchaseImportant DefinitionsHire Purchase AgreementHire Purchase PriceCash PriceHire Purchase Charges –Calculation of InterestCalculation of Cash PriceJournal Entries and Ledger Accounts in the books of Hire Purchaser only. (Asset Accrual Method only)	REF 3	CO 2	UNDERSTAND	Lecture	1 Min Question

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
21	P	8 Jun 2023	difference between Hire Purchase and Installment PurchaseImportant DefinitionsHire Purchase AgreementHire Purchase PriceCash PriceHire Purchase Charges –Calculation of InterestCalculation of Cash PriceJournal Entries and Ledger Accounts in the books of Hire Purchaser only. (Asset Accrual Method only)				Lecture	
23	E	12 Jun 2023	Problems	REF 3	CO 2	APPLY	Lecture	1 Min Question
22	P	9 Jun 2023	difference between Hire Purchase and Installment PurchaseImportant DefinitionsHire Purchase AgreementHire Purchase PriceCash PriceHire Purchase Charges –Calculation of InterestCalculation of Cash PriceJournal Entries and Ledger Accounts in the books of Hire Purchaser only. (Asset Accrual Method only)				Lecture	
24	E	13 Jun 2023	Problems	REF 3	CO 2	APPLY	Lecture	1 Min Question
23	P	12 Jun 2023	Problems				Lecture	
25	E	15 Jun 2023	Problems	REF 3	CO 2	APPLY	Lecture	1 Min Question
24	P	13 Jun 2023	Problems				Lecture	
26	E	16 Jun 2023	Problems	REF 3	CO 2	APPLY	Lecture	1 Min Question
25	P	15 Jun 2023	Problems				Lecture	
27	E	19 Jun 2023	Meaning and Features of Departmental Undertaking, Problems	REF 3		EVALUATE	Lecture	Assignment
26	P	16 Jun 2023	Problems				Lecture	
28	E	20 Jun 2023	Problems	REF 3	CO 2	ANALYZE	Lecture	1 Min Question
29	E	22 Jun 2023	Problems	REF 3	CO 2	ANALYZE	Lecture	1 Min Question
30	E	23 Jun 2023	Problems	REF 3	CO 2	ANALYZE	Lecture	1 Min Question
31	E	26 Jun 2023	Problems	REF 3	CO 2	APPLY	Lecture	1 Min Question

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
32	E	27 Jun 2023	Problems	REF 3	CO 2	APPLY	Lecture	Assignment
33	E	30 Jun 2023	Problems	REF 3	CO 2	APPLY	Lecture	Assignment
34	E	3 Jul 2023	Problems	REF 3	CO 2	ANALYZE	Lecture	1 Min Question
35	E	4 Jul 2023	Problems	REF 3	CO 2	APPLY	Lecture	Assignment
Module 3								
27	P	19 Jun 2023	Meaning and Features of Departmental Undertaking				Lecture	
36	E	6 Jul 2023	Meaning and Features of Departmental Undertaking	REF 3	CO 3	REMEMBER	Lecture	1 Min Question
28	P	20 Jun 2023	Meaning and Features of Departmental Undertaking				Lecture	
37	E	7 Jul 2023	Problems	REF 3	CO 3	UNDERSTAND	Lecture	1 Min Question
29	P	22 Jun 2023	Examples of Department Specific Expenses and Common Expenses				Lecture	
38	E	10 Jul 2023	Problems	REF 3	CO 3	ANALYZE	Lecture	1 Min Question
30	P	23 Jun 2023	Examples of Department Specific Expenses and Common Expenses				Lecture	
39	E	11 Jul 2023	Single entry system, Problems	REF 3	CO 3	ANALYZE	Lecture	1 Min Question
31	P	26 Jun 2023	Need and Bases of Apportionment of Common Expenses				Lecture	
40	E	13 Jul 2023	Single entry system, Problems	REF 3	CO 3	APPLY	Lecture	1 Min Question
32	P	27 Jun 2023	Need and Bases of Apportionment of Common Expenses				Lecture	
41	E	14 Jul 2023	Single entry system, Problems	REF 3	CO 3	APPLY	Lecture	1 Min Question
33	P	30 Jun 2023	Preparation of Statement of Trading and Profit and Loss in Columnar form				Lecture	
42	E	17 Jul 2023	Single entry system, Problems	REF 3	CO 3	APPLY	Lecture	1 Min Question

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
34	P	3 Jul 2023	Preparation of Statement of Trading and Profit and Loss in Columnar form				Lecture	
43	E	18 Jul 2023	Problems	REF 3	CO 3	ANALYZE	Lecture	1 Min Question
35	P	4 Jul 2023	Statement of General Profit and Loss and Balance SheetSimple problems involving Inter Departmental Transfers at Cost Price (vertical form)				Lecture	
36	P	6 Jul 2023	Statement of General Profit and Loss and Balance SheetSimple problems involving Inter Departmental Transfers at Cost Price (vertical form)				Lecture	
37	P	7 Jul 2023	Problems				Lecture	
38	P	10 Jul 2023	Problems				Lecture	
Module 4								
39	P	11 Jul 2023	Single entry system				Lecture	

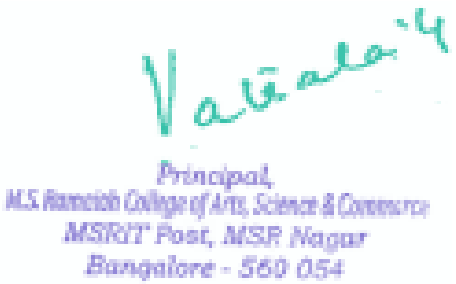
Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
44	E	20 Jul 2023	MeaningFeaturesMeritsDemeritsTypes. Conversion into Double Entry systemNeed for ConversionPreparation of Statement of AffairsCash bookMemorandum Trading AccountTotal Debtors AccountTotal Creditors AccountBills Receivable AccountBills Payable AccountStatement of Trading and Profit & Loss and Balance Sheet	REF 3	CO 4	ANALYZE	Lecture	1 Min Question
40	P	13 Jul 2023	Single entry system				Lecture	
45	E	21 Jul 2023	MeaningFeaturesMeritsDemeritsTypes. Conversion into Double Entry systemNeed for ConversionPreparation of Statement of AffairsCash bookMemorandum Trading AccountTotal Debtors AccountTotal Creditors AccountBills Receivable AccountBills Payable AccountStatement of Trading and Profit & Loss and Balance Sheet	REF 3	CO 4	ANALYZE	Lecture	1 Min Question
41	P	14 Jul 2023	Single entry system				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
46	E	24 Jul 2023	MeaningFeaturesMeritsDemeritsTypes. Conversion into Double Entry systemNeed for ConversionPreparation of Statement of AffairsCash bookMemorandum Trading AccountTotal Debtors AccountTotal Creditors AccountBills Receivable AccountBills Payable AccountStatement of Trading and Profit & Loss and Balance Sheet	REF 3	CO 4	ANALYZE	Lecture	1 Min Question
42	P	17 Jul 2023	Single entry system				Lecture	
47	E	25 Jul 2023	Problems	REF 3	CO 4	APPLY	Lecture	1 Min Question
43	P	18 Jul 2023	MeaningFeaturesMeritsDemeritsTypes. Conversion into Double Entry systemNeed for ConversionPreparation of Statement of AffairsCash bookMemorandum Trading AccountTotal Debtors AccountTotal Creditors AccountBills Receivable AccountBills Payable AccountStatement of Trading and Profit & Loss and Balance Sheet				Lecture	
48	E	27 Jul 2023	Problems	REF 3	CO 4	EVALUATE	Lecture	1 Min Question

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
44	P	20 Jul 2023	MeaningFeaturesMeritsDemeritsTypes. Conversion into Double Entry systemNeed for ConversionPreparation of Statement of AffairsCash bookMemorandum Trading AccountTotal Debtors AccountTotal Creditors AccountBills Receivable AccountBills Payable AccountStatement of Trading and Profit & Loss and Balance Sheet				Lecture	
49	E	28 Jul 2023	Problems	REF 3	CO 4	ANALYZE	Lecture	1 Min Question
45	P	21 Jul 2023	MeaningFeaturesMeritsDemeritsTypes. Conversion into Double Entry systemNeed for ConversionPreparation of Statement of AffairsCash bookMemorandum Trading AccountTotal Debtors AccountTotal Creditors AccountBills Receivable AccountBills Payable AccountStatement of Trading and Profit & Loss and Balance Sheet				Lecture	
50	E	31 Jul 2023	Problems	REF 3	CO 4	EVALUATE	Lecture	1 Min Question

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
46	P	24 Jul 2023	MeaningFeaturesMeritsDemeritsTypes. Conversion into Double Entry systemNeed for ConversionPreparation of Statement of AffairsCash bookMemorandum Trading AccountTotal Debtors AccountTotal Creditors AccountBills Receivable AccountBills Payable AccountStatement of Trading and Profit & Loss and Balance Sheet				Lecture	
51	E	1 Aug 2023	Digital transformation of AccountingBig Data Analytics in Accounting, Problems	REF 3	CO 4	EVALUATE	Lecture	Revision
47	P	25 Jul 2023	Problems				Lecture	
52	E	3 Aug 2023	Digital transformation of AccountingBig Data Analytics in Accounting, Problems	REF 3	CO 4	EVALUATE	Lecture	1 Min Question
48	P	27 Jul 2023	Problems				Lecture	
53	E	4 Aug 2023	Problems	REF 3	CO 4	UNDERSTAND	Lecture	1 Min Question
49	P	28 Jul 2023	Problems				Lecture	
50	P	31 Jul 2023	Problems				Lecture	
Module 5								
51	P	1 Aug 2023	Digital transformation of AccountingBig Data Analytics in Accounting				Lecture	
54	E	7 Aug 2023	Cloud Computing in accounting	REF 3	CO 5	ANALYZE	Lecture	1 Min Question
52	P	3 Aug 2023	Digital transformation of AccountingBig Data Analytics in Accounting				Lecture	
55	E	8 Aug 2023	Green Accounting	REF 3	CO 5	ANALYZE	Lecture	1 Min Question
53	P	4 Aug 2023	Cloud Computing in accounting				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
56	E	10 Aug 2023	Human Resource Accounting	REF 3	CO 5	ANALYZE	Lecture	1 Min Question
54	P	7 Aug 2023	Cloud Computing in accounting				Lecture	
57	E	11 Aug 2023	Inflation Accounting	REF 3	CO 5	ANALYZE	Lecture	1 Min Question
55	P	8 Aug 2023	Green Accounting				Lecture	
58	E	14 Aug 2023	Database Accounting (Meaning and Features only)	REF 3	CO 5	ANALYZE	Lecture	1 Min Question
56	P	10 Aug 2023	Human Resource Accounting				Lecture	
57	P	11 Aug 2023	Inflation Accounting				Lecture	
58	P	14 Aug 2023	Database Accounting (Meaning and Features only)				Lecture	



M S Ramaiah College of Arts, Science and Commerce

Bengaluru

COURSE BOOK

Period of the Semester : **From** 8 May 2023 **To** 14 Aug 2023

Dept-Sem-Sec: B.Com-2-C

Subject with Code: ADVANCED FINANCIAL ACCOUNTING (B.COM.2.1)

Time Slot

MON: 13:30 - 14:30	**TUE :**	**WED:** 09:30 - 10:30
THU :	**FRI :** 11:40 - 12:40	**SAT :** 09:30 - 10:30

Name of the Teacher : Mrs Roopa H S

Lesson Plan & Execution

Name of the Faculty	***Mrs Roopa H S***
Dept-Sem-Sec	***B.Com-2-C***
Date of Commencement	***8 May 2023***
Last Working Day of Semester	***14 Aug 2023***

Source Material List

REF 1	S.N. Maheshwari, and. S. K. Maheshwari. Financial Accounting. Vikas Publishing House, New Delhi, 6thEdition.
LINK 1	Hire Purchase System
REF 2	B.S. Raman (2008), Financial Accounting Vol. I & II, United Publishers & Distributors
LINK 2	Hire Purchase System
REF 3	S.Anil Kumar, V.Rajesh Kumar and B.MariyappaFinancial Accounting, Himalaya Publishing House, New Delhi
REF 4	SP Iyengar (2005), Advanced Accounting, Sultan Chand & Sons, Vol.1.
REF 5	Robert N Anthony, David Hawkins, Kenneth A. Merchant, (2017) Accounting: Text and Cases, McGraw,Hill Education, 13thEdition.
REF 6	Charles T. Horngren and Donna Philbrick, (2013) Introduction to Financial Accounting, Pearson Education, 11thEdition.
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Course Outcome List

1	Understand & compute the amount of claims for loss of stock & loss of Profit.
2	Learn various methods of accounting for hire purchase transactions.
3	Deal with the inter,departmental transfers and their accounting treatment.
4	Prepare financial statements from incomplete records.
5	Outline the emerging trends in the field of accounting
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Module 1								
1	P	8 May 2023	Meaning				Lecture	
1	E	8 May 2023	Meaning	REF 3	CO 1	REMEMBER	Lecture	1 Min Question
2	P	10 May 2023	Need and Advantages of Fire Insurance				Lecture	
2	E							
3	P	11 May 2023	Under Insurance, Sum Assured	REF 3	CO 1	UNDERSTAND	Lecture	1 Min Question
3	E	11 May 2023	Under Insurance, Sum Assured	REF 3	CO 1	UNDERSTAND	Lecture	1 Min Question
4	P	12 May 2023	Special terminologies in Fire Insurance ClaimsInsurer				Lecture	
4	E	12 May 2023	Special terminologies in Fire Insurance ClaimsInsurer	REF 3	CO 1	REMEMBER	Lecture	1 Min Question
5	P	13 May 2023	Insured				Lecture	
5	E	13 May 2023	Insured, Premium, advantages of fire insurance	REF 3	CO 1	REMEMBER	Lecture	1 Min Question
6	P	15 May 2023	Premium				Lecture	
6	E	15 May 2023	Premium	REF 3	CO 1	UNDERSTAND	Lecture	1 Min Question
7	P	17 May 2023	Salvage				Lecture	
7	E	17 May 2023	Salvage	REF 3	CO 1	UNDERSTAND	Lecture	1 Min Question
8	P	19 May 2023	Insurance Policy				Lecture	
8	E	19 May 2023	Insurance Policy, Problems	REF 3	CO 1	APPLY	Lecture	Revision
9	P	20 May 2023	Sum Assured				Lecture	
9	E	20 May 2023	Sum Assured, Problems	REF 3	CO 1	APPLY	Lecture	1 Min Question
10	P	22 May 2023	Under Insurance				Lecture	
10	E	22 May 2023	Under Insurance, Problems	REF 3	CO 1	APPLY	Lecture	Open Debate
11	P	24 May 2023	over insurance Average Clause				Lecture	
11	E	24 May 2023	over insurance Average Clause, Problems	REF 3	CO 1	APPLY	Lecture	1 Min Question

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
12	P	26 May 2023	Claim. Problems on Ascertainment of Fire Insurance Claim including problems on abnormal line of goods				Lecture	
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13	P	27 May 2023	Problems				Lecture	
13	E	27 May 2023	Problems	REF 3	CO 1		Lecture	1 Min Question
15	E	31 May 2023	Problems	REF 3	CO 1	EVALUATE	Lecture	Revision
Module 2								
14	P	29 May 2023	Meaning of Hire Purchase and Installment Purchase System				Lecture	
14	E	29 May 2023	Problems	REF 3	CO 1	EVALUATE	Lecture	1 Min Question
15	P	31 May 2023	Meaning of Hire Purchase and Installment Purchase System				Lecture	
16	E	2 Jun 2023	Meaning of Hire Purchase and Installment Purchase System	REF 3	CO 2	REMEMBER	Lecture	1 Min Question
16	P	2 Jun 2023	Meaning of Hire Purchase and Installment Purchase System				Lecture	
17	E	3 Jun 2023	Meaning of Hire Purchase and Installment Purchase System	REF 3	CO 2	REMEMBER	Lecture	1 Min Question
17	P	3 Jun 2023	Meaning of Hire Purchase and Installment Purchase System				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
18	E	5 Jun 2023	difference between Hire Purchase and Installment PurchaseImportant DefinitionsHire Purchase AgreementHire Purchase PriceCash PriceHire Purchase Charges –Calculation of InterestCalculation of Cash PriceJournal Entries and Ledger Accounts in the books of Hire Purchaser only. (Asset Accrual Method only)	REF 3	CO 2	UNDERSTAND	Lecture	1 Min Question
18	P	5 Jun 2023	difference between Hire Purchase and Installment PurchaseImportant DefinitionsHire Purchase AgreementHire Purchase PriceCash PriceHire Purchase Charges –Calculation of InterestCalculation of Cash PriceJournal Entries and Ledger Accounts in the books of Hire Purchaser only. (Asset Accrual Method only)				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
19	E	7 Jun 2023	difference between Hire Purchase and Installment PurchaseImportant DefinitionsHire Purchase AgreementHire Purchase PriceCash PriceHire Purchase Charges –Calculation of InterestCalculation of Cash PriceJournal Entries and Ledger Accounts in the books of Hire Purchaser only. (Asset Accrual Method only)	REF 3	CO 2	UNDERSTAND	Lecture	1 Min Question
19	P	7 Jun 2023	difference between Hire Purchase and Installment PurchaseImportant DefinitionsHire Purchase AgreementHire Purchase PriceCash PriceHire Purchase Charges –Calculation of InterestCalculation of Cash PriceJournal Entries and Ledger Accounts in the books of Hire Purchaser only. (Asset Accrual Method only)				Lecture	

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20	E	9 Jun 2023	difference between Hire Purchase and Installment PurchaseImportant DefinitionsHire Purchase AgreementHire Purchase PriceCash PriceHire Purchase Charges –Calculation of InterestCalculation of Cash PriceJournal Entries and Ledger Accounts in the books of Hire Purchaser only. (Asset Accrual Method only)	REF 3	CO 2	UNDERSTAND	Lecture	1 Min Question
20	P	9 Jun 2023	difference between Hire Purchase and Installment PurchaseImportant DefinitionsHire Purchase AgreementHire Purchase PriceCash PriceHire Purchase Charges –Calculation of InterestCalculation of Cash PriceJournal Entries and Ledger Accounts in the books of Hire Purchaser only. (Asset Accrual Method only)				Lecture	

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21	E	10 Jun 2023	difference between Hire Purchase and Installment PurchaseImportant DefinitionsHire Purchase AgreementHire Purchase PriceCash PriceHire Purchase Charges –Calculation of InterestCalculation of Cash PriceJournal Entries and Ledger Accounts in the books of Hire Purchaser only. (Asset Accrual Method only)	REF 3	CO 2	APPLY	Lecture	1 Min Question
21	P	10 Jun 2023	difference between Hire Purchase and Installment PurchaseImportant DefinitionsHire Purchase AgreementHire Purchase PriceCash PriceHire Purchase Charges –Calculation of InterestCalculation of Cash PriceJournal Entries and Ledger Accounts in the books of Hire Purchaser only. (Asset Accrual Method only)				Lecture	
22	E	12 Jun 2023	Problems	LINK 1	CO 2	APPLY	Lecture	1 Min Question
22	P	12 Jun 2023	Problems				Lecture	
23	E	14 Jun 2023	Problems	VIDEO 1	CO 2	APPLY	Lecture	1 Min Question
23	P	14 Jun 2023	Problems				Lecture	
24	E	16 Jun 2023	Problems	REF 3	CO 2	APPLY	Lecture	1 Min Question
24	P	16 Jun 2023	Problems				Lecture	
25	E	17 Jun 2023	Problems	REF 3	CO 2	APPLY	Lecture	Assignment
25	P	17 Jun 2023	Problems				Lecture	
26	E	19 Jun 2023	Problems	REF 3	CO 2	APPLY	Lecture	1 Min Question
27	E	21 Jun 2023	Problems	REF 3	CO 2	APPLY	Lecture	1 Min Question
28	E	23 Jun 2023	Problems	REF 3	CO 2	APPLY	Lecture	1 Min Question
29	E	24 Jun 2023	Problems	REF 3	CO 2	APPLY	Lecture	1 Min Question
30	E	26 Jun 2023	Problems	REF 3	CO 2	APPLY	Lecture	1 Min Question
31	E	28 Jun 2023	Problems	REF 3	CO 2	APPLY	Lecture	1 Min Question

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
32	E	30 Jun 2023	Problems	REF 3	CO 2	APPLY	Lecture	1 Min Question
33	E	1 Jul 2023	Problems	REF 3	CO 2	APPLY	Lecture	1 Min Question
34	E	3 Jul 2023	Problems	REF 3	CO 2	APPLY	Lecture	1 Min Question
35	E	5 Jul 2023	Problems	REF 3	CO 2	APPLY	Lecture	1 Min Question
Module 3								
26	P	19 Jun 2023	Meaning and Features of Departmental Undertaking				Lecture	
36	E	7 Jul 2023	Problems	REF 3	CO 4	UNDERSTAND	Lecture	1 Min Question
27	P	21 Jun 2023	Meaning and Features of Departmental Undertaking				Lecture	
37	E	8 Jul 2023	Problems	REF 3	CO 4	EVALUATE	Lecture	1 Min Question
28	P	23 Jun 2023	Examples of Department Specific Expenses and Common Expenses				Lecture	
38	E	10 Jul 2023	Single entry system, Problems		CO 3	EVALUATE	Lecture	1 Min Question
29	P	24 Jun 2023	Examples of Department Specific Expenses and Common Expenses				Lecture	
39	E	12 Jul 2023	Single entry system, Problems	REF 3	CO 3	ANALYZE	Lecture	Assignment
30	P	26 Jun 2023	Need and Bases of Apportionment of Common Expenses				Lecture	
40	E	14 Jul 2023	Single entry system, Problems	REF 3	CO 3	ANALYZE	Lecture	1 Min Question
31	P	28 Jun 2023	Need and Bases of Apportionment of Common Expenses				Lecture	
41	E	15 Jul 2023	Single entry system, Problems	REF 3	CO 3	APPLY	Lecture	1 Min Question
32	P	30 Jun 2023	Preparation of Statement of Trading and Profit and Loss in Columnar form				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
42	E	17 Jul 2023	MeaningFeaturesMeritsDemeritsTypes. Conversion into Double Entry systemNeed for ConversionPreparation of Statement of AffairsCash bookMemorandum Trading AccountTotal Debtors AccountTotal Creditors AccountBills Receivable AccountBills Payable AccountStatement of Trading and Profit & Loss and Balance Sheet, Problems	REF 3	CO 3	APPLY	Lecture	1 Min Question
33	P	1 Jul 2023	Preparation of Statement of Trading and Profit and Loss in Columnar form				Lecture	
34	P	3 Jul 2023	Statement of General Profit and Loss and Balance SheetSimple problems involving Inter Departmental Transfers at Cost Price (vertical form)				Lecture	
35	P	5 Jul 2023	Statement of General Profit and Loss and Balance SheetSimple problems involving Inter Departmental Transfers at Cost Price (vertical form)				Lecture	
36	P	7 Jul 2023	Problems				Lecture	
37	P	8 Jul 2023	Problems				Lecture	
Module 4								
38	P	10 Jul 2023	Single entry system				Lecture	

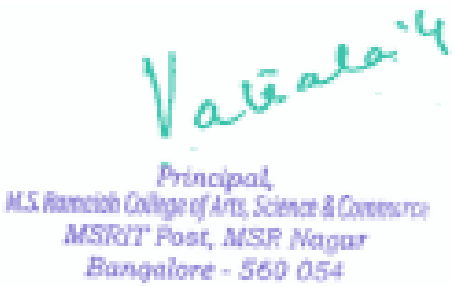
Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
43	E	19 Jul 2023	MeaningFeaturesMeritsDemeritsTypes. Conversion into Double Entry systemNeed for ConversionPreparation of Statement of AffairsCash bookMemorandum Trading AccountTotal Debtors AccountTotal Creditors AccountBills Receivable AccountBills Payable AccountStatement of Trading and Profit & Loss and Balance Sheet	REF 3	CO 4	UNDERSTAND	Lecture	1 Min Question
39	P	12 Jul 2023	Single entry system				Lecture	
44	E	21 Jul 2023	MeaningFeaturesMeritsDemeritsTypes. Conversion into Double Entry systemNeed for ConversionPreparation of Statement of AffairsCash bookMemorandum Trading AccountTotal Debtors AccountTotal Creditors AccountBills Receivable AccountBills Payable AccountStatement of Trading and Profit & Loss and Balance Sheet	REF 3	CO 4	UNDERSTAND	Lecture	1 Min Question
40	P	14 Jul 2023	Single entry system				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
45	E	22 Jul 2023	MeaningFeaturesMeritsDemeritsTypes. Conversion into Double Entry systemNeed for ConversionPreparation of Statement of AffairsCash bookMemorandum Trading AccountTotal Debtors AccountTotal Creditors AccountBills Receivable AccountBills Payable AccountStatement of Trading and Profit & Loss and Balance Sheet	REF 3	CO 4	APPLY	Lecture	1 Min Question
41	P	15 Jul 2023	Single entry system				Lecture	
46	E	24 Jul 2023	Problems	REF 3	CO 4	ANALYZE	Lecture	1 Min Question
42	P	17 Jul 2023	MeaningFeaturesMeritsDemeritsTypes. Conversion into Double Entry systemNeed for ConversionPreparation of Statement of AffairsCash bookMemorandum Trading AccountTotal Debtors AccountTotal Creditors AccountBills Receivable AccountBills Payable AccountStatement of Trading and Profit & Loss and Balance Sheet				Lecture	
47	E	26 Jul 2023	Problems	REF 3	CO 4	ANALYZE	Lecture	1 Min Question

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
43	P	19 Jul 2023	MeaningFeaturesMeritsDemeritsTypes. Conversion into Double Entry systemNeed for ConversionPreparation of Statement of AffairsCash bookMemorandum Trading AccountTotal Debtors AccountTotal Creditors AccountBills Receivable AccountBills Payable AccountStatement of Trading and Profit & Loss and Balance Sheet				Lecture	
48	E	28 Jul 2023	Problems	REF 3	CO 4	APPLY	Lecture	1 Min Question
44	P	21 Jul 2023	MeaningFeaturesMeritsDemeritsTypes. Conversion into Double Entry systemNeed for ConversionPreparation of Statement of AffairsCash bookMemorandum Trading AccountTotal Debtors AccountTotal Creditors AccountBills Receivable AccountBills Payable AccountStatement of Trading and Profit & Loss and Balance Sheet				Lecture	
49	E	31 Jul 2023	Problems	REF 3	CO 4	APPLY	Lecture	1 Min Question

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
45	P	22 Jul 2023	MeaningFeaturesMeritsDemeritsTypes. Conversion into Double Entry systemNeed for ConversionPreparation of Statement of AffairsCash bookMemorandum Trading AccountTotal Debtors AccountTotal Creditors AccountBills Receivable AccountBills Payable AccountStatement of Trading and Profit & Loss and Balance Sheet				Lecture	
50	E	2 Aug 2023	Digital transformation of AccountingBig Data Analytics in Accounting, Problems	REF 3	CO 4	APPLY	Lecture	1 Min Question
46	P	24 Jul 2023	Problems				Lecture	
51	E	4 Aug 2023	Digital transformation of AccountingBig Data Analytics in Accounting, Problems	REF 3	CO 4	APPLY	Lecture	1 Min Question
47	P	26 Jul 2023	Problems				Lecture	
52	E	5 Aug 2023	Cloud Computing in accounting, Problems	REF 3	CO 4	EVALUATE	Lecture	1 Min Question
48	P	28 Jul 2023	Problems				Lecture	
49	P	31 Jul 2023	Problems				Lecture	
Module 5								
50	P	2 Aug 2023	Digital transformation of AccountingBig Data Analytics in Accounting				Lecture	
53	E	7 Aug 2023	Cloud Computing in accounting	REF 3	CO 5	ANALYZE	Lecture	1 Min Question
51	P	4 Aug 2023	Digital transformation of AccountingBig Data Analytics in Accounting				Lecture	
54	E	9 Aug 2023	Green Accounting	REF 3	CO 5	ANALYZE	Lecture	Revision
52	P	5 Aug 2023	Cloud Computing in accounting				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
55	E	11 Aug 2023	Human Resource Accounting	REF 3	CO 5	ANALYZE	Lecture	Seminar
53	P	7 Aug 2023	Cloud Computing in accounting				Lecture	
56	E	12 Aug 2023	Inflation Accounting	REF 3	CO 5	ANALYZE	Lecture	1 Min Question
54	P	9 Aug 2023	Green Accounting				Lecture	
57	E	14 Aug 2023	Database Accounting (Meaning and Features only)	REF 3	CO 5	ANALYZE	Lecture	1 Min Question
55	P	11 Aug 2023	Human Resource Accounting				Lecture	
56	P	12 Aug 2023	Inflation Accounting				Lecture	
57	P	14 Aug 2023	Database Accounting (Meaning and Features only)				Lecture	



M S Ramaiah College of Arts, Science and Commerce

Bengaluru

COURSE BOOK

Period of the Semester : **From** 8 May 2023 **To** 14 Aug 2023

Dept-Sem-Sec: B.Com-4-A

Subject with Code: ADVANCED CORPORATE ACCOUNTING (B.COM.4.1)

Time Slot

MON:	**TUE :** 10:30 - 11:30	**WED:** 13:30 - 14:30
THU :	**FRI :** 10:30 - 11:30	**SAT :** 10:30 - 11:30

Name of the Teacher : Mrs Roopa H S

Lesson Plan & Execution

Name of the Faculty	***Mrs Roopa H S***
Dept-Sem-Sec	***B.Com-4-A***
Date of Commencement	***8 May 2023***
Last Working Day of Semester	***14 Aug 2023***

Source Material List

REF 1	Arulanandam & Raman , Corporate Accounting-II, HPH
REF 2	Anil Kumar.S Rajesh Kumar.V and Mariyappa.B Advanced Corporate Accounting, HPH
REF 3	Roadmap to IFRS and Indian Accounting Standards by CA Shibarama Tripathy
REF 4	Dr. Venkataraman. R Advanced Corporate Accounting
REF 5	S.N. Maheswari , Financial Accounting, Vikas publishing
REF 6	Soundarajan A & K. Venkataramana Advanced Corporate Accounting, SHBP.
REF 7	RL Gupta, Advanced Accountancy, Sultan Chand
REF 8	K.K Verma Corporate Accounting.
REF 9	Jain and Narang, Corporate Accounting.
REF 10	Tulsian, Advanced Accounting,
REF 11	Shukla and Grewal Advanced Accountancy, Sultan Chand
REF 12	Srinivas Putty - Advanced Corporate Accounting, HPH

Course Outcome List

1	Know the procedure of redemption of Preference Shares and Debentures.
2	Comprehend the different methods of Amalgamation and Acquisition of Companies
3	Understand the process of Internal reconstruction.
4	Prepare the liquidators Final statement of accounts.
5	Understand the process of Liquidation of Companies in India
0	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
Module 1								
1	P	9 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemptionissue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).				Lecture	
1	E	9 May 2023	Meaning of Preference shares	REF 2	CO 1	REMEMBER	Lecture	1 Min Question
2	P	10 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemption issue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
2	E							
3	P	12 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemption issue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).				Lecture	
3	E	12 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemptionissue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).	REF 2	CO 1	REMEMBER	Lecture	1 Min Question

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
4	P	13 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemption issue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).				Lecture	
4	E	13 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve Account Fresh issue of shares Arranging cash balance for the purpose of redemption).	REF 2	CO 1	REMEMBER	Lecture	1 Min Question

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
5	P	16 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemption issue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).				Lecture	
5	E	16 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemptionissue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).	REF 2	CO 1	APPLY	Lecture	1 Min Question

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
6	P	17 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemption issue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).				Lecture	
6	E	17 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemptionissue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).	REF 2	CO 1	ANALYZE	Lecture	1 Min Question

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
7	P	19 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemption issue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).				Lecture	
7	E	19 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemptionissue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).	REF 2	CO 1	APPLY	Lecture	1 Min Question

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
8	P	20 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemption issue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).				Lecture	
8	E	20 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemptionissue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).	REF 2	CO 1	ANALYZE	Lecture	1 Min Question

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
9	P	23 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemption issue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).				Lecture	
9	E	23 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemptionissue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).	REF 2	CO 1	ANALYZE	Lecture	1 Min Question

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
10	P	24 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemption issue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).				Lecture	
10	E	24 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemptionissue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).	REF 4	CO 1	ANALYZE	Lecture	1 Min Question

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
11	E	26 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemptionissue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).	REF 4	CO 1	ANALYZE	Lecture	Revision
12	E	27 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemptionissue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).	REF 2	CO 1	ANALYZE	Lecture	Revision

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
13	E	30 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemptionissue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).	REF 2		EVALUATE	Lecture	Revision
14	E	31 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemptionissue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).	REF 2	CO 1	ANALYZE	Lecture	1 Min Question
Module 2								
11	P	26 May 2023	Meaning Types of Debentures Methods of Redemption of Debentures Lump sum Method				Lecture	
52	E	8 Aug 2023	Meaning Types of Debentures Methods of Redemption of Debentures Lump sum Method	REF 2	CO 2	ANALYZE	Lecture	1 Min Question
12	P	27 May 2023	Meaning Types of Debentures Methods of Redemption of Debentures Lump sum Method				Lecture	
53	E	9 Aug 2023	Installment Method	REF 2	CO 2	ANALYZE	Lecture	1 Min Question

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
13	P	30 May 2023	Meaning Types of Debentures Methods of Redemption of Debentures Lump sum Method				Lecture	
54	E	11 Aug 2023	Sinking Fund Method	REF 2	CO 2	ANALYZE	Lecture	1 Min Question
14	P	31 May 2023	Installment Method				Lecture	
55	E	12 Aug 2023	Insurance Policy Method (Problems on all the methods of Redemption of Debentures)	REF 2	CO 2	ANALYZE	Lecture	1 Min Question
15	P	2 Jun 2023	Installment Method				Lecture	
16	P	3 Jun 2023	Installment Method				Lecture	
17	P	6 Jun 2023	Sinking Fund Method				Lecture	
18	P	7 Jun 2023	Sinking Fund Method				Lecture	
19	P	9 Jun 2023	Insurance Policy Method (Problems on all the methods of Redemption of Debentures)				Lecture	
20	P	10 Jun 2023	Insurance Policy Method (Problems on all the methods of Redemption of Debentures)				Lecture	
Module 3								
21	P	13 Jun 2023	Meaning of Amalgamation and Acquisition Types of Amalgamation Amalgamation in the nature of Merger Amalgamation in the nature of Purchase - Methods of Calculation of Purchase Consideration (IND AS - 103)				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
46	E	26 Jul 2023	Meaning of Amalgamation and Acquisition Types of Amalgamation Amalgamation in the nature of Merger Amalgamation in the nature of Purchase - Methods of Calculation of Purchase Consideration (IND AS - 103)	REF 2	CO 5	EVALUATE	Lecture	1 Min Question
22	P	14 Jun 2023	Meaning of Amalgamation and Acquisition Types of Amalgamation Amalgamation in the nature of Merger Amalgamation in the nature of Purchase - Methods of Calculation of Purchase Consideration (IND AS - 103)				Lecture	
47	E	28 Jul 2023	Meaning of Amalgamation and Acquisition Types of Amalgamation Amalgamation in the nature of Merger Amalgamation in the nature of Purchase - Methods of Calculation of Purchase Consideration (IND AS - 103)	REF 2	CO 5	UNDERSTAND	Lecture	1 Min Question
23	P	16 Jun 2023	Meaning of Amalgamation and Acquisition Types of Amalgamation Amalgamation in the nature of Merger Amalgamation in the nature of Purchase - Methods of Calculation of Purchase Consideration (IND AS - 103)				Lecture	
48	E	1 Aug 2023	Net asset Method - Net Payment Method and Lumpsum method	REF 2	CO 5	ANALYZE	Lecture	1 Min Question

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
24	P	17 Jun 2023	Meaning of Amalgamation and Acquisition Types of Amalgamation Amalgamation in the nature of Merger Amalgamation in the nature of Purchase - Methods of Calculation of Purchase Consideration (IND AS - 103)				Lecture	
49	E	2 Aug 2023	Accounting for Amalgamation (Problems under purchase method only)Ledger Accounts in the Books of Transferor Company and Journal Entries in the books of Transferee Com pany Preparation of Balance Sheet after Amalgamation and Acquisition. (As per Schedule III of Companies Act 2013)	REF 2	CO 5	ANALYZE	Lecture	1 Min Question
25	P	20 Jun 2023	Meaning of Amalgamation and Acquisition Types of Amalgamation Amalgamation in the nature of Merger Amalgamation in the nature of Purchase - Methods of Calculation of Purchase Consideration (IND AS - 103)				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
50	E	4 Aug 2023	Accounting for Amalgamation (Problems under purchase method only)Ledger Accounts in the Books of Transferor Company and Journal Entries in the books of Transferee Com pany Preparation of Balance Sheet after Amalgamation and Acquisition. (As per Schedule III of Companies Act 2013)	REF 2	CO 3	ANALYZE	Lecture	1 Min Question
26	P	21 Jun 2023	Net asset Method - Net Payment Method and Lumpsum method				Lecture	
51	E	5 Aug 2023	Accounting for Amalgamation (Problems under purchase method only)Ledger Accounts in the Books of Transferor Company and Journal Entries in the books of Transferee Com pany Preparation of Balance Sheet after Amalgamation and Acquisition. (As per Schedule III of Companies Act 2013)	REF 2	CO 3	ANALYZE	Lecture	1 Min Question
27	P	23 Jun 2023	Net asset Method - Net Payment Method and Lumpsum method				Lecture	
28	P	24 Jun 2023	Net asset Method - Net Payment Method and Lumpsum method				Lecture	
29	P	27 Jun 2023	Net asset Method - Net Payment Method and Lumpsum method				Lecture	
30	P	28 Jun 2023	Net asset Method - Net Payment Method and Lumpsum method				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
31	P	30 Jun 2023	Accounting for Amalgamation (Problems under purchase method only)Ledger Accounts in the Books of Transferor Company and Journal Entries in the books of Transferee Com pany Preparation of Balance Sheet after Amalgamation and Acquisition. (As per Schedule III of Companies Act 2013)				Lecture	
32	P	1 Jul 2023	Accounting for Amalgamation (Problems under purchase method only)Ledger Accounts in the Books of Transferor Company and Journal Entries in the books of Transferee Com pany Preparation of Balance Sheet after Amalgamation and Acquisition. (As per Schedule III of Companies Act 2013)				Lecture	
33	P	4 Jul 2023	Accounting for Amalgamation (Problems under purchase method only)Ledger Accounts in the Books of Transferor Company and Journal Entries in the books of Transferee Com pany Preparation of Balance Sheet after Amalgamation and Acquisition. (As per Schedule III of Companies Act 2013)				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
34	P	5 Jul 2023	Accounting for Amalgamation (Problems under purchase method only)Ledger Accounts in the Books of Transferor Company and Journal Entries in the books of Transferee Com pany Preparation of Balance Sheet after Amalgamation and Acquisition. (As per Schedule III of Companies Act 2013)				Lecture	
Module 4								
35	P	7 Jul 2023	Meaning of Capital Reduction				Lecture	
15	E	2 Jun 2023	Installment Method, Meaning of Capital Reduction	REF 2	CO 4	REMEMBER	Lecture	
36	P	8 Jul 2023	Meaning of Capital Reduction				Lecture	
16	E	3 Jun 2023	Meaning of Capital Reduction	REF 2	CO 4	UNDERSTAND	Lecture	1 Min Question
37	P	11 Jul 2023	Objectives of Capital Reduction				Lecture	
17	E	6 Jun 2023	Objectives of Capital Reduction	REF 2	CO 4	UNDERSTAND	Lecture	1 Min Question
38	P	12 Jul 2023	Objectives of Capital Reduction				Lecture	
18	E	7 Jun 2023	Provisions for Reduction of Share Capital under Companies Act	REF 2	CO 4	UNDERSTAND	Lecture	1 Min Question
39	P	14 Jul 2023	Provisions for Reduction of Share Capital under Companies Act				Lecture	
19	E	9 Jun 2023	2013. Forms of Reduction. Accounting for Capital Reduction. Problems on passing Journal Entries	REF 2	CO 4	UNDERSTAND	Lecture	1 Min Question
40	P	15 Jul 2023	Provisions for Reduction of Share Capital under Companies Act				Lecture	
20	E	10 Jun 2023	2013. Forms of Reduction. Accounting for Capital Reduction. Problems on passing Journal Entries	REF 2	CO 4	APPLY	Lecture	1 Min Question

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
41	P	18 Jul 2023	2013. Forms of Reduction. Accounting for Capital Reduction. Problems on passing Journal Entries				Lecture	
21	E	13 Jun 2023	2013. Forms of Reduction. Accounting for Capital Reduction. Problems on passing Journal Entries	REF 2	CO 4	APPLY	Lecture	1 Min Question
42	P	19 Jul 2023	2013. Forms of Reduction. Accounting for Capital Reduction. Problems on passing Journal Entries				Lecture	
22	E	14 Jun 2023	2013. Forms of Reduction. Accounting for Capital Reduction. Problems on passing Journal Entries	REF 2	CO 4	APPLY	Lecture	1 Min Question
43	P	21 Jul 2023	preparation of Capital Reduction Account and Balance sheet after reduction (Schedule III to Companies Act 2013).				Lecture	
23	E	16 Jun 2023	2013. Forms of Reduction. Accounting for Capital Reduction. Problems on passing Journal Entries	REF 2	CO 4	APPLY	Lecture	1 Min Question
44	P	22 Jul 2023	preparation of Capital Reduction Account and Balance sheet after reduction (Schedule III to Companies Act 2013).				Lecture	
24	E	17 Jun 2023	2013. Forms of Reduction. Accounting for Capital Reduction. Problems on passing Journal Entries	REF 2	CO 4	APPLY	Lecture	1 Min Question
25	E	20 Jun 2023	2013. Forms of Reduction. Accounting for Capital Reduction. Problems on passing Journal Entries	REF 2	CO 4	APPLY	Lecture	1 Min Question

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
26	E	21 Jun 2023	2013. Forms of Reduction. Accounting for Capital Reduction. Problems on passing Journal Entries	REF 2	CO 4	APPLY	Lecture	1 Min Question
27	E	23 Jun 2023	2013. Forms of Reduction. Accounting for Capital Reduction. Problems on passing Journal Entries	REF 2	CO 4	APPLY	Lecture	Assignment
28	E	24 Jun 2023	2013. Forms of Reduction. Accounting for Capital Reduction. Problems on passing Journal Entries	REF 2	CO 4	ANALYZE	Lecture	Assignment
29	E	27 Jun 2023	preparation of Capital Reduction Account and Balance sheet after reduction (Schedule III to Companies Act 2013).	REF 2	CO 4	ANALYZE	Lecture	1 Min Question
30	E	28 Jun 2023	2013. Forms of Reduction. Accounting for Capital Reduction. Problems on passing Journal Entries	REF 2	CO 4	ANALYZE	Lecture	1 Min Question
31	E	30 Jun 2023	2013. Forms of Reduction. Accounting for Capital Reduction. Problems on passing Journal Entries	REF 2	CO 4	ANALYZE	Lecture	1 Min Question
32	E	1 Jul 2023	2013. Forms of Reduction. Accounting for Capital Reduction. Problems on passing Journal Entries	REF 2	CO 4	ANALYZE	Lecture	1 Min Question
33	E	4 Jul 2023	preparation of Capital Reduction Account and Balance sheet after reduction (Schedule III to Companies Act 2013).	REF 2	CO 4	ANALYZE	Lecture	1 Min Question
34	E	5 Jul 2023	2013. Forms of Reduction. Accounting for Capital Reduction. Problems on passing Journal Entries	REF 2	CO 4	EVALUATE	Lecture	Assignment
Module 5								
45	P	25 Jul 2023	Meaning of Liquidation				Lecture	
35	E	8 Jun 2023	Meaning of Liquidation	REF 2	CO 5	REMEMBER	Lecture	1 Min Question

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
46	P	26 Jul 2023	Meaning of Liquidation				Lecture	
36	E	8 Jul 2023	Meaning of Liquidation	REF 2	CO 5	REMEMBER	Lecture	1 Min Question
47	P	28 Jul 2023	Meaning of Liquidation				Lecture	
37	E	11 Jul 2023	Modes of Winding up Compulsory Winding up	REF 2	CO 5	UNDERSTAND	Lecture	1 Min Question
48	P	1 Aug 2023	Meaning of Liquidation				Lecture	
38	E	12 Jul 2023	Voluntary Winding up and winding up subject to Supervision by Court. Order of payments in the event of Liquidation. Liquidator ’s Statement of Account. Liquidator ’s remuneration. Problems on preparation of Liquidator ’s Final Statement of Account.	REF 2	CO 5	ANALYZE	Lecture	1 Min Question
49	P	2 Aug 2023	Modes of Winding up Compulsory Winding up				Lecture	
39	E	14 Jul 2023	Voluntary Winding up and winding up subject to Supervision by Court. Order of payments in the event of Liquidation. Liquidator ’s Statement of Account. Liquidator ’s remuneration. Problems on preparation of Liquidator ’s Final Statement of Account.	REF 2	CO 5	ANALYZE	Lecture	1 Min Question
50	P	4 Aug 2023	Modes of Winding up Compulsory Winding up				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
40	E	15 Jul 2023	Voluntary Winding up and winding up subject to Supervision by Court. Order of payments in the event of Liquidation. Liquidator ’s Statement of Account. Liquidator ’s remuneration. Problems on preparation of Liquidator ’s Final Statement of Account.	REF 2	CO 5	EVALUATE	Lecture	1 Min Question
51	P	5 Aug 2023	Modes of Winding up Compulsory Winding up				Lecture	
41	E	18 Jul 2023	Voluntary Winding up and winding up subject to Supervision by Court. Order of payments in the event of Liquidation. Liquidator ’s Statement of Account. Liquidator ’s remuneration. Problems on preparation of Liquidator ’s Final Statement of Account.	REF 2	CO 5	EVALUATE	Lecture	1 Min Question
52	P	8 Aug 2023	Modes of Winding up Compulsory Winding up				Lecture	
42	E	19 Jul 2023	Voluntary Winding up and winding up subject to Supervision by Court. Order of payments in the event of Liquidation. Liquidator ’s Statement of Account. Liquidator ’s remuneration. Problems on preparation of Liquidator ’s Final Statement of Account.	REF 2	CO 5	ANALYZE	Lecture	Assignment

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
53	P	9 Aug 2023	Voluntary Winding up and winding up subject to Supervision by Court. Order of payments in the event of Liquidation. Liquidator ’s Statement of Account. Liquidator ’s remuneration. Problems on preparation of Liquidator ’s Final Statement of Account.				Lecture	
43	E	21 Jul 2023	Voluntary Winding up and winding up subject to Supervision by Court. Order of payments in the event of Liquidation. Liquidator ’s Statement of Account. Liquidator ’s remuneration. Problems on preparation of Liquidator ’s Final Statement of Account.	REF 2	CO 5	EVALUATE	Lecture	Revision
54	P	11 Aug 2023	Voluntary Winding up and winding up subject to Supervision by Court. Order of payments in the event of Liquidation. Liquidator ’s Statement of Account. Liquidator ’s remuneration. Problems on preparation of Liquidator ’s Final Statement of Account.				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
44	E	22 Jul 2023	Voluntary Winding up and winding up subject to Supervision by Court. Order of payments in the event of Liquidation. Liquidator ’s Statement of Account. Liquidator ’s remuneration. Problems on preparation of Liquidator ’s Final Statement of Account.	REF 2	CO 5	EVALUATE	Lecture	1 Min Question
55	P	12 Aug 2023	Voluntary Winding up and winding up subject to Supervision by Court. Order of payments in the event of Liquidation. Liquidator ’s Statement of Account. Liquidator ’s remuneration. Problems on preparation of Liquidator ’s Final Statement of Account.				Lecture	
45	E	25 Jul 2023	Voluntary Winding up and winding up subject to Supervision by Court. Order of payments in the event of Liquidation. Liquidator ’s Statement of Account. Liquidator ’s remuneration. Problems on preparation of Liquidator ’s Final Statement of Account.	REF 2	CO 5	EVALUATE	Lecture	Open Debate

Principal,
M.S. Ramaiah College of Arts, Science & Commerce
MSRIT Post, MSR Nagar
Bangalore - 560 054

M S Ramaiah College of Arts, Science and Commerce

Bengaluru

COURSE BOOK

Period of the Semester : **From** 8 May 2023 **To** 14 Aug 2023

Dept-Sem-Sec: B.Com-4-B

Subject with Code: ADVANCED CORPORATE ACCOUNTING (B.COM.4.1)

Time Slot

MON: 11:40 - 12:40	**TUE :** 09:30 - 10:30	**WED:** 10:30 - 11:30
THU : 10:30 - 11:30	**FRI :**	**SAT :**

Name of the Teacher : Mrs Roopa H S

Lesson Plan & Execution

Name of the Faculty	***Mrs Roopa H S***
Dept-Sem-Sec	***B.Com-4-B***
Date of Commencement	***8 May 2023***
Last Working Day of Semester	***14 Aug 2023***

Source Material List

REF 1	Arulanandam & Raman , Corporate Accounting-II, HPH
REF 2	Anil Kumar.S Rajesh Kumar.V and Mariyappa.B Advanced Corporate Accounting, HPH
REF 3	Roadmap to IFRS and Indian Accounting Standards by CA Shibarama Tripathy
REF 4	Dr. Venkataraman. R Advanced Corporate Accounting
REF 5	S.N. Maheswari , Financial Accounting, Vikas publishing
REF 6	Soundarajan A & K. Venkataramana Advanced Corporate Accounting, SHBP.
REF 7	RL Gupta, Advanced Accountancy, Sultan Chand
REF 8	K.K Verma Corporate Accounting.
REF 9	Jain and Narang, Corporate Accounting.
REF 10	Tulsian, Advanced Accounting,
REF 11	Shukla and Grewal Advanced Accountancy, Sultan Chand
REF 12	Srinivas Putty - Advanced Corporate Accounting, HPH

Course Outcome List

1	Know the procedure of redemption of Preference Shares and Debentures.
2	Comprehend the different methods of Amalgamation and Acquisition of Companies
3	Understand the process of Internal reconstruction.
4	Prepare the liquidators Final statement of accounts.
5	Understand the process of Liquidation of Companies in India
0	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
Module 1								
1	P	8 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemption issue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).				Lecture	
1	E	8 May 2023	Meaning of Preference shares	REF 2	CO 1	REMEMBER	Lecture	1 Min Question
2	P	9 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemption issue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
2	E	9 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemptionissue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).	REF 2	CO 1	REMEMBER	Lecture	1 Min Question
3	P	10 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemption issue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
3	E							
4	P	11 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemption issue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).				Lecture	
4	E	11 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemptionissue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).	REF 2	CO 1		Lecture	1 Min Question

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
5	P	12 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemptionissue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).	REF 2	CO 1	APPLY	Lecture	Revision
5	E	12 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemptionissue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).	REF 2	CO 1	APPLY	Lecture	Revision

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
6	P	13 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemptionissue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).	REF 2	CO 1	UNDERSTAND	Lecture	Open Debate
6	E	15 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemptionissue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).	REF 2	CO 1	UNDERSTAND	Lecture	Open Debate

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
7	P	15 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemption issue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).				Lecture	
7	E	16 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemptionissue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).	REF 2	CO 1	UNDERSTAND	Lecture	Open Debate

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
8	P	16 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemption issue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).				Lecture	
8	E	17 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemptionissue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).	REF 2	CO 1	APPLY	Lecture	1 Min Question

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
9	P	17 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemption issue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).				Lecture	
9	E	18 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemptionissue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).	REF 2	CO 1	APPLY	Lecture	Revision

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
10	P	18 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemption issue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).				Lecture	
10	E	22 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemptionissue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).	REF 2	CO 1	EVALUATE	Lecture	1 Min Question

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
11	P	22 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemption issue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).				Lecture	
11	E	23 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemptionissue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).	REF 2	CO 1	EVALUATE	Lecture	Assignment

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
12	P	23 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemption issue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).				Lecture	
12	E	24 May 2023	Meaning Types of Debentures Methods of Redemption of Debentures Lump sum Method	REF 2	CO 1	EVALUATE	Lecture	1 Min Question
13	E	25 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemptionissue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).	REF 2	CO 1	EVALUATE	Lecture	1 Min Question

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
14	E	29 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemptionissue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).	REF 2	CO 1	EVALUATE	Lecture	Assignment
16	E	31 May 2023	Meaning Legal Provisions Treatment of premium on redemption creation of Capital Redemption Reserve AccountFresh issue of shares Arranging cash balance for the purpose of redemption minimum number of shares to be issued for redemptionissue of bonus shares preparation of Balance sheet after redemption (AS per Schedule III of Companies Act 2013).	REF 2	CO 1	EVALUATE	Lecture	1 Min Question
Module 2								
13	P	24 May 2023	Meaning Types of Debentures Methods of Redemption of Debentures Lump sum Method				Lecture	
15	E	30 May 2023	Installment Method	REF 2	CO 1	EVALUATE	Lecture	1 Min Question
14	P	25 May 2023	Meaning Types of Debentures Methods of Redemption of Debentures Lump sum Method				Lecture	
54	E	8 Aug 2023	Meaning Types of Debentures Methods of Redemption of Debentures Lump sum Method	REF 2	CO 2	APPLY	Lecture	1 Min Question

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
15	P	29 May 2023	Meaning Types of Debentures Methods of Redemption of Debentures Lump sum Method				Lecture	
55	E	9 Aug 2023	Meaning Types of Debentures Methods of Redemption of Debentures Lump sum Method	REF 2	CO 2	ANALYZE	Lecture	1 Min Question
16	P	30 May 2023	Installment Method				Lecture	
56	E	10 Aug 2023	Installment Method	REF 2	CO 2	ANALYZE	Lecture	1 Min Question
17	P	31 May 2023	Installment Method				Lecture	
57	E	14 Aug 2023	Sinking Fund Method	REF 2		ANALYZE	Lecture	1 Min Question
18	P	1 Jun 2023	Installment Method				Lecture	
19	P	5 Jun 2023	Sinking Fund Method				Lecture	
20	P	6 Jun 2023	Sinking Fund Method				Lecture	
21	P	7 Jun 2023	Insurance Policy Method (Problems on all the methods of Redemption of Debentures)				Lecture	
22	P	8 Jun 2023	Insurance Policy Method (Problems on all the methods of Redemption of Debentures)				Lecture	
Module 3								
23	P	12 Jun 2023	Meaning of Amalgamation and Acquisition Types of Amalgamation Amalgamation in the nature of Merger Amalgamation in the nature of Purchase - Methods of Calculation of Purchase Consideration (IND AS - 103)				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
25	E							
24	P	13 Jun 2023	Meaning of Amalgamation and Acquisition Types of Amalgamation Amalgamation in the nature of Merger Amalgamation in the nature of Purchase - Methods of Calculation of Purchase Consideration (IND AS - 103)				Lecture	
48	E	27 Jul 2023	Meaning of Liquidation	REF 2	CO 3	REMEMBER	Lecture	1 Min Question
25	P	14 Jun 2023	Meaning of Amalgamation and Acquisition Types of Amalgamation Amalgamation in the nature of Merger Amalgamation in the nature of Purchase - Methods of Calculation of Purchase Consideration (IND AS - 103)				Lecture	
49	E	31 Jul 2023	Meaning of Amalgamation and Acquisition Types of Amalgamation Amalgamation in the nature of Merger Amalgamation in the nature of Purchase - Methods of Calculation of Purchase Consideration (IND AS - 103)	REF 2	CO 3	APPLY	Lecture	1 Min Question
26	P	15 Jun 2023	Meaning of Amalgamation and Acquisition Types of Amalgamation Amalgamation in the nature of Merger Amalgamation in the nature of Purchase - Methods of Calculation of Purchase Consideration (IND AS - 103)				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
50	E	1 Aug 2023	Meaning of Amalgamation and Acquisition Types of Amalgamation Amalgamation in the nature of Merger Amalgamation in the nature of Purchase - Methods of Calculation of Purchase Consideration (IND AS - 103)	REF 2	CO 3	APPLY	Lecture	1 Min Question
27	P	19 Jun 2023	Meaning of Amalgamation and Acquisition Types of Amalgamation Amalgamation in the nature of Merger Amalgamation in the nature of Purchase - Methods of Calculation of Purchase Consideration (IND AS - 103)				Lecture	
51	E	2 Aug 2023	Net asset Method - Net Payment Method and Lumpsum method	REF 2	CO 3	ANALYZE	Lecture	1 Min Question
28	P	20 Jun 2023	Net asset Method - Net Payment Method and Lumpsum method				Lecture	
52	E	3 Aug 2023	Accounting for Amalgamation (Problems under purchase method only)Ledger Accounts in the Books of Transferor Company and Journal Entries in the books of Transferee Com pany Preparation of Balance Sheet after Amalgamation and Acquisition. (As per Schedule III of Companies Act 2013)	REF 2	CO 3	ANALYZE	Lecture	1 Min Question
29	P	21 Jun 2023	Net asset Method - Net Payment Method and Lumpsum method				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
53	E	7 Aug 2023	Accounting for Amalgamation (Problems under purchase method only)Ledger Accounts in the Books of Transferor Company and Journal Entries in the books of Transferee Com pany Preparation of Balance Sheet after Amalgamation and Acquisition. (As per Schedule III of Companies Act 2013)	REF 2	CO 3	APPLY	Lecture	1 Min Question
30	P	22 Jun 2023	Net asset Method - Net Payment Method and Lumpsum method				Lecture	
31	P	26 Jun 2023	Net asset Method - Net Payment Method and Lumpsum method				Lecture	
32	P	27 Jun 2023	Net asset Method - Net Payment Method and Lumpsum method				Lecture	
33	P	28 Jun 2023	Accounting for Amalgamation (Problems under purchase method only)Ledger Accounts in the Books of Transferor Company and Journal Entries in the books of Transferee Com pany Preparation of Balance Sheet after Amalgamation and Acquisition. (As per Schedule III of Companies Act 2013)				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
34	P	3 Jul 2023	Accounting for Amalgamation (Problems under purchase method only)Ledger Accounts in the Books of Transferor Company and Journal Entries in the books of Transferee Com pany Preparation of Balance Sheet after Amalgamation and Acquisition. (As per Schedule III of Companies Act 2013)				Lecture	
35	P	4 Jul 2023	Accounting for Amalgamation (Problems under purchase method only)Ledger Accounts in the Books of Transferor Company and Journal Entries in the books of Transferee Com pany Preparation of Balance Sheet after Amalgamation and Acquisition. (As per Schedule III of Companies Act 2013)				Lecture	
36	P	5 Jul 2023	Accounting for Amalgamation (Problems under purchase method only)Ledger Accounts in the Books of Transferor Company and Journal Entries in the books of Transferee Com pany Preparation of Balance Sheet after Amalgamation and Acquisition. (As per Schedule III of Companies Act 2013)				Lecture	
Module 4								
37	P	6 Jul 2023	Meaning of Capital Reduction				Lecture	
17	E	1 Jun 2023	Meaning of Capital Reduction	REF 2	CO 4	REMEMBER	Lecture	1 Min Question
38	P	10 Jul 2023	Meaning of Capital Reduction				Lecture	
18	E	5 Jun 2023	Objectives of Capital Reduction	REF 2	CO 4	REMEMBER	Lecture	1 Min Question
39	P	11 Jul 2023	Objectives of Capital Reduction				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
19	E	6 Jun 2023	Objectives of Capital Reduction	REF 2	CO 4	UNDERSTAND	Lecture	1 Min Question
40	P	12 Jul 2023	Objectives of Capital Reduction				Lecture	
20	E	7 Jun 2023	Provisions for Reduction of Share Capital under Companies Act	REF 2	CO 4	APPLY	Lecture	1 Min Question
41	P	13 Jul 2023	Provisions for Reduction of Share Capital under Companies Act				Lecture	
21	E	8 Jun 2023	Provisions for Reduction of Share Capital under Companies Act	REF 2	CO 4	APPLY	Lecture	1 Min Question
42	P	17 Jul 2023	Provisions for Reduction of Share Capital under Companies Act				Lecture	
22	E	12 Jun 2023	Provisions for Reduction of Share Capital under Companies Act	REF 2	CO 4	APPLY	Lecture	1 Min Question
43	P	18 Jul 2023	2013. Forms of Reduction. Accounting for Capital Reduction. Problems on passing Journal Entries				Lecture	
23	E	13 Jun 2023	2013. Forms of Reduction. Accounting for Capital Reduction. Problems on passing Journal Entries	REF 2	CO 4	APPLY	Lecture	Seminar
44	P	19 Jul 2023	2013. Forms of Reduction. Accounting for Capital Reduction. Problems on passing Journal Entries				Lecture	
24	E							
45	P	20 Jul 2023	preparation of Capital Reduction Account and Balance sheet after reduction (Schedule III to Companies Act 2013).				Lecture	
26	E	19 Jun 2023	preparation of Capital Reduction Account and Balance sheet after reduction (Schedule III to Companies Act 2013).	REF 2	CO 4	APPLY	Lecture	1 Min Question

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
46	P	24 Jul 2023	preparation of Capital Reduction Account and Balance sheet after reduction (Schedule III to Companies Act 2013).				Lecture	
27	E	20 Jun 2023	preparation of Capital Reduction Account and Balance sheet after reduction (Schedule III to Companies Act 2013).	REF 2	CO 4	APPLY	Lecture	1 Min Question
28	E	21 Jun 2023	preparation of Capital Reduction Account and Balance sheet after reduction (Schedule III to Companies Act 2013).		CO 4	APPLY	Lecture	1 Min Question
29	E	22 Jun 2023	preparation of Capital Reduction Account and Balance sheet after reduction (Schedule III to Companies Act 2013).	REF 2	CO 4	APPLY	Lecture	1 Min Question
30	E	26 Jun 2023	preparation of Capital Reduction Account and Balance sheet after reduction (Schedule III to Companies Act 2013).	REF 2	CO 4	APPLY	Lecture	1 Min Question
31	E	27 Jun 2023	preparation of Capital Reduction Account and Balance sheet after reduction (Schedule III to Companies Act 2013).	REF 2	CO 4	ANALYZE	Lecture	Revision
32	E	28 Jun 2023	preparation of Capital Reduction Account and Balance sheet after reduction (Schedule III to Companies Act 2013).	REF 2	CO 4	EVALUATE	Lecture	Assignment
33	E	3 Jul 2023	preparation of Capital Reduction Account and Balance sheet after reduction (Schedule III to Companies Act 2013).	REF 2	CO 4	EVALUATE	Lecture	Seminar

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
34	E	4 Jul 2023	preparation of Capital Reduction Account and Balance sheet after reduction (Schedule III to Companies Act 2013).	REF 2	CO 4	CREATE	Lecture	Revision
Module 5								
47	P	25 Jul 2023	Meaning of Liquidation				Lecture	
35	E	5 Jul 2023	Meaning of Liquidation	REF 2	CO 5	REMEMBER	Lecture	Open Debate
48	P	26 Jul 2023	Meaning of Liquidation				Lecture	
36	E	6 Jul 2023	Modes of Winding up Compulsory Winding up	REF 2	CO 5	UNDERSTAND	Lecture	Open Debate
49	P	27 Jul 2023	Meaning of Liquidation				Lecture	
37	E	10 Jul 2023	Voluntary Winding up and winding up subject to Supervision by Court. Order of payments in the event of Liquidation. Liquidator ’s Statement of Account. Liquidator ’s remuneration. Problems on preparation of Liquidator ’s Final Statement of Account.	REF 2	CO 5	EVALUATE	Lecture	Open Debate
50	P	31 Jul 2023	Meaning of Liquidation				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
38	E	11 Jul 2023	Voluntary Winding up and winding up subject to Supervision by Court. Order of payments in the event of Liquidation. Liquidator ’s Statement of Account. Liquidator ’s remuneration. Problems on preparation of Liquidator ’s Final Statement of Account.	REF 2	CO 5	ANALYZE	Lecture	1 Min Question
51	P	1 Aug 2023	Modes of Winding up Compulsory Winding up				Lecture	
39	E	12 Jul 2023	Voluntary Winding up and winding up subject to Supervision by Court. Order of payments in the event of Liquidation. Liquidator ’s Statement of Account. Liquidator ’s remuneration. Problems on preparation of Liquidator ’s Final Statement of Account.	REF 2	CO 5	ANALYZE	Lecture	1 Min Question
52	P	2 Aug 2023	Modes of Winding up Compulsory Winding up				Lecture	
40	E	13 Jul 2023	Voluntary Winding up and winding up subject to Supervision by Court. Order of payments in the event of Liquidation. Liquidator ’s Statement of Account. Liquidator ’s remuneration. Problems on preparation of Liquidator ’s Final Statement of Account.	REF 2	CO 5	ANALYZE	Lecture	1 Min Question
53	P	3 Aug 2023	Modes of Winding up Compulsory Winding up				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
41	E	17 Jul 2023	Voluntary Winding up and winding up subject to Supervision by Court. Order of payments in the event of Liquidation. Liquidator ’s Statement of Account. Liquidator ’s remuneration. Problems on preparation of Liquidator ’s Final Statement of Account.	REF 2	CO 5	ANALYZE	Lecture	1 Min Question
54	P	7 Aug 2023	Modes of Winding up Compulsory Winding up				Lecture	
42	E	18 Jul 2023	Voluntary Winding up and winding up subject to Supervision by Court. Order of payments in the event of Liquidation. Liquidator ’s Statement of Account. Liquidator ’s remuneration. Problems on preparation of Liquidator ’s Final Statement of Account.	REF 2	CO 5	EVALUATE	Lecture	1 Min Question
55	P	8 Aug 2023	Voluntary Winding up and winding up subject to Supervision by Court. Order of payments in the event of Liquidation. Liquidator ’s Statement of Account. Liquidator ’s remuneration. Problems on preparation of Liquidator ’s Final Statement of Account.				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
43	E	19 Jul 2023	Voluntary Winding up and winding up subject to Supervision by Court. Order of payments in the event of Liquidation. Liquidator ’s Statement of Account. Liquidator ’s remuneration. Problems on preparation of Liquidator ’s Final Statement of Account.	REF 2	CO 5	EVALUATE	Lecture	Assignment
56	P	9 Aug 2023	Voluntary Winding up and winding up subject to Supervision by Court. Order of payments in the event of Liquidation. Liquidator ’s Statement of Account. Liquidator ’s remuneration. Problems on preparation of Liquidator ’s Final Statement of Account.				Lecture	
44	E	20 Jul 2023	Voluntary Winding up and winding up subject to Supervision by Court. Order of payments in the event of Liquidation. Liquidator ’s Statement of Account. Liquidator ’s remuneration. Problems on preparation of Liquidator ’s Final Statement of Account.	REF 2	CO 5	EVALUATE	Lecture	Open Debate

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
57	P	10 Aug 2023	Voluntary Winding up and winding up subject to Supervision by Court. Order of payments in the event of Liquidation. Liquidator ’s Statement of Account. Liquidator ’s remuneration. Problems on preparation of Liquidator ’s Final Statement of Account.				Lecture	
45	E	24 Jul 2023	Voluntary Winding up and winding up subject to Supervision by Court. Order of payments in the event of Liquidation. Liquidator ’s Statement of Account. Liquidator ’s remuneration. Problems on preparation of Liquidator ’s Final Statement of Account.	REF 2	CO 5	ANALYZE	Lecture	1 Min Question
58	P	14 Aug 2023	Voluntary Winding up and winding up subject to Supervision by Court. Order of payments in the event of Liquidation. Liquidator ’s Statement of Account. Liquidator ’s remuneration. Problems on preparation of Liquidator ’s Final Statement of Account.				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
46	E	25 Jul 2023	Voluntary Winding up and winding up subject to Supervision by Court. Order of payments in the event of Liquidation. Liquidator ’s Statement of Account. Liquidator ’s remuneration. Problems on preparation of Liquidator ’s Final Statement of Account.	REF 2	CO 5	EVALUATE	Lecture	1 Min Question
47	E	26 Jul 2023	Meaning of Liquidation	REF 2	CO 5	EVALUATE	Lecture	1 Min Question

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M S Ramaiah College of Arts, Science and Commerce

Bengaluru

COURSE BOOK

Period of the Semester : **From** 7 May 2023 **To** 19 Aug 2023

Dept-Sem-Sec: BCA-2-A

Subject with Code: OBJECT ORIENTED PROGRAMMING USING JAVA (CAC7T)

Time Slot

MON:			**TUE :** 10:30 - 11:30	**WED:**
THU :	09:30 - 10:30	14:30 - 15:30	**FRI :**	**SAT :** 11:40 - 12:40

Name of the Teacher : Ms Shilpa Nayak

Lesson Plan & Execution

Name of the Faculty	***Ms Shilpa Nayak***
Dept-Sem-Sec	***BCA-2-A***
Date of Commencement	***7 May 2023***
Last Working Day of Semester	***19 Aug 2023***

Source Material List

TEXT 1	E. Balagurusamy, Programming with JAVA, McGraw Hill, New Delhi, 2007
REF 1	Raj Kumar Buyya, Object Oriented Programming with JAVA, McGraw Hill, 2009
REF 2	Herbert Schildt, Java A Beginner ’s Guide – Create, Compile, and Run Java Programs Today, Sixth Edition, Oracle Press, 2014
REF 3	Ken Arnold, James Gosling, “The Java Programming Language, Fourth Edition, Addison Wisely,2005
REF 4	Herbert Schildt, ‘The Complete Reference Java, 7th Edition, McGraw Hill, 2007

Course Outcome List

1	Gain knowledge about basic Java language syntax and semantics to write Java programs and use concepts such as variables, conditional and iterative execution methods, Write down in depth Classes, Arrays, Strings.
2	Understanding in detail the concept of Inheritance and polymorphism
3	Identify the classification and characteristics of Graphics Programming and Applet Programming

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
Module 1								
1	P	9 May 2023	Basics of Java programming, Data types				Lecture	
1	E	8 May 2023	Basics of Java programming, Data types		CO 1		Lecture	1 Min Question
2	P	11 May 2023	Variables, Operators				Lecture	
2	E	9 May 2023	Variables, Operators		CO 1	UNDERSTAND	Lecture	Revision
3	P	11 May 2023	Control structures including selection, Looping				Lecture	
3	E	11 May 2023	Control structures including selection, Looping		CO 1		Lecture	Revision
4	P	13 May 2023	Java methods, Overloading				Lecture	
4	E	11 May 2023	Java methods, Overloading		CO 1	UNDERSTAND	Lecture	1 Min Question
5	P	16 May 2023	Math class, Arrays in java				Lecture	
5	E	16 May 2023	Math class, Arrays in java		CO 1	UNDERSTAND	Lecture	Revision
6	P	18 May 2023	Objects and Classes, Basics of objects and classes in java				Lecture	
6	E	18 May 2023	Objects and Classes, Basics of objects and classes in java		CO 1	REMEMBER	Lecture	Revision
7	P	18 May 2023	Constructors, Finalizer				Lecture	
7	E	18 May 2023	Constructors, Finalizer		CO 1	UNDERSTAND	Lecture	1 Min Question
8	P	20 May 2023	Visibility modifiers, Methods and objects				Lecture	
8	E	20 May 2023	Visibility modifiers, Methods and objects		CO 1	REMEMBER	Lecture	1 Min Question
9	P	23 May 2023	Inbuilt classes like String, Character				Lecture	
9	E	23 May 2023	Inbuilt classes like String, Character		CO 1	REMEMBER	Lecture	Revision
10	P	25 May 2023	String Buffer				Lecture	
10	E	25 May 2023	String Buffer		CO 1	REMEMBER	Lecture	Revision
11	P	25 May 2023	File				Lecture	
11	E	25 May 2023	File		CO 1	REMEMBER	Lecture	Revision

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
12	P	27 May 2023	this reference				Lecture	
12	E	27 May 2023	this reference		CO 1	UNDERSTAND	Lecture	1 Min Question
Module 2								
13	P	30 May 2023	Inheritance in java, Super and sub class				Lecture	
13	E	30 May 2023	Inheritance in java, Super and sub class		CO 1	REMEMBER	Lecture	Revision
14	P	1 Jun 2023	Overriding				Lecture	
14	E	1 Jun 2023	Overriding		CO 1	UNDERSTAND	Lecture	Revision
15	P	1 Jun 2023	Object class				Lecture	
15	E	1 Jun 2023	Object class		CO 1	REMEMBER	Lecture	Revision
16	P	3 Jun 2023	Polymorphism				Lecture	
16	E	3 Jun 2023	Polymorphism		CO 1	REMEMBER	Lecture	1 Min Question
17	P	6 Jun 2023	Dynamic binding				Lecture	
17	E	6 Jun 2023	Dynamic binding		CO 1	UNDERSTAND	Lecture	Revision
18	P	8 Jun 2023	Generic programming				Lecture	
18	E	8 Jun 2023	Generic programming		CO 1	REMEMBER	Lecture	Revision
19	P	8 Jun 2023	Casting objects				Lecture	
19	E	8 Jun 2023	Casting objects		CO 2	UNDERSTAND	Lecture	Revision
20	P	10 Jun 2023	Instance of operator				Lecture	
20	E	10 Jun 2023	Instance of operator		CO 2	REMEMBER	Lecture	1 Min Question
21	P	13 Jun 2023	Abstract class				Lecture	
21	E	13 Jun 2023	Abstract class		CO 2	REMEMBER	Lecture	Revision
22	P	15 Jun 2023	Interface in java				Lecture	
22	E	20 Jun 2023	Interface in java		CO 2	UNDERSTAND	Lecture	Revision
23	P	15 Jun 2023	Package in java				Lecture	
23	E	27 Jun 2023	Package in java		CO 2	UNDERSTAND	Lecture	Revision
24	P	17 Jun 2023	UTIL package				Lecture	
24	E	1 Jul 2023	UTIL package		CO 2	REMEMBER	Lecture	1 Min Question
Module 3								

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
25	P	20 Jun 2023	Event handling in java, Event types, Mouse and key events				Lecture	
25	E	4 Jul 2023	Event handling in java, Event types, Mouse and key events		CO 3	UNDERSTAND	Lecture	Revision
26	P	22 Jun 2023	GUI Basics, Panels, Frames				Lecture	
26	E	6 Jul 2023	GUI Basics, Panels, Frames		CO 3	UNDERSTAND	Lecture	Revision
27	P	22 Jun 2023	Layout Managers, Flow Layout, Border Layout				Lecture	
27	E	6 Jul 2023	Layout Managers, Flow Layout, Border Layout		CO 3	UNDERSTAND	Lecture	Revision
28	P	24 Jun 2023	Grid Layout, GUI components like Buttons, Check Boxes				Lecture	
28	E	8 Jul 2023	Grid Layout, GUI components like Buttons, Check Boxes		CO 3	REMEMBER	Lecture	Revision
29	P	27 Jun 2023	Radio Buttons, Labels, Text Fields				Lecture	
29	E	10 Jul 2023	Radio Buttons, Labels, Text Fields		CO 3	UNDERSTAND	Lecture	Revision
30	P	1 Jul 2023	Text Areas, Combo Boxes, Lists				Lecture	
30	E	13 Jul 2023	Text Areas, Combo Boxes, Lists		CO 3	UNDERSTAND	Lecture	Revision
31	P	4 Jul 2023	Scroll Bars, Sliders, Windows				Lecture	
31	E	17 Jul 2023	Scroll Bars, Sliders, Windows		CO 3	UNDERSTAND	Lecture	Revision
32	P	6 Jul 2023	Menus, Dialog Box				Lecture	
32	E	18 Jul 2023	Menus, Dialog Box		CO 3	UNDERSTAND	Lecture	
33	P	6 Jul 2023	Applet and its life cycle, Introduction to swing				Lecture	
33	E	20 Jul 2023	Applet and its life cycle, Introduction to swing		CO 3	UNDERSTAND	Lecture	Revision
34	P	8 Jul 2023	Exceptional handling mechanism, I/O programming				Lecture	
34	E	20 Jul 2023	Exceptional handling mechanism, I/O programming		CO 3	UNDERSTAND	Lecture	Revision

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
35	P	11 Jul 2023	Text and Binary I/O, Binary I/O classes				Lecture	
35	E	20 Jul 2023	Text and Binary I/O, Binary I/O classes		CO 3	UNDERSTAND	Lecture	Revision
36	P	13 Jul 2023	Object I/O, Random Access Files				Lecture	
36	E	22 Jul 2023	Object I/O, Random Access Files		CO 3	UNDERSTAND	Lecture	Revision
Module 4								
37	P	13 Jul 2023	Thread life cycle and methods				Lecture	
37	E	22 Jul 2023	Thread life cycle and methods		CO 3	UNDERSTAND	Lecture	Revision
38	P	13 Jul 2023	Thread life cycle and methods				Lecture	
38	E	25 Jul 2023	Thread life cycle and methods		CO 3	UNDERSTAND	Lecture	Revision
39	P	15 Jul 2023	Runnable interface				Lecture	
39	E	5 Aug 2023	Runnable interface		CO 4	UNDERSTAND	Lecture	Revision
40	P	18 Jul 2023	Runnable interface				Lecture	
40	E	5 Aug 2023	Runnable interface		CO 4	UNDERSTAND	Lecture	Revision
41	P	20 Jul 2023	Thread synchronization				Lecture	
41	E	10 Aug 2023	Thread synchronization		CO 4	UNDERSTAND	Lecture	Revision
42	P	20 Jul 2023	Thread synchronization				Lecture	
42	E	10 Aug 2023	Thread synchronization		CO 4	UNDERSTAND	Lecture	Revision
43	P	22 Jul 2023	Exception handling with try-catch-finally				Lecture	
43	E	1 Aug 2023	Exception handling with try-catch-finally		CO 3	UNDERSTAND	Lecture	Revision
44	P	25 Jul 2023	Exception handling with try-catch-finally				Lecture	
44	E	3 Aug 2023	Exception handling with try-catch-finally		CO 3	UNDERSTAND	Lecture	Revision
45	P	27 Jul 2023	Collections in java				Lecture	
45	E	12 Aug 2023	Collections in java		CO 4	UNDERSTAND	Lecture	Revision
46	P	27 Jul 2023	Collections in java				Lecture	
46	E	17 Aug 2023	Collections in java		CO 4	UNDERSTAND	Lecture	Revision

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
47	P	1 Aug 2023	Introduction to JavaBeans and Network Programming				Lecture	
47	E	17 Aug 2023	Introduction to JavaBeans and Network Programming		CO 4	UNDERSTAND	Lecture	Revision
48	P	3 Aug 2023	Introduction to JavaBeans and Network Programming				Lecture	
48	E	19 Aug 2023	Introduction to JavaBeans and Network Programming		CO 4	UNDERSTAND	Lecture	Revision

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M S Ramaiah College of Arts, Science and Commerce

Bengaluru

COURSE BOOK

Period of the Semester : **From** 8 May 2023 **To** 19 Aug 2023

Dept-Sem-Sec: ECs-4-A

Subject with Code: OPERATING SYSTEM AND UNIX (CS4T1)

Time Slot

MON:	**TUE :** 09:30 - 10:30	14:30	**WED:**
THU :	**FRI :** 13:30 - 14:30	**SAT :** 09:30 - 10:30	

Name of the Teacher : Ms Shilpa Nayak

Lesson Plan & Execution

Name of the Faculty	***Ms Shilpa Nayak***
Dept-Sem-Sec	***ECs-4-A***
Date of Commencement	***8 May 2023***
Last Working Day of Semester	***19 Aug 2023***

Source Material List

TEXT 1	Abraham Silberschatz and Peter Baer Galvin, “Operating System Concepts ”, 7th Edition, Pearson Education, 2002,
TEXT 2	M,G,Venkateshmurthy, “Introduction to UNIX & SHELL Programming ”, First Edition, Pearson Education, 2004,
REF 1	Forouzan, “Unix and Shell Programming ”, 1st Edition,2008 Cengage Learning India,
REF 2	H,M,Deitel, “Operating Systems ”, Pearson Learning Solutions, 3rd Edition, 2003,
REF 3	William Stallings, “Operating Systems ”, 6th Edition, Pearson Education, 2010,

Course Outcome List

1	CO1
2	CO2
3	CO3
4	CO4

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
Module 1								
1	P	9 May 2023	Computer System Organization, Architecture				Lecture	
1	E	9 May 2023	Computer System Organization, Architecture		CO 1	REMEMBER	Lecture	Revision
2	P	9 May 2023	Structure, Operations				Lecture	
2	E	12 May 2023	Structure, Operations		CO 1	UNDERSTAND	Lecture	1 Min Question
3	P	12 May 2023	Process Management, Memory Management				Lecture	
3	E	12 May 2023	Process Management, Memory Management		CO 1	REMEMBER	Lecture	Revision
4	P	13 May 2023	Storage Management, Kernel Data Structures				Lecture	
4	E	16 May 2023	Storage Management, Kernel Data Structures		CO 1	REMEMBER	Lecture	1 Min Question
5	P	16 May 2023	Computing Environments				Lecture	
5	E	19 May 2023	Computing Environments		CO 1	REMEMBER	Lecture	Revision
6	P	16 May 2023	Operating System Structures: Services				Lecture	
6	E	19 May 2023	Operating System Structures: Services		CO 1	UNDERSTAND	Lecture	Revision
7	P	19 May 2023	System Calls				Lecture	
7	E	20 May 2023	System Calls		CO 1	UNDERSTAND	Lecture	Revision
8	P	20 May 2023	Types				Lecture	
8	E	23 May 2023	Types		CO 1	REMEMBER	Lecture	1 Min Question
9	P	23 May 2023	Operating System Structure				Lecture	
9	E	23 May 2023	Operating System Structure		CO 1	REMEMBER	Lecture	Revision
10	P	23 May 2023	System Boot				Lecture	
10	E	26 May 2023	System Boot		CO 1	REMEMBER	Lecture	1 Min Question
11	P	26 May 2023	Processes: Process Concept				Lecture	

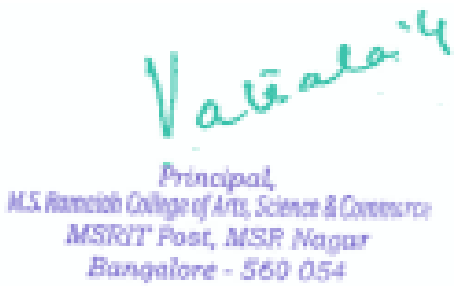
Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
11	E	27 May 2023	Processes: Process Concept		CO 1	UNDERSTAND	Lecture	Revision
12	P	27 May 2023	Scheduling				Lecture	
12	E	30 May 2023	Scheduling		CO 1	REMEMBER	Lecture	1 Min Question
13	P	30 May 2023	Operations				Lecture	
13	E	2 Jun 2023	Operations		CO 1	REMEMBER	Lecture	1 Min Question
14	P	30 May 2023	Interprocess Communication				Lecture	
14	E	3 Jun 2023	Interprocess Communication		CO 1	UNDERSTAND	Lecture	Revision
15	P	2 Jun 2023	Multithreaded Programming: Multicore Programming				Lecture	
15	E	6 Jun 2023	Multithreaded Programming: Multicore Programming		CO 1	UNDERSTAND	Lecture	Revision
16	P	3 Jun 2023	Multithreading Models				Lecture	
16	E	6 Jun 2023	Multithreading Models		CO 1	REMEMBER	Lecture	1 Min Question
Module 2								
17	P	6 Jun 2023	The Critical Section Problem				Lecture	
17	E	27 Jun 2023	The Critical Section Problem		CO 2	UNDERSTAND	Lecture	Revision
18	P	6 Jun 2023	The Critical Section Problem				Lecture	
18	E	30 Jun 2023	The Critical Section Problem		CO 2	UNDERSTAND	Lecture	Revision
19	P	9 Jun 2023	Synchronization hardware				Lecture	
19	E	1 Jul 2023	Synchronization hardware		CO 2	UNDERSTAND	Lecture	Revision
20	P	10 Jun 2023	Synchronization hardware				Lecture	
20	E	4 Jul 2023	Synchronization hardware		CO 2	UNDERSTAND	Lecture	Revision
21	P	13 Jun 2023	Semaphores				Lecture	
21	E	4 Jul 2023	Semaphores		CO 2	UNDERSTAND	Lecture	Revision
22	P	13 Jun 2023	Semaphores				Lecture	
22	E	7 Jul 2023	Semaphores		CO 2	UNDERSTAND	Lecture	Revision
23	P	16 Jun 2023	Classical problems of synchronization				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
23	E	8 Jul 2023	Classical problems of synchronization		CO 2	UNDERSTAND	Lecture	Revision
24	P	17 Jun 2023	Critical regions				Lecture	
24	E	14 Jul 2023	Critical regions		CO 2	UNDERSTAND	Lecture	Revision
25	P	20 Jun 2023	monitors				Lecture	
25	E	18 Jul 2023	monitors		CO 2	UNDERSTAND	Lecture	Revision
26	P	20 Jun 2023	Dead locks				Lecture	
26	E	9 Jun 2023	Dead locks		CO 2	UNDERSTAND	Lecture	1 Min Question
27	P	23 Jun 2023	system model				Lecture	
27	E	10 Jun 2023	system model		CO 2	REMEMBER	Lecture	Revision
28	P	24 Jun 2023	Characterization				Lecture	
28	E	13 Jun 2023	Characterization		CO 2	REMEMBER	Lecture	1 Min Question
29	P	27 Jun 2023	Dead lock prevention				Lecture	
29	E	13 Jun 2023	Dead lock prevention		CO 2	UNDERSTAND	Lecture	Revision
30	P	27 Jun 2023	avoidance and detection				Lecture	
30	E	20 Jun 2023	avoidance and detection		CO 2	UNDERSTAND	Lecture	Revision
31	P	30 Jun 2023	Recovery from dead lock				Lecture	
31	E	20 Jun 2023	Recovery from dead lock		CO 2	REMEMBER	Lecture	Revision
32	P	1 Jul 2023	Combined approach to deadlock handling				Lecture	
32	E	27 Jun 2023	Combined approach to deadlock handling		CO 2	REMEMBER	Lecture	Revision
Module 3								
33	P	4 Jul 2023	Background, Swapping				Lecture	
33	E	18 Jul 2023	Background, Swapping		CO 3	UNDERSTAND	Lecture	Revision
34	P	4 Jul 2023	Contiguous Memory Allocation, Segmentation				Lecture	
34	E	21 Jul 2023	Contiguous Memory Allocation, Segmentation		CO 3	UNDERSTAND	Lecture	Revision

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
35	P	7 Jul 2023	Paging, Structure of the Page Table				Lecture	
35	E	22 Jul 2023	Paging, Structure of the Page Table		CO 3	UNDERSTAND	Lecture	Revision
36	P	8 Jul 2023	Virtual Memory Management: Demand Paging; Copy-on-Write, Page Replacement; Allocation of Frames; Thrashing				Lecture	
36	E	25 Jul 2023	Virtual Memory Management: Demand Paging; Copy-on-Write, Page Replacement; Allocation of Frames; Thrashing		CO 3	UNDERSTAND	Lecture	Revision
37	P	11 Jul 2023	Memory-Mapped Files, Allocating Kernel Memory				Lecture	
37	E	25 Jul 2023	Memory-Mapped Files, Allocating Kernel Memory		CO 3	UNDERSTAND	Lecture	Revision
38	P	11 Jul 2023	File System: File Concept, Access Methods				Lecture	
38	E	25 Jul 2023	File System: File Concept, Access Methods		CO 3	UNDERSTAND	Lecture	Revision
39	P	14 Jul 2023	Directory and Disk Structure, Protection				Lecture	
39	E	28 Jul 2023	Directory and Disk Structure, Protection		CO 3	UNDERSTAND	Lecture	Revision
40	P	15 Jul 2023	File-System Implementation: Structure				Lecture	
40	E	1 Aug 2023	File-System Implementation: Structure		CO 3	UNDERSTAND	Lecture	Revision
41	P	18 Jul 2023	File-System and Directory Implementation				Lecture	
41	E	1 Aug 2023	File-System and Directory Implementation		CO 3	UNDERSTAND	Lecture	Revision
42	P	18 Jul 2023	Allocation Methods				Lecture	
42	E	2 Aug 2023	Allocation Methods		CO 3	UNDERSTAND	Lecture	Revision
43	P	21 Jul 2023	Free Space Management				Lecture	
43	E	4 Aug 2023	Free Space Management		CO 3	UNDERSTAND	Lecture	Revision

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
44	P	22 Jul 2023	Efficiency and Performance				Lecture	
44	E	4 Aug 2023	Efficiency and Performance		CO 3	UNDERSTAND	Lecture	Revision
45	P	25 Jul 2023	Recovery				Lecture	
45	E	5 Aug 2023	Recovery		CO 3	UNDERSTAND	Lecture	Revision
46	P	25 Jul 2023	Mass-Storage Structure: Overview				Lecture	
46	E	11 Aug 2023	Mass-Storage Structure: Overview		CO 3	UNDERSTAND	Lecture	Revision
47	P	28 Jul 2023	Disk Scheduling				Lecture	
47	E	11 Aug 2023	Disk Scheduling		CO 3	UNDERSTAND	Lecture	Revision
48	P	1 Aug 2023	Disk Management				Lecture	
48	E	11 Aug 2023	Disk Management		CO 3	UNDERSTAND	Lecture	Revision
Module 4								
49	P	1 Aug 2023	Protection: Goals, Principles, Domain of Protection				Lecture	
49	E	12 Aug 2023	Protection: Goals, Principles, Domain of Protection		CO 4	UNDERSTAND	Lecture	Revision
50	P	1 Aug 2023	Access Matrix, Implementation of the Access Matrix, Access Control				Lecture	
50	E	12 Aug 2023	Access Matrix, Implementation of the Access Matrix, Access Control		CO 4	UNDERSTAND	Lecture	Revision
51	P	4 Aug 2023	Revocation of the Access Rights, Virtual Machines: Building Blocks				Lecture	
51	E	14 Aug 2023	Revocation of the Access Rights, Virtual Machines: Building Blocks		CO 4	UNDERSTAND	Lecture	Revision
52	P	5 Aug 2023	Types of VMs and their implementations, Distributed Systems: Advantages				Lecture	
52	E	18 Aug 2023	Types of VMs and their implementations, Distributed Systems: Advantages		CO 4	UNDERSTAND	Lecture	Revision

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
53	P	8 Aug 2023	Types of Network-based OS, Robustness				Lecture	
53	E	18 Aug 2023	Types of Network-based OS, Robustness		CO 4	UNDERSTAND	Lecture	Revision
54	P	8 Aug 2023	Design Issues, Distributed File Systems				Lecture	
54	E	19 Aug 2023	Design Issues, Distributed File Systems		CO 4	UNDERSTAND	Lecture	Revision
55	P	11 Aug 2023	Case Studies: The Linux System, Windows10				Lecture	
55	E	19 Aug 2023	Case Studies: The Linux System, Windows10		CO 4	UNDERSTAND	Lecture	Revision



M S Ramaiah College of Arts, Science and Commerce

Bengaluru

COURSE BOOK

Period of the Semester : **From** 8 May 2023 **To** 19 Aug 2023

Dept-Sem-Sec: MCs-4-A

Subject with Code: OPERATING SYSTEM AND UNIX (CS4T1)

Time Slot

MON:	**TUE :** 09:30 - 10:30	14:30	**WED:** 13:30
THU :	**FRI :** 13:30 - 14:30	**SAT :** 09:30 - 10:30	

Name of the Teacher : Shilpa

Lesson Plan & Execution

Name of the Faculty	***Shilpa***
Dept-Sem-Sec	***MCs-4-A***
Date of Commencement	***8 May 2023***
Last Working Day of Semester	***19 Aug 2023***

Source Material List

TEXT 1	Abraham Silberschatz and Peter Baer Galvin, “Operating System Concepts ”, 7th Edition, Pearson Education, 2002,
TEXT 2	M,G,Venkateshmurthy, “Introduction to UNIX & SHELL Programming ”, First Edition, Pearson Education, 2004,
REF 1	Forouzan, “Unix and Shell Programming ”, 1st Edition,2008 Cengage Learning India,
REF 2	H,M,Deitel, “Operating Systems ”, Pearson Learning Solutions, 3rd Edition, 2003,
REF 3	William Stallings, “Operating Systems ”, 6th Edition, Pearson Education, 2010,

Course Outcome List

1	CO1
2	CO2
3	CO3
4	CO4

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
Module 1								
1	P	9 May 2023	Computer System Organization, Architecture				Lecture	
1	E	9 May 2023	Computer System Organization, Architecture		CO 1	REMEMBER	Lecture	Revision
2	P	12 May 2023	Structure, Operations				Lecture	
2	E	12 May 2023	Structure, Operations		CO 1	UNDERSTAND	Lecture	1 Min Question
3	P	13 May 2023	Process Management, Memory Management				Lecture	
3	E	12 May 2023	Process Management, Memory Management		CO 1	REMEMBER	Lecture	Revision
4	P	16 May 2023	Storage Management, Kernel Data Structures				Lecture	
4	E	16 May 2023	Storage Management, Kernel Data Structures		CO 1	REMEMBER	Lecture	1 Min Question
5	P	16 May 2023	Computing Environments				Lecture	
5	E	19 May 2023	Computing Environments		CO 1	REMEMBER	Lecture	Revision
6	P	19 May 2023	Operating System Structures: Services				Lecture	
6	E	19 May 2023	Operating System Structures: Services		CO 1	UNDERSTAND	Lecture	Revision
7	P	20 May 2023	System Calls				Lecture	
7	E	20 May 2023	System Calls		CO 1	UNDERSTAND	Lecture	Revision
8	P	23 May 2023	Types				Lecture	
8	E	23 May 2023	Types		CO 1	REMEMBER	Lecture	1 Min Question
9	P	23 May 2023	Operating System Structure				Lecture	
9	E	23 May 2023	Operating System Structure		CO 1	REMEMBER	Lecture	Revision
10	P	26 May 2023	System Boot				Lecture	
10	E	26 May 2023	System Boot		CO 1	REMEMBER	Lecture	1 Min Question
11	P	27 May 2023	Processes: Process Concept				Lecture	

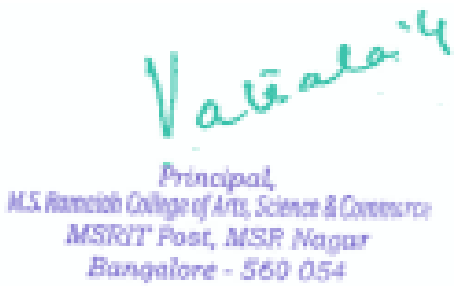
Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
11	E	27 May 2023	Processes: Process Concept		CO 1	UNDERSTAND	Lecture	Revision
12	P	30 May 2023	Scheduling				Lecture	
12	E	30 May 2023	Scheduling		CO 1	REMEMBER	Lecture	1 Min Question
13	P	30 May 2023	Operations				Lecture	
13	E	2 Jun 2023	Operations		CO 1	REMEMBER	Lecture	1 Min Question
14	P	2 Jun 2023	Interprocess Communication				Lecture	
14	E	3 Jun 2023	Interprocess Communication		CO 1	UNDERSTAND	Lecture	Revision
15	P	3 Jun 2023	Multithreaded Programming: Multicore Programming				Lecture	
15	E	6 Jun 2023	Multithreaded Programming: Multicore Programming		CO 1	UNDERSTAND	Lecture	Revision
16	P	6 Jun 2023	Multithreading Models				Lecture	
16	E	6 Jun 2023	Multithreading Models		CO 1	REMEMBER	Lecture	1 Min Question
Module 2								
17	P	6 Jun 2023	The Critical Section Problem				Lecture	
17	E	27 Jun 2023	The Critical Section Problem		CO 2	UNDERSTAND	Lecture	Revision
18	P	9 Jun 2023	The Critical Section Problem				Lecture	
18	E	30 Jun 2023	The Critical Section Problem		CO 2	UNDERSTAND	Lecture	Revision
19	P	10 Jun 2023	Synchronization hardware				Lecture	
19	E	1 Jul 2023	Synchronization hardware		CO 2	UNDERSTAND	Lecture	Revision
20	P	13 Jun 2023	Synchronization hardware				Lecture	
20	E	4 Jul 2023	Synchronization hardware		CO 2	UNDERSTAND	Lecture	Revision
21	P	13 Jun 2023	Semaphores				Lecture	
21	E	4 Jul 2023	Semaphores		CO 2	UNDERSTAND	Lecture	Revision
22	P	16 Jun 2023	Semaphores				Lecture	
22	E	7 Jul 2023	Semaphores		CO 2	UNDERSTAND	Lecture	Revision
23	P	17 Jun 2023	Classical problems of synchronization				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
23	E	8 Jul 2023	Classical problems of synchronization		CO 2	UNDERSTAND	Lecture	Revision
24	P	20 Jun 2023	Critical regions				Lecture	
24	E	14 Jul 2023	Critical regions		CO 2	UNDERSTAND	Lecture	Revision
25	P	20 Jun 2023	monitors				Lecture	
25	E	18 Jul 2023	monitors		CO 2	UNDERSTAND	Lecture	Revision
26	P	23 Jun 2023	Dead locks				Lecture	
26	E	9 Jun 2023	Dead locks		CO 2	UNDERSTAND	Lecture	1 Min Question
27	P	24 Jun 2023	system model				Lecture	
27	E	10 Jun 2023	system model		CO 2	REMEMBER	Lecture	Revision
28	P	27 Jun 2023	Characterization				Lecture	
28	E	13 Jun 2023	Characterization		CO 2	REMEMBER	Lecture	1 Min Question
29	P	27 Jun 2023	Dead lock prevention				Lecture	
29	E	13 Jun 2023	Dead lock prevention		CO 2	UNDERSTAND	Lecture	Revision
30	P	30 Jun 2023	avoidance and detection				Lecture	
30	E	20 Jun 2023	avoidance and detection		CO 2	UNDERSTAND	Lecture	Revision
31	P	1 Jul 2023	Recovery from dead lock				Lecture	
31	E	20 Jun 2023	Recovery from dead lock		CO 2	REMEMBER	Lecture	Revision
32	P	4 Jul 2023	Combined approach to deadlock handling				Lecture	
32	E	27 Jun 2023	Combined approach to deadlock handling		CO 2	REMEMBER	Lecture	Revision
Module 3								
33	P	4 Jul 2023	Background, Swapping				Lecture	
33	E	18 Jul 2023	Background, Swapping		CO 3	UNDERSTAND	Lecture	Revision
34	P	7 Jul 2023	Contiguous Memory Allocation, Segmentation				Lecture	
34	E	21 Jul 2023	Contiguous Memory Allocation, Segmentation		CO 3	UNDERSTAND	Lecture	Revision

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
35	P	8 Jul 2023	Paging, Structure of the Page Table				Lecture	
35	E	22 Jul 2023	Paging, Structure of the Page Table		CO 3	UNDERSTAND	Lecture	Revision
36	P	11 Jul 2023	Virtual Memory Management: Demand Paging; Copy-on-Write, Page Replacement; Allocation of Frames; Thrashing				Lecture	
36	E	25 Jul 2023	Virtual Memory Management: Demand Paging; Copy-on-Write, Page Replacement; Allocation of Frames; Thrashing		CO 3	UNDERSTAND	Lecture	Revision
37	P	11 Jul 2023	Memory-Mapped Files, Allocating Kernel Memory				Lecture	
37	E	25 Jul 2023	Memory-Mapped Files, Allocating Kernel Memory		CO 3	UNDERSTAND	Lecture	Revision
38	P	14 Jul 2023	File System: File Concept, Access Methods				Lecture	
38	E	25 Jul 2023	File System: File Concept, Access Methods		CO 3	UNDERSTAND	Lecture	Revision
39	P	15 Jul 2023	Directory and Disk Structure, Protection				Lecture	
39	E	28 Jul 2023	Directory and Disk Structure, Protection		CO 3	UNDERSTAND	Lecture	Revision
40	P	18 Jul 2023	File-System Implementation: Structure				Lecture	
40	E	1 Aug 2023	File-System Implementation: Structure		CO 3	UNDERSTAND	Lecture	Revision
41	P	18 Jul 2023	File-System and Directory Implementation				Lecture	
41	E	1 Aug 2023	File-System and Directory Implementation		CO 3	UNDERSTAND	Lecture	Revision
42	P	21 Jul 2023	Allocation Methods				Lecture	
42	E	2 Aug 2023	Allocation Methods		CO 3	UNDERSTAND	Lecture	Revision
43	P	22 Jul 2023	Free Space Management				Lecture	
43	E	4 Aug 2023	Free Space Management		CO 3	UNDERSTAND	Lecture	Revision

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
44	P	25 Jul 2023	Efficiency and Performance				Lecture	
44	E	4 Aug 2023	Efficiency and Performance		CO 3	UNDERSTAND	Lecture	Revision
45	P	25 Jul 2023	Recovery				Lecture	
45	E	5 Aug 2023	Recovery		CO 3	UNDERSTAND	Lecture	Revision
46	P	28 Jul 2023	Mass-Storage Structure: Overview				Lecture	
46	E	11 Aug 2023	Mass-Storage Structure: Overview		CO 3	UNDERSTAND	Lecture	Revision
47	P	1 Aug 2023	Disk Scheduling				Lecture	
47	E	11 Aug 2023	Disk Scheduling		CO 3	UNDERSTAND	Lecture	Revision
48	P	1 Aug 2023	Disk Management				Lecture	
48	E	11 Aug 2023	Disk Management		CO 3	UNDERSTAND	Lecture	Revision
Module 4								
49	P	4 Aug 2023	Protection: Goals, Principles, Domain of Protection				Lecture	
49	E	12 Aug 2023	Protection: Goals, Principles, Domain of Protection		CO 4	UNDERSTAND	Lecture	Revision
50	P	5 Aug 2023	Access Matrix, Implementation of the Access Matrix, Access Control				Lecture	
50	E	12 Aug 2023	Access Matrix, Implementation of the Access Matrix, Access Control		CO 3	UNDERSTAND	Lecture	Revision
51	P	8 Aug 2023	Revocation of the Access Rights, Virtual Machines: Building Blocks				Lecture	
51	E	14 Aug 2023	Revocation of the Access Rights, Virtual Machines: Building Blocks		CO 4	UNDERSTAND	Lecture	Revision
52	P	8 Aug 2023	Types of VMs and their implementations, Distributed Systems: Advantages				Lecture	
52	E	18 Aug 2023	Types of VMs and their implementations, Distributed Systems: Advantages		CO 4	UNDERSTAND	Lecture	Revision

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
53	P	11 Aug 2023	Types of Network-based OS, Robustness				Lecture	
53	E	18 Aug 2023	Types of Network-based OS, Robustness		CO 4	UNDERSTAND	Lecture	Revision
54	P	12 Aug 2023	Design Issues, Distributed File Systems				Lecture	
54	E	19 Aug 2023	Design Issues, Distributed File Systems		CO 4	UNDERSTAND	Lecture	Revision
55	P	12 Aug 2023	Case Studies: The Linux System, Windows10				Lecture	
55	E	19 Aug 2023	Case Studies: The Linux System, Windows10		CO 4	UNDERSTAND	Lecture	Revision



M S Ramaiah College of Arts, Science and Commerce

Bengaluru

COURSE BOOK

Period of the Semester : **From** 14 Nov 2022 **To** 14 Mar 2023

Dept-Sem-Sec: MbGnBc-5-A

Subject with Code: BIOCHEMISTRY - VI (BC-502)

Time Slot		
MON:	**TUE :**	**WED:**
THU : 10:30 - 11:30	**FRI :**	**SAT :**

Name of the Teacher : Ms Ramya Kumari B.s

Lesson Plan & Execution	
Name of the Faculty	***Ms Ramya Kumari B.s***
Dept-Sem-Sec	***MbGnBc-5-A***
Date of Commencement	***14 Nov 2022***
Last Working Day of Semester	***14 Mar 2023***
Source Material List	
Course Outcome List	

1	Definition classification and mechanism of enzymes Biological system
2	detail structure of nucleic acids , isolation and sequencing techniques
3	REPLCATION IN PROKARYOTES AND EUKARYOTES
4	DNA Mutation and repair

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
Module 1								
1	P	17 Nov 2022	Brief Introduction, Nomenclature (E C No upto 2nd digit) and classification of enzrymes, Holoenzyme, apoenzyme				Lecture	
1	E							
3	P	24 Nov 2022	prosthetic group, Enzyme specificity and theories-Lock and key model, induced fit theory, Active site and its characteristics				Lecture	
3	E							
5	P	1 Dec 2022	Enzyme assay methods, enzyme Units, IU, KCAT & Katal				Lecture	
5	E							
7	P	8 Dec 2022	Chemical nature of enzymes catalysis and energy of activation, Effect of pH and temperature, Ertzyme kinetics of single substrate reactions- Michaelis theory				Lecture	
7	E							
9	P	15 Dec 2022	steady state theory, MichaelisMenten equation (Noderivation), Significance of Km and V max and their determination using Line Weaver- Burkplots				Lecture	
9	E							
11	P	22 Dec 2022	Monomeric and oligomeric enzymes, cooperativity incatalysis, sigmoidal kinetics				Lecture	
11	E							
13	P	29 Dec 2022	allosteric effectors, Enzyme Inhibition,Types - reversible				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
13	E							
15	P	5 Jan 2023	irreversible, competitive, noncompetitive				Lecture	
15	E							
17	P	12 Jan 2023	un-competitive and mixed inhibitors, Partial inhibition, substrate inhibition and allosteric inhibition				Lecture	
17	E							
19	P	19 Jan 2023	Cofactors- metal cofactors, Coenzymes, definition and role of TPP and PLP)				Lecture	
19	E							
Module 2								
21	P	26 Jan 2023	Nucleosides and nucleotides, configuration and conformation				Lecture	
21	E							
22	P	2 Feb 2023	Composition of RNA and DNA, Physico- chemical properties of nucleic acids - effect of alkali				Lecture	
22	E							
23	P	9 Feb 2023	acid and heat (denaturation and renaturation)				Lecture	
23	E							
24	P	16 Feb 2023	features of phosphodiester bond				Lecture	
24	E							
25	P	23 Feb 2023	endonucleases				Lecture	
25	E							
26	P	2 Mar 2023	Complementary base pairing				Lecture	
26	E							
27	P	9 Mar 2023	secondary structure of RNA				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
27	E							
28	P	9 Mar 2023	features of DNA double helix (Watson-Crick model)				Lecture	
28	E							
29	P	9 Mar 2023	Nucleoproteins - histone and nonhistone				Lecture	
29	E							
30	P	9 Mar 2023	Isolation of nucleic acids and sequencing				Lecture	
30	E							
Module 3								
2	P	17 Nov 2022	Experimental proofs, Genome organization- from nucleotide to chromatin, the versatility of RNA				Lecture	
2	E							
4	P	24 Nov 2022	Basic features of DNA replication in vivo, semi - conservative replication, bidirectional replication-visualization of replication forks by autoradiography				Lecture	
4	E							
6	P	1 Dec 2022	unique origins of replication, DNA polymerases and DNA synthesis in vitro, Discovery of DNA polymerases				Lecture	
6	E							
8	P	8 Dec 2022	multiple DNA polymerases, the complex replication apparatus, semi-discontinuous synthesis				Lecture	
8	E							

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
10	P	15 Dec 2022	replication initiation, elongation and termination- Enzymology, outline of DNA replication in eukaryotes				Lecture	
10	E							
12	P	22 Dec 2022	Mutagens- chemical and physical, Molecular basis of mutation				Lecture	
12	E	22 Dec 2022	Mutagens- chemical and physical, Molecular basis of mutation				Lecture	
14	P	29 Dec 2022	spontaneous and induced mutations, Types of mutation				Lecture	
14	E	29 Dec 2022	spontaneous and inducedmutations, Types of mutation				Lecture	
16	P	5 Jan 2023	reversion and suppression, DNA repair mechanisms- repair systems				Lecture	
16	E	5 Jan 2023	reversion and suppression, DNA repair mechanisms- repair systems				Lecture	
18	P	12 Jan 2023	direct (photoactivation)				Lecture	
18	E	12 Jan 2023	direct (photoactivation)				Lecture	
20	P	19 Jan 2023	excision repair - base excision and nucleotide excision rep				Lecture	
20	E	19 Jan 2023	excision repair - base excision and nucleotide excision rep				Lecture	
Module 4								
31	P	9 Mar 2023	Transfer of RNA polymerases, genetic information,the central dogma, RNA polymerases				Lecture	
31	E							

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
32	P	9 Mar 2023	different types of promoters, regulatory elements, constitutive and inducible promoter, operatorslnitiation (role sigma factor)				Lecture	
32	E							
33	P	9 Mar 2023	elongation and termination (rho dependent and independent),regulation of gene expression i-n prokaryotes, ptsitive and negative control using lac operon as an example				Lecture	
33	E							
34	P	9 Mar 2023	attenuation, trp operon, Overview of eukaryo'tic transcription				Lecture	
34	E							
35	P	9 Mar 2023	-post transcriptional processing, capping, splicing and polyadenylation				Lecture	
35	E							
36	P	9 Mar 2023	Genetic code- features,Translation machinery- ribosomes				Lecture	
36	E							
37	P	9 Mar 2023	composition and assembly, Translation - overview				Lecture	
37	E							
38	P	9 Mar 2023	mechanism, iso-accepting tRNA				Lecture	
38	E							
39	P	9 Mar 2023	wobble hypothesis, outline of translation in eukaryotes				Lecture	
39	E							
40	P	9 Mar 2023	Inhibitors of translation				Lecture	
40	E							

Module No.	# of Classes Planned(till date)	Planned Effort(till date)	# of Classes Executed(till date)	Actual Effort (till date)	% Coverage
1	10	10hrs 0min	10	10hrs 0min	100.0
2	14	14hrs 0min	14	14hrs 0min	100.0
3	12	12hrs 0min	12	12hrs 0min	100.0
4	14	14hrs 0min	14	14hrs 0min	100.0
5	6	6hrs 0min	6	6hrs 0min	100.0

Faculty in charge

HEAD OF DEPARTMENT
M.S. RAMAIAH COLLEGE
OF ARTS, SCIENCE & COMMERCE
BANGALORE-560054

HOD's Signature

Signature of Principal (remark if any)

Principal
M.S. Ramaiah College of Arts, Science & Commerce
Bangalore-560054

RAMAIAH
College of Arts, Science & Commerce

M S Ramaiah College of Arts, Science and Commerce

Bengaluru

COURSE BOOK

Period of the Semester : **From** 2 Sep 2022 **To** 28 Feb 2023

Dept-Sem-Sec: B.Com-1-B

Subject with Code: MANAGEMENT PRINCIPLES AND APPLICATIONS (B.COM 1.2)

Time Slot		
MON: 09:30 - 10:30	**TUE :** 09:30 - 10:30	**WED:**
THU :	**FRI :** 09:30 - 10:30	**SAT :** 10:30 - 11:30

Name of the Teacher : Ms Sindhu K

Principal,
M.S. Ramaiah College of Arts, Science & Commerce
MSRIT Post, MSR Nagar
Bangalore - 560 0

Lesson Plan & Execution

Name of the Faculty	***Ms Sindhu K***
Dept-Sem-Sec	***B.Com-1-B***
Date of Commencement	***2 Sep 2022***
Last Working Day of Semester	***28 Feb 2023***

Source Material List

REF 1	1. Harold Koontz and Heinz Weihrich (2017), Essentials of Management: An International and Leadership Perspective, McGraw Hill Education, 10th Edition. 2. Stephen PRobbins and Madhushree Nanda Agrawal (2009), Fundamentals of Management: Essential Concepts and Applications, Pearson Education, 6th Edition. 3. James H. Donnelly, (1990) Fundamentals of Management, Pearson Education, 7th Edition. 4. B.P. Singh and A.K.Singh (2002), Essentials of Management, Excel Books 5. P C Tripathi & P N Reddy (2005), Principles of Management, TMH Publications, 3rd Edition. 6. Koontz Harold (2004), Essentials of Management, Tata McGraw Hill.

Course Outcome List

1	Understand and identify the different theories of organisations, which are relevant in the present context
2	Design and demonstrate the strategic plan for the attainment of organisational goals
3	Differentiate the different types of authority and chose the best one in the present context
4	Compare and chose the different types of motivation factors and leadership styles

5	Choose the best controlling techniques for better productivity of an organisation

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
Module 1								
1	P	2 Sep 2022	Introduction-Meaning and importance of Management-Managerial FunctionsEssence of Mangership-Evolution of the Management thoughts				Lecture	
1	E	2 Sep 2022	Introduction-Meaning and importance of Management-Managerial FunctionsEssence of Mangership-Evolution of the Management thoughts				Lecture	
2	P	3 Sep 2022	Introduction-Meaning and importance of Management-Managerial FunctionsEssence of Mangership-Evolution of the Management thoughts				Lecture	
2	E	3 Sep 2022	Introduction-Meaning and importance of Management-Managerial FunctionsEssence of Mangership-Evolution of the Management thoughts				Lecture	
3	P	5 Sep 2022	Introduction-Meaning and importance of Management-Managerial FunctionsEssence of Mangership-Evolution of the Management thoughts				Lecture	
3	E	5 Sep 2022	Introduction-Meaning and importance of Management-Managerial FunctionsEssence of Mangership-Evolution of the Management thoughts				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
4	P	6 Sep 2022	Introduction-Meaning and importance of Management-Managerial FunctionsEssence of Mangership-Evolution of the Management thoughts				Lecture	
4	E	6 Sep 2022	Introduction-Meaning and importance of Management-Managerial FunctionsEssence of Mangership-Evolution of the Management thoughts	REF 1			Lecture	
5	P	9 Sep 2022	Introduction-Meaning and importance of Management-Managerial FunctionsEssence of Mangership-Evolution of the Management thoughts				Lecture	
5	E	9 Sep 2022	Introduction-Meaning and importance of Management-Managerial FunctionsEssence of Mangership-Evolution of the Management thoughts				Lecture	
6	P	10 Sep 2022	Introduction-Meaning and importance of Management-Managerial FunctionsEssence of Mangership-Evolution of the Management thoughts				Lecture	
6	E	10 Sep 2022	Introduction-Meaning and importance of Management-Managerial FunctionsEssence of Mangership-Evolution of the Management thoughts				Lecture	

Validated

Period	Plan/ Execution	Date	Topic	Source material to be referred	Course Outcome	Bloom's Level	Execution Methods	Learning Validation Method
7	P	12 Sep 2022	Classical organizational theories-Neo-Classical theories-Modern organizational theories				Lecture	
7	E	12 Sep 2022	Classicalorganizational theories-Neo-Classical theories-Modern organizational theories				Lecture	
8	P	13 Sep 2022	Classical organizational theories-Neo-Classical theories-Modern organizational theories				Lecture	
8	E	13 Sep 2022	Classicalorganizational theories-Neo-Classical theories-Modern organizational theories				Lecture	
9	P	16 Sep 2022	Classical organizational theories-Neo-Classical theories-Modern organizational theories				Lecture	
9	E	16 Sep 2022	Classicalorganizational theories-Neo-Classical theories-Modern organizational theories				Lecture	
10	P	19 Sep 2022	Classical organizational theories-Neo-Classical theories-Modern organizational theories				Lecture	
10	E	19 Sep 2022	Classicalorganizational theories-Neo-Classical theories-Modern organizational theories				Lecture	
11	P	20 Sep 2022	Classical organizational theories-Neo-Classical theories-Modern organizational theories				Lecture	
11	E	20 Sep 2022	Classicalorganizational theories-Neo-Classical theories-Modern organizational theories				Lecture	

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Period	Plan/ Execution	Date	Topic	Source material to be referred	Course Outcome	Bloom's Level	Execution Methods	Learning Validation Method
12	P	23 Sep 2022	Classical organizational theories-Neo-Classical theories-Modern organizational theories				Lecture	
12	E	23 Sep 2022	Classicalorganizational theories-Neo-Classical theories-Modern organizational theories				Lecture	
13	E	23 Sep 2022	Classicalorganizational theories-Neo-Classical theories-Modern organizational theories				Lecture	
Module 2								
13	P	24 Sep 2022	Introduction-Meaning-Nature-Purpose-Types of plans-Planning process				Lecture	
14	E	24 Sep 2022	Introduction-Meaning-Nature-Purpose-Types of plans-Planning process				Lecture	
14	P	26 Sep 2022	Introduction-Meaning-Nature-Purpose-Types of plans-Planning process				Lecture	
15	E	24 Sep 2022	Introduction-Meaning-Nature-Purpose-Types of plans-Planning process				Lecture	
15	P	27 Sep 2022	Strategic planning				Lecture	
16	E	24 Sep 2022	Introduction-Meaning-Nature-Purpose-Types of plans-Planning process				Lecture	
16	P	30 Sep 2022	Strategic planning				Lecture	
17	E	26 Sep 2022	Introduction-Meaning-Nature-Purpose-Types of plans-Planning process				Lecture	
17	P	1 Oct 2022	Concept-Process-Importance and Limitations				Lecture	
18	E	27 Sep 2022	Strategicplanning				Lecture	
18	P	3 Oct 2022	Concept-Process-Importance and Limitations				Lecture	
19	E	30 Sep 2022	Strategicplanning				Lecture	

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Period	Plan/ Execution	Date	Topic	Source material to be referred	Course Outcome	Bloom's Level	Execution Methods	Learning Validation Method
19	P	7 Oct 2022	Environmental Analysis and diagnosis				Lecture	
20	E	1 Oct 2022	Concept-Process-Importance and Limitations				Lecture	
20	P	8 Oct 2022	Environmental Analysis and diagnosis				Lecture	
21	E	3 Oct 2022	Concept-Process-Importance and Limitations				Lecture	
21	P	10 Oct 2022	Meaning-importance and Techniques (SWOT/TOWS/WOTS-UPBCG Matrix-Competitor Analysis)				Lecture	
22	E	7 Oct 2022	Environmental Analysisand diagnosis				Lecture	
22	P	11 Oct 2022	Meaning-importance and Techniques (SWOT/TOWS/WOTS-UPBCG Matrix-Competitor Analysis)				Lecture	
23	E	8 Oct 2022	Environmental Analysisand diagnosis				Lecture	
23	P	14 Oct 2022	Decision-making-Concept-ImportanceCommittee and Group decision making Process				Lecture	
24	E	10 Oct 2022	Meaning-importance and Techniques (SWOT/TOWS/WOTS-UPBCG Matrix-Competitor Analysis)				Lecture	
24	P	15 Oct 2022	Decision-making-Concept-ImportanceCommittee and Group decision making Process				Lecture	
25	E	11 Oct 2022	Meaning-importance and Techniques (SWOT/TOWS/WOTS-UPBCG Matrix-Competitor Analysis)				Lecture	
26	E	14 Oct 2022	Decision-making-Concept-ImportanceCommittee and Group decision making Process				Lecture	
27	E	15 Oct 2022	Decision-making-Concept-ImportanceCommittee and Group decision making Process				Lecture	
Module 3								

Period	Plan/ Execution	Date	Topic	Source material to be referred	Course Outcome	Bloom's Level	Execution Methods	Learning Validation Method
25	P	17 Oct 2022	Introduction-Meaning-Concept and Process of Organizing – An overview-Span of management-Different types of authority (line				Lecture	
28	E	17 Oct 2022	Introduction-Meaning-Concept and Process of Organizing – An overview-Span ofmanagement-Different types of authority (line				Lecture	
26	P	18 Oct 2022	Introduction-Meaning-Concept and Process of Organizing – An overview-Span of management-Different types of authority (line				Lecture	
29	E	18 Oct 2022	Introduction-Meaning-Concept and Process of Organizing – An overview-Span ofmanagement-Different types of authority (line				Lecture	
27	P	21 Oct 2022	Introduction-Meaning-Concept and Process of Organizing – An overview-Span of management-Different types of authority (line				Lecture	
30	E	21 Oct 2022	Introduction-Meaning-Concept and Process of Organizing – An overview-Span ofmanagement-Different types of authority (line				Lecture	
28	P	22 Oct 2022	Introduction-Meaning-Concept and Process of Organizing – An overview-Span of management-Different types of authority (line				Lecture	

Period	Plan/ Execution	Date	Topic	Source material to be referred	Course Outcome	Bloom's Level	Execution Methods	Learning Validation Method
31	E	22 Oct 2022	Introduction-Meaning-Concept and Process of Organizing – An overview-Span ofmanagement-Different types of authority (line				Lecture	
29	P	28 Oct 2022	staff and functional)-Decentralization-Delegation of authority; Formal and Informal StructurePrinciples of Organizing				Lecture	
32	E	28 Oct 2022	staff and functional)-Decentralization-Delegation of authority; Formal and Informal StructurePrinciples of Organizing				Lecture	
30	P	29 Oct 2022	staff and functional)-Decentralization-Delegation of authority; Formal and Informal StructurePrinciples of Organizing				Lecture	
33	E	29 Oct 2022	staff and functional)-Decentralization-Delegation of authority; Formal and Informal StructurePrinciples of Organizing				Lecture	
31	P	31 Oct 2022	staff and functional)-Decentralization-Delegation of authority; Formal and Informal StructurePrinciples of Organizing				Lecture	
34	E	31 Oct 2022	staff and functional)-Decentralization-Delegation of authority; Formal and Informal StructurePrinciples of Organizing				Lecture	
32	P	4 Nov 2022	staff and functional)-Decentralization-Delegation of authority; Formal and Informal StructurePrinciples of Organizing				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
35	E	4 Nov 2022	staff and functional)-Decentralization-Delegation of authority; Formal and Informal StructurePrinciples of Organizing				Lecture	
33	P	5 Nov 2022	Network Organisation Structure				Lecture	
36	E	5 Nov 2022	Network Organisation Structure				Lecture	
34	P	7 Nov 2022	Network Organisation Structure				Lecture	
37	E	7 Nov 2022	Network Organisation Structure				Lecture	
35	P	8 Nov 2022	Network Organisation Structure				Lecture	
38	E	8 Nov 2022	Network Organisation Structure				Lecture	
36	P	12 Nov 2022	Network Organisation Structure				Lecture	
39	E	12 Nov 2022	Network Organisation Structure				Lecture	
Module 4								
37	P	14 Nov 2022	Introduction-Staffing.Concept of Staffing-Staffing Process				Lecture	
40	E	14 Nov 2022	Introduction-Staffing. Concept of Staffing-Staffing Process				Lecture	
38	P	15 Nov 2022	Motivation.ConceptImportance-extrinsic and intrinsic motivation-Major Motivation theories				Lecture	
41	E	15 Nov 2022	Motivation. ConceptImportance-extrinsic and intrinsic motivation-Major Motivation theories				Lecture	
39	P	18 Nov 2022	Maslow's Need-Hierarchy Theory-Hertzberg's Two-factor Theory-Vroom's Expectation Theory. Leadership				Lecture	

Period	Plan/ Execution	Date	Topic	Source material to be referred	Course Outcome	Bloom's Level	Execution Methods	Learning Validation Method
48	P	3 Dec 2022	Concept-purpose-process-Oral and written communicationFormal and informal communication networks-Barriers to communicationOvercoming barriers to communication				Lecture	
51	E	3 Dec 2022	Concept-purpose-process-Oral and written communicationFormal and informal communication networks-Barriers to communicationOvercoming barriers to communication				Lecture	
Module 5								
49	P	5 Dec 2022	Control: Concept-Process-Limitations-Principles of Effective Control-Major Techniques of control – Ratio Analysis				Lecture	
52	E	5 Dec 2022	Control: Concept-Process-Limitations-Principles of Effective Control-MajorTechniques of control – Ratio Analysis				Lecture	
50	P	6 Dec 2022	ROI				Lecture	
53	E	6 Dec 2022	ROI				Lecture	
51	P	9 Dec 2022	Budgetary Control				Lecture	
54	E	9 Dec 2022	Budgetary Control				Lecture	
52	P	10 Dec 2022	EVA				Lecture	
55	E	10 Dec 2022	EVA				Lecture	
53	P	12 Dec 2022	PERT/CPM				Lecture	
56	E	12 Dec 2022	PERT/CPM				Lecture	
54	P	13 Dec 2022	Emerging issues in Management				Lecture	
57	E	13 Dec 2022	Emerging issues in Management				Lecture	
55	P	16 Dec 2022	Coordination				Lecture	

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Period	Plan/ Execution	Date	Topic	Source material to be referred	Course Outcome	Bloom's Level	Execution Methods	Learning Validation Method
58	P	16 Dec 2022	Coordination				Lecture	
56	P	17 Dec 2022	Meaning-NatureImportance-Principles of Coordination				Lecture	
59	P	17 Dec 2022	Meaning-NatureImportance-Principles of Coordination				Lecture	

Module No.	*# of Classes Planned(till date)*	*Planned Effort(till date)*	*# of Classes Executed(till date)*	*Actual Effort (till date)*	*% Coverage*
1	12	12hrs 0min	13	13hrs 0min	108.33
2	12	12hrs 0min	14	14hrs 0min	116.67
3	12	12hrs 0min	12	12hrs 0min	100.0
4	12	12hrs 0min	12	12hrs 0min	100.0
5	8	8hrs 0min	8	8hrs 0min	100.0

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Module No.	# of Classes Planned(till date)	Planned Effort(till date)	# of Classes Executed(till date)	Actual Effort (till date)	% Coverage
1	5	5hrs 0min	5	5hrs 0min	100.0
2	15	15hrs 0min	13	13hrs 0min	86.67
3	6	6hrs 0min	6	6hrs 0min	100.0
4	14	12hrs 30min	14	12hrs 30min	100.0
5	14	12hrs 40min	14	12hrs 40min	100.0

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Lesson Plan for V Sem B.Sc Electronics-2023

Sub – MICRO PROCESSOR and ELECTRONIC INSTRUMENTATION

Name of Faculty – Dr.Naveen Kumar R

Class	Sl No	Content	No of hours planned	Date	Remarks
III BSc (Vth SEM)		**Unit-1: (9 hrs)**			
	1	**Introduction to Microprocessor** Introduction, applications, basic block diagram, Features and classification of microprocessors	02	Day 1 &2	
	2	**Microprocessor 8085:** Architecture of 8085, Pin description of microprocessor 8085, Address pins	01	Day 3	
	3	Address/data pins, multiplexing, Vcc, ground, crystal pins, ALE pins, role of each pins	01	Day 4	
	4	Pins Read, write, HOLD, READY, Reset, Status pins,	01	Day 5	
	5	Multiplexing the data/address busses, Concept of memory, registers, ALU, accumulator, SP,IR. (Objective: practice the student to write pin diagram, architecture)	01	Day 6	
	6	**8085 Instructions:** Operation code, Operand & Mnemonics, classification of Instruction set of 8085.	01	Day 7	
	7	Addressing modes, Data transfer instructions and examples.	01	Day 8	
	8	Arithmetic instructions, increment & decrement instructions and examples	01	Day 9	
	9	Logical instructions, branch instructions and machine control instructions and its examples. (Objectives: practice the instructions set to the students and way of specifying the data)	01	Day 10	
			09hrs		

		UNIT 2: 09 hours			
	1	**Stack operations and Microprocessor Programming:** Stack operations, subroutine calls and return operations.	**01**	**Day 11**	
	2	Delay loops, use of counters, timing diagrams-instruction cycle, machine cycle, T- states, time delay-numerical examples.	**01**	**Day 12**	
	3	Programs for data transfer, memory operations, addition, subtraction and multiplication of two 8-bit & 16- bit numbers	**02**	**Day 13,14**	
	4	Programs to display of smallest / largest number in a given array of numbers, sorting of numbers in descending / ascending order.	**02**	**Day 15,16**	
	5	Number of 1's and 0's in a given byte, testing for zero condition. 1's and 2's complements.	**01**	**Day 17**	
	6	Verification of truth tables of logic gates, program to add two N byte numbers, program to generate Fibonacci series up to the limit.	**01**	**Day 18**	
	7	Program to find the factorial of a number, program to find the GCD of two integer numbers. (Objective: practice the students to learn how to implement the program logics)	**01**	**Day 19**	
			09hrs		
		UNIT 3: 08 hours			
	1	**I/O instructions and Interfacing:** I/O instructions and, interrupts in 8085.	**01**	**Day 20**	
	2	Basic interfacing concepts, compatible ICs of microprocessor 8085, data transfer, synchronous I/O data transfer using interrupts.	**01**	**Day 21**	
	3	Memory interfacing – address decoding, interfacing RAM and ROM.	**01**	**Day 22**	
	4	Interfacings I/O devices– input port, output port, IN & OUT instructions.	**02**	**Day 23&24**	
	5	Interfacing input devices (interfacing matrix key board-block diagram), interfacing output devices (LED display interfacing-block diagram).	**02**	**Day 25&26**	
		PPI IC 8255– features, pin diagram, functional block diagram, ports & their modes.	**01**	**Day 27**	

		(objectives: to taught students to learn how to connect microprocessor to external devices)	**08hrs**		
	1	**Unit –4** **Measurement systems, Transducers and Electronic Instrumentation** Introduction to general measurement systems; characteristics; static characteristics- Definition of instrument, measurement, accuracy, resolution, precision, expected value, error and sensitivity	**01**	**Day 28**	
	2	Transducers- Types of transducers; Explanation of strain gauges- bonded, unbonded, foil and semiconductor strain gauge	**01**	**Day 29**	
	3	Temperature transducers- Introduction; Thermistor- construction; advantages;	**02**	**Day 30**	
	4	Disadvantages and applications	**01**	**Day 31**	
	5	Explanation of thermocouples and ultrasonic temperature transducers			
		Photoelectric transducers- construction, working and applications of photoconductive cell, photodiode and photovoltaic cell	**01**	**Day 32**	
	6	Construction, working and applications of phototransistor; Pressure transducers- construction, working and applications of MIC and loud speaker	**01**	**Day 33**	
	7	Explanation of signal conditioning; Block diagram and qualitative explanation of chopper amplifier, carrier amplifier and lock in amplifier	**01**	**Day 34**	
		(Objectives: to taught them about the basics of transducers, instruments)	**08hrs**		

	1	**Unit –5** **Introduction to Bio-medical instruments:** Introduction, Explanation of origin of bio-electric signals	**01**	**Day 35**	
	2	Explanation of Resting potential, Action potential and propagation; Physiological transducers- active transducers for medical applications	**02**	**Day 36&37**	
	3	Passive transducers for medical applications; Diagnostic and analytical equipments- electrodes for ECG, EEG and EMG	**03**	**Day 38,39&40**	
	4	Block diagram of ECG and EEG systems	**02** **08 hrs**	**Day 41 &42**	

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Department of Electronics

Lesson plan for Even semester-2022-23

Name of the faculty: Dr.NAVEENKUMAR. R
Name of the subject: EL602T- MICROCONTROLLERS
Semester: 6TH semester
Total hrs allotted for particular subject: 42 hrs

SL NO	CLASS	DATE	CONTENT	HOURS PLANNED
1	6th semester		**UNIT 1**	**10 hours**
		Day 1 Day 2 Day 3 Day 4	Introduction to Microcontrollers: Basic block diagram, comparison with microprocessor. Classification of microcontrollers based on word length. Overview of 8051, 8052, 8031 and other families of microcontrollers 89C420, 440, 450 &ATMEL AT89C51, AT89LV51, etc. (objectives: The introduction to microcontroller with brief history and its family were discussed) Microcontroller 8051: Architecture of 8051, internal block diagram, features.	4 hours
		Day 5 Day 6 Day 7 Day 8	Pin description of 8051 (Objectives: The Structure of 8051 and its features are need to discuss and make students thorough in writing configuration of 8051) Memory organization: Internal RAM/ROM of 8051. General/special purpose registers, Program and data memory in 8051, external memory. (Objectives: Explanation of internal memory organization of 8051 in different form) Timers and counters: Oscillators, clock, Program counter. TCON,TMOD, timer/counter interrupts, timer mode of operation. (Objectives: Elucidate the operation of timers and counters in 8051)	4 hours

		Day 9 Day 10	**Input/output configuration in 8051:** serial communication in 8051 using SCON, PCON registers mode. (**Objectives :** the interfacing of 8051 for external devices communication in two techniques are discussed)	2 hours
	6th semester		**UNIT 2**	**14 hours**
		Day 11 Day 12 Day 13	**8051 Interrupts**: IE, IP, timer flag interrupts, serial port, external interrupt, reset, interrupt control and its priority. Interrupt destination, software interrupts **(Objectives:** describing the interrupt concept, software/hardware interrupts with 8051 configured pins.)	3 hours
		Day 14 Day 15 Day 16 Day 17	Addressing modes- immediate, register, direct and indirect addressing mode. **Instruction set in 8051:** Data transfer instructions: internal, external data exchange, code memory transfer, push and pop instruction.	4 hours
		Day 18 Day 19 Day 20	**Logical instructions:** byte/bit level logical operation, rotate and swap operation. **Arithmetic instructions:** Addition, subtraction, multiplication, division increment and decrement instructions and simple Assembly level language program. (Objectives: Describing about way of specifying operand and different types of mnemonics used in 8051)	3 hours
	6th semester		**UNIT 3**	**09 hours**
		Day 21 Day 22 Day 23 Day 24	Jump and Call instruction: range of jump, locations, subroutine in 8051. Programming in 8051: simple programs in assembly language program. (Objectives: The description about branching instructions and practicing the assembly programming for simple arithmetic operations) Programming 8051 using C: Data type and time delay program in 8051.	4 hours
		Day 25 Day 26	I/O programming, logical operations, data conversion program **(Objectives:** Thorough the concept of programming using C and simple program, I/O programming)	2 hours
		Day 27 Day 28 Day 29	Assessing code RAM space and serialization of data. **Timer/counter programming in 8051**:- Timer/counters initializations, configuring timer 0 and timer 1, examples of some program. (objectives: the programming the timers and counters using timer 0 and timer 1 for 8051 is explained with examples)	3 hours
	6th		**UNIT 4**	**09 hours**

	semester	Day 30 Day 31 Day 32 Day 33	**Interfacing with 8051:** Basic concepts of interfacing, Interrupt programming in 8051: timer interrupt, external interrupt hardware	4 hours
		Day 34 Day 35	Interfacing of 8051 with keyboard, seven segment display and stepper motor.	2 hours
		Day 36 Day 37 Day 38	Interfacing 8051 with DAC, ADC and traffic light controller circuit. (**Objectives:** Elucidation of Interfacing concept in 8051 to external devices and its software program)	3 hours
	6th semester		**UNIT 5**	**04 hours**
		Day 39 Day 40	PIC microcontrollers: Core features of PIC, various families of PIC	2 hours
		Day 41 Day 42	Pin configuration of PIC 16F877A, I/O port interface to LCD. (Objectives: the Pin specification and features of PIC, interfacing challenges in PIC were discussed with block diagrams)	2 hours

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Lesson Plan for VI Sem B.Sc Electronics-2023

Sub – Communication II

Name of Faculty – Mrs. Rithu R

Sl No	Class	Contents	No of Hrs planned	Date	Remarks
I.	VI Semester BSc(EMCs)	**Unit –I:** **DIGITAL COMMUNICATION (8 Hours)**			
1		Introduction to Digital Communication, Difference between analog and digital communication, advantages of digital communication, Basic elements of communication **Objective:** Learn the difference between analog and digital communication, advantages of digital communication and basic elements of communication	1	Day 1	
2		Digital radio, Sampling theorem and its proof, Aliasing and oversampling **Objective:** Learn the digital radio, sampling theorem and its proof, Aliasing and oversampling	1	Day 2	
3		Modulation, Types of modulation, Introduction to pulse modulation and its types, Analog pulse modulation – PAM, PPM and PWM. **Objective:** Learn modulation, types of modulation, pulse modulation and its types, analog pulse modulation – PAM, PPM and PWM.	1	Day 3	
4		Digital pulse modulation – PCM – Block diagram and its methods, Advantages and disadvantages of PCM and its applications, Quantization **Objective:** Learn digital pulse modulation PCM - B/D and its methods, advantages and disadvantages of PCM and its applications and Quantization	1	Day 4	
5		Advantages and Disadvantages of digital transmission, Digital modulation and its types, operation and waveforms – ASK,	1	Day 5	

		PSK, FSK			
		Objective: Learn advantages and disadvantages of digital transmission, digital modulation and its types, operation and waveforms – ASK, PSK and FSK			
6		Characteristics of data transmission – Bandwidth, Shanon theorem for information capacity, Data transmission speed, Crosstalk **Objective:** Learn characteristics of data transmission bandwidth, Shanon theorem for information capacity, data transmission speed and crosstalk	1	Day 6	
7		Noise, Echo suppressors, Distortion and Equalizers **Objective:** Learn noise, echo suppressors, distortion and equalizers	1	Day 7	
8		MODEM and its types, RS232 Interfacing **Objective:** Learn MODEM and its types and RS232 Interfacing	1	Day 8	
9		**Unit –II** **RADAR AND TELEVISION (9 Hours)** Introduction to RADAR and its principles **Objective:** Learn RADAR and its principles	1	Day 9	
10		Frequencies and power used in RADAR **Objective:** Learn frequencies and power used in RADAR	1	Day 10	
11		Maximum unambiguous range used in RADAR , RADAR fundamentals **Objective:** Learn maximum unambiguous range used in RADAR and RADAR fundamentals	1	Day 11	
12		Classification of RADARs, Block diagram of Pulsed RADARs. **Objective:** Learn classification and B/D of Pulsed RADARs.	1	Day 12	
13		RADAR range equation and its derivation **Objective:** Learn RADAR range equation and its derivation	1	Day 13	
14		Factors influencing maximum range of			

		RADAR, Doppler effect and derivation of Doppler frequency **Objective:** Learn factors influencing maximum range of RADAR, Doppler effect and derivation of Doppler frequency	**1**	Day 14	
15		MTI RADAR – Block diagram, advantages and applications **Objective:** Learn MTI RADAR block diagram, advantages and applications	**1**	Day 15	
16		CW RADAR – block diagram, advantages and applications **Objective:** Learn CW RADAR block diagram, advantages and applications	**1**	Day 16	
17		FMCW RADAR – block diagram, advantages and applications **Objective:** Learn FMCW RADAR – block diagram, advantages and applications	**1**	Day 17	
18		**Unit – III** **SATELLITE COMMUNICATION (8 Hours)** Introduction to satellite communication, Need for satellite communication, Basic orbital elements of satellites **Objective:** Learn what is satellite communication, need for satellite communication and basic orbital elements of satellites	**1**	Day 18	
19		Satellite orbits and its types, advantages and disadvantages of Geostationary satellites, Satellite visibility **Objective:** Learn satellite orbits and its types, advantages and disadvantages of Geostationary satellites and satellite visibility	**1**	Day 19	
20		Satellite system, Space segment, Block diagram of satellite subsystems **Objective:** Learn satellite system, Space segment and B/D of satellite subsystems	**1**	Day 20	
21		Block diagram of Uplink, downlink, crosslink and Transponders **Objective:** Learn block diagram of Uplink, downlink, crosslink and Transponders	**1**	Day 21	
22					

		Effect of solar ecllipse, Path loss, Ground station, Block diagram of Earth station **Objective:** Learn effect of solar ecllipse, Path loss, Ground station and block diagram of Earth station	1	Day 22
23		Satellite access – Multiple access techniques – TDMA, FDMA and CDMA concepts. **Objective:** Learn satellite access: Multiple access techniques like TDMA, FDMA and CDMA concepts.	1	Day 23
24		Comparison of TDMA, FDMA and CDMA, Satellite antenna **Objective:** Learn the comparison of TDMA, FDMA and CDMA and satellite antenna	1	Day 24
25		GPS services – SPS & PPS **Objective:** Learn the GPS services like SPS & PPS	1	Day 25
26		**Unit – IV** **OPTICAL FIBER COMMUNICATION (9 Hours)** Introduction and Need for optical fiber communication, Block diagram of OFC system **Objective:** Learn about optical fiber, need for optical fiber communication, B/D of OFC system	1	Day 26
27		Fiber optic cables and its types, Light propagation through fibers – Step index and graded index fibers **Objective:** Learn the fiber optic cables and its types, light propagation through fibers – Step index and graded index fibers	1	Day 27
28		Snell's law, Numerical apreture and its derivation, Light source requirements **Objective:** Learn Snell's law, numerical apreture and its derivation and light source requirements	1	Day 28
29		LEDs, Semiconductor LASER diodes **Objective:** Learn LEDs and Semiconductor LASER diodes	1	Day 29
30		Photodiodes, Types of photodiodes – PN, PIN, Avalanche photodiodes **Objective:** Learn photodiodes, types of	1	Day 30

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		photodiodes like PN, PIN, Avalanche photodiodes			
31		Losses in Optical fibers – Rayleigh scattering losses **Objective:** Learn the losses in Optical fibers andRayleigh scattering losses	**1**	Day 31	
32		Absorption losses, Leaky modes **Objective:** Learn absorption losses and leaky modes	**1**	Day 32	
33		Joint junction and bending losses **Objective:** Learn joint junction and bending losses	**1**	Day 33	
34		Advantages and disadvantages of optical fiber cables over metallic cables **Objective:** Learn advantages and disadvantages of optical fiber cables over metallic cables	**1**	Day 34	
35		**Unit – IV** **CELLULAR COMMUNICATION AND WIRELESS LANs (8 Hours)** Introduction to the concepts of cellular mobile communication, Cell Splitting, Frequency bands used in Cellular communication **Objective:** Learn the concepts of cellular mobile communication, Cell Splitting, and frequency bands used in cellular communication	**1**	Day 35	
36		ARFCN, Frequency reuse, Roaming and Hand-off **Objective:** Learn ARFCN, frequency reuse, Roaming and Hand-off	**1**	Day 36	
37		Authentication of SIM card of the subscribers, IMEI number **Objective:** Learn authentication of SIM card of the subscribers and IMEI number	**1**	Day 37	
38		Concept of data encryption, Block diagram of Cellular mobile communication network **Objective:** Learn the concept of data encryption and B/D of Cellular mobile communication network	**1**	Day 38	
39		CDMA technology, Comparison of	**1**	Day 39	

		CDMA and GSM, Block diagram of cellular phone handset **Objective:** Learn CDMA technology, Comparison of CDMA and GSM and B/D of cellular phone handset			
40		Comparitive study of GSM and CDMA, 2G, 3G and 4G concepts Major components of LAN, Primary characteristics of ethernet **Objective:** Learn comparitive study of GSM and CDMA, 2G, 3G and 4G concepts major components of LAN and primary characteristics of ethernet	**1**	Day 40	
41		Mobile IP, OSI Model, Wireless LAN requirements **Objective:** Learn Mobile IP, OSI Model and Wireless LAN requirements	**1**	Day 41	
42		Concept of Bluetooth, Wifi and WiMAX **Objective:** Learn the concept of Bluetooth, Wifi and WiMAX	**1**	Day 42	

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Monthly Lesson Plan for IV Sem B.Sc Electronics-2023

Subject : Electronics Communiction-I (ELE-CT4)

Faculty Name: Rithu R

Sl No	Class	Contents	No of Hrs planned	Date	Remarks
I.	IV Semester BSc (ECs)	Unit –II: **ANALOG MODULATION TECHNIQUES (16 Hours)**			
1		Block diagram of electronic communication system. Modulation-need Objective: Learn B/D of Communication system, need of modulation techniques.	1	Day 1	
2		Types of modulation-AM, FM & PM Objective: Learn the types of analog modulation techniques.	1	Day 2	
3		Amplitude modulation – representation, modulation index, Derivation of instantaneous voltage Objective: Learn expression for instantaneous voltage	1	Day 3	
4		Frequency spectrum, power relations, Limitations of AM Objective: Learn spectrum, DSBFC, DSBSC and SSBSC and limitations of AM.	1	Day 4	
5		FM - definition, modulation index, FM frequency spectrum, bandwidth requirements, frequency deviation and carrier swing Objective: Learn definition, MI, spectrum, bandwidth requirements, frequency deviation and carrier swing of FM.	1	Day 5	

6		Block diagram of AM transmitter. Objective: Learn B/D of AM transmitter.	1	Day 6	
7		Block diagram of FM transmitter. Objective: Learn B/D of FM transmitter with AFC.	1	Day 7	
8		Comparison of AM and FM, numerical examples wherever applicable. Objective: Learn Comparison of AM and FM and problems on AM and FM.	1	Day 8	
9		Introduction to pulse communication: types- PAM, PWM, PPM Objective: Learn pulse modulation and its types, analog pulse modulation – PAM, PPM ,PWM .	1	Day 9	
10		PCM – quantization, advantages, and applications. Objective: Learn PCM, quantizations, advantages and applications of pulse modulation techniques	1	Day 10	
11		Satellite Communication - Introduction, need Objective: Learn what is satellite communication, need for satellite communication and basic orbital elements of satellites	1	Day 11	
12		Geosynchronous satellite orbits, geostationary satellites, advantages of geostationary satellites. Objective: Learn satellite orbits and its types, advantages, and disadvantages of Geostationary satellites.	1	Day 12	
13		Satellite visibility, transponders (C - Band) Objective: Learn about Satellite visibility and transponders (C - Band)	1	Day 13	
14		Path loss, ground station Objective: Learn about Path loss and ground station	1	Day 14	

15		Simplified block diagram of earth station Objective: Learn about Simplified block diagram of earth station	1	Day 15
16		Uplink and downlink. Objective: Learn about Uplink and downlink.	1	Day 16
17		**UNIT –I** **NOISE AND TRANSMISSION LINES(14 Hours)** Noise and Transmission lines Noise-Introduction, internal and external noises Objective: Learn internal and external noises.	1	Day 17
18		Signal to noise ratio and noise figure, numerical examples Objective: Learn SNR, noise figure and numerical on noise figure.	1	Day 18
19		Transmission lines - types and equivalent circuit of T-lines, primary and secondary constants. Objective: Learn types and equivalent circuit of T-lines, primary and secondary constants.	1	Day 19
20		Reflection co-efficient, VSWR and CSWR Objective: Learn Reflection co-efficient, VSWR and CSWR.	1	Day 20
21		Numerical examples Objective: Learn problems on VSWR and CSWR.	1	Day 21
22		Losses and distortions in T lines Objective: Learn losses and distortions in T lines.	1	Day 22
			1	Day 23

23		Propagation of waves-ground wave, sky-wave and space wave propagations Objective: Learn propagation of waves-ground wave, sky-wave, and space wave propagations.			
24		Ionosphere and its effects Objective: Learn Ionosphere and its effects.	1	Day 24	
25		Radiation mechanism, wire Radiators in space-resonant antennas-radiation pattern and current distribution for different lengths Objective: Learn radiation mechanism, wire radiators in space-resonant antennas-radiation pattern and current distribution for different lengths.	1	Day 25	
26		Non - resonant antenna, antenna parameters-gain, directive gain, power gain, bandwidth Objective: Learn Non - resonant antenna, antenna parameters-gain, directive gain, power gain, bandwidth.	1	Day 26	
27		Beam width, polarisation, efficiency, radiation resistance, total effective resistance Objective: Learn beam width, polarisation, efficiency, radiation resistance, total effective resistance.	1	Day 27	
28		Expression of the power radiated by antenna and expression for radiation resistance. Objective: Learn the expression for the power radiated by antenna and expression for radiation resistance.	1	Day 28	
29		Ungrounded and grounded antennas, effect of antenna height Objective: Learn ungrounded and grounded antennas and effect of antenna height.	1	Day 29	

30		Qualitative study of –folded dipole, micro strip, dish, helical, horn, and loop antennas, numerical examples wherever applicable. Objective: Learn folded dipole,micro strip , dish, helical, horn, and loop antennas.	1	Day 30
31		**Unit –III RADAR COMMUNICATION SYSTEMS (12 hrs)** Introduction to Microwaves Objective: Learn Microwaves	1	Day 31
32		Frequency bands and applications Objective: Learn frequency bands and applications	1	Day 32
33		RADAR Systems: RADAR– principles Objective: Learn about RADAR Systems: RADAR– principles	1	Day 33
34		Maximum unambiguous range Objective: Learn maximum unambiguous range used in RADAR and RADAR fundamentals	1	Day 34
35		Detailed Block diagram of Pulsed RADARs Objective: Learn B/D of Pulsed RADARs	1	Day 35
36		RADAR range equation and its derivation Objective: Learn RADAR range equation and its derivation	1	Day 36
37		Factors influencing maximum range of RADAR, Doppler effect Objective: Learn factors influencing maximum range of RADAR, Doppler effect	1	Day 37

38		Doppler effect. Objective: Learn Doppler effect	1	Day 38	
39		MTI RADAR – Block diagram, Objective: Learn MTI RADAR block diagram, advantages and applications	1	Day 39	
40		CW RADAR – block diagram, Objective: Learn CW RADAR block diagram,	1	Day 40	
41		advantages ,applications and limitations Objective: CW RADAR advantages and applications	1	Day 41	
42		FMCW RADAR – block diagram, numerical examples wherever applicable. Objective: Learn FMCW RADAR – block diagram, advantages and applications	1	Day 42	
43		Unit – IV **OPTICAL FIBER COMMUNICATION (14 Hours)** Introduction and Need for optical fiber communication, Block diagram of OFC system **Objective:** Learn about optical fiber, need for optical fiber communication, B/D of OFC system	1	Day 43	
44		Fiber optic cables,Light propagation through fibers – Step index and graded index fibers **Objective:** Learn the fiber optic cables, light propagation through fibers – Step index and graded index fibers Snell's law **Objective:** Learn Snell's law,	1	Day 44	
			1	Day 45	

45					
46		Numerical aperture and its derivation, **Objective:** Learn numerical apreture and its derivation	1	Day 46	
47		Types of optical fiber cables **Objective:** Learn about the types of optical fiber cables	1	Day 47	
48		light sources – requirements **Objective:** Learn about the light sources	1	Day 48	
49		LEDs, Semiconductor LASER diodes **Objective:** Learn LEDs and Semiconductor LASER diodes	1	Day 49	
50		Photodiodes, Types of photodiodes – PN, PIN, Avalanche photodiodes **Objective:** Learn photodiodes, types of photodiodes like PN, PIN, Avalanche photodiodes	1	Day 50	
51		Avalanche photodiodes **Objective:** Learn Avalanche photodiodes	1	Day 51	
52		Losses in Optical fibers – Rayleigh scattering losses **Objective:** Learn the losses in Optical fibers and Rayleigh scattering losses	1	Day 52	
53		Absorption losses, Leaky modes **Objective:** Learn absorption losses and leaky modes	1	Day 53	
54		Joint junction and bending losses **Objective:** Learn joint junction and bending losses	1	Day 54	
			1	Day 55	

55 56		Advantages and disadvantages of optical fiber cables over metallic cables **Objective:** Learn advantages and disadvantages of optical fiber cables over metallic cables numerical examples wherever applicable. **Objective:** Solve numerical problems of fibre optic cable	1	Day 56	

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Lesson plan for Odd semester-2022-23

Name of the faculty: ASHARANI R
Name of the subject: ELE-CT3: PROGRAMMING IN C AND DIGITAL DESIGN USING VERILOG
Semester: 3rd semester
Total hrs allotted for particular subject: 28 hrs

SL NO	CLASS	DATE	CONTENT	HOURS PLANNED
1	3rd semester core		**UNIT 1 Introduction to C Programming**	**14 hours**
		Day 1 Day 2 Day 3 Day 4	C Programming: Introduction, Importance of C, Character set, Tokens, basic data types, variables: declaration & assigning values. Structure of C program	4 hours
		Day 5 Day 6	Arithmetic operators, relational operators, logical operators, assignment operators, increment and decrement	2 hours
		Day 7 Day 8 Day 9	operators, conditional operators, bitwise operators, expressions and evaluation of expressions, type cast operator, implicit conversions, precedence of operators.	3 hours
		Day 10 Day 11	Input output statement – sprintf(), scanf() and getch(), and math library functions.	2 hours
		Day 12 Day 13	Decision making, branching, and looping: if, if-else, else-if, switch statement, break,	2 hours
		Day 14	for loop, while loop and do loop. string related library functions.	1 hours
	3rd semester core		**UNIT 2**	**14 hours**
		Day 15 Day 16 Day 17	Arrays: Basics of arrays, declaration, accessing elements, storing elements, two-dimensional and multi-dimensional arrays.	3 hours
		Day 18 Day 19 Day 20	Functions: Defining functions, function arguments and passing, returning values from functions, example programs.	3 hours
		Day 21 Day 22 Day 23 Day 24	Pointers: Pointer declaration, assigning values to pointers, pointer arithmetic, array names used as pointers, pointers used as arrays, pointers and text strings, pointers as function parameters.	4 hours
		Day 25 Day 26 Day 27 Day 28	Structures: Structure type declarations, structure declarations, referencing structure members, referencing whole structures, initialization of structures, structure bit fields	4 hours

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Lesson plan for Odd semester-2022-23

Name of the faculty: ASHARANI R
Name of the subject: ELE - CT1: ELECTRONIC DEVICES AND CIRCUITS
Semester: 1st semester
Total hrs allotted for particular subject: 28 hrs

SL NO	CLASS	DATE	CONTENT	HOURS PLANNED
1	1st semester core		**UNIT 4 Number System**	**14 hours**
		Day 1 Day 2 Day 3 Day 4	Decimal, Binary, Octal and Hexadecimal number systems, base conversions.	4 hours
		Day 5 Day 6	Representation of signed and unsigned numbers, Binary arithmetic; addition, subtraction by 1's and 2's complement method,	2 hours
		Day 7 Day 8 Day 9	BCD code (8421, 2421, Excess-3), Self complementing property of Excess-3 and 2421 codes, Gray code, error checking and correction codes (Only parity check). ASCII and EBCDIC codes.	3 hours
		Day 10 Day 11	Boolean Algebra: Constants, variables, operators, Positive and negative logic, basic logic gates- AND, OR, NOT, Boolean laws, Duality Theorem, De Morgan's Theorems	2 hours
		Day 12 Day 13	simplification of Boolean expressions. Derived logic gates (NAND, NOR, XOR & XNOR). Universal property of NOR and NAND gates.	2 hours
		Day 14	Numerical examples	1 hours
	1st semester core		**UNIT 3**	**14 hours**
		Day 15 Day 16 Day 17	Transistor biasing and Stabilization circuits: Fixed Bias and Voltage Divider Bias. Thermal runaway, stability and stability factor. Numerical problems	3 hours
		Day 18 Day 19 Day 20	Amplifier: Small signal analysis of single stage CE amplifier using re- model. Input and Output impedances, Current and Voltage gains. Advantages of CC amplifier.	3 hours
		Day 21 Day 22 Day 23 Day 24	Types of coupling, two stage RC Coupled Amplifier – circuit, working and its Frequency Response, loading effect, GBW product, Darlington transistor, Current gain.	4 hours
		Day 25	Special semiconductor devices: LED, LCD and	4 hours

		Day 26 Day 27 Day 28	solar cell – construction, operation and applications, 7-segment display, concept of common anode and common cathode types	

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Lesson plan for Even semester-2022-23

Name of the faculty: ASHARANI R
Name of the subject: ELE-CT2: ANALOG AND DIGITAL ELECTRONICS
Semester: 2nd semester
Total hrs allotted for particular subject: 56 hrs

SL NO	CLASS	DATE	CONTENT	HOURS PLANNED
1	2nd semester core		**UNIT 1**	**14 hours**
		Day 1 Day 2 Day 3 Day 4	Varactor diode, Schottky diode, Tunnel diode - construction, characteristics, working, symbol, and applications for each. JFET–Types - p-channel and n-channel, working and I-V characteristics - n-channel JFET, parameters and their relationships, Comparison of BJT and JFET.	4 hours
		Day 5 Day 6 Day 7 Day 8 Day 9	MOSFET: E–MOSFET, D–MOSFET – n-channel and p-channel, Construction, working, symbols, biasing, drain and transfer characteristics, VMOS, UMOS Power MOSFETs, handling, MOS logic, symbols and switching action of MOS, NMOS inverter, CMOS logic, CMOS – inverter, circuit and working, CMOS characteristics, IGBT construction and working.	5 hours
		Day 10 Day 11	UJT: Construction, working, equivalent circuit and I-V characteristics, intrinsic stand-off ratio, Relaxation oscillator.	2 hours
		Day 12 Day 13	SCR: Construction, VI characteristics, working, symbol, and applications – HWR and FWR	2 hours
		Day 14	Diac and Triac: Construction, working, characteristics, applications. Numerical examples wherever applicable	1 hours
	2nd semester core		**UNIT 2**	**14 hours**
		Day 15 Day 16 Day 17	Op-Amp: Differential Amplifier, Block diagram of Op-Amp, Characteristics of an Ideal and Practical Op-Amp, Open and closed loop configuration, Frequency Response, CMRR, Slew Rate and concept of Virtual Ground	3 hours
		Day 18 Day 19 Day 20	Applications of op-amps: Concept of feedback, negative and positive feedback, advantages of negative feedback (Qualitative Study). Inverting and non- inverting amplifiers, Summing and Difference Amplifier, Differentiator,	3 hours

			Integrator, Comparator and Zero-crossing detector.	
		Day 21 Day 22 Day 23 Day 24 Day 25 Day 26	Filters: First and Second order active Low pass, High pass and Band pass Butterworth filters Oscillators: Barkhausen criterion for sustained oscillations, Colpitt's oscillator and crystal oscillators using transistor, Phase Shift oscillator, Wien-bridge oscillator – (no derivation for each)	6 hours
		Day 27 Day 28	IC 555Timer: Introduction, Block diagram, Astable and Monostable multivibrator circuits. (Numerical Examples wherever applicable).	2 hours
	2nd semester core		**UNIT 3**	**14 hours**
		Day 29 Day 30 Day 31	Logic Families: Pulse characteristics, Logic Families-classification of digital ICs. Characteristics of logic families, circuit description of TTL NAND gate with totem pole and open collector. TTL IC terminology. CMOS NAND, Comparison of TTL and CMOS families.	3 hours
		Day 32 Day 33 Day 34	Combinational Logic Circuits: SOP and POS, Minterm, Maxterm, SSOP, SPOS, Simplification of Boolean expressions, K-Map for 3 and 4 variables. Half Adder, Full Adder, Half Subtractor, Full Subtractor.	3 hours
		Day 35 Day 36 Day 37 Day 38 Day 39 Day 40	4-bit parallel binary adder, 2-bit and 4-bit magnitude comparator. Encoder, decimal to BCD priority encoder. Decoder, 2:4 decoder using AND gates, 3:8 decoder using NAND gates, BCD to decimal decoder, BCD to 7-Segment decoder, Multiplexer - 4:1 and 8:1 multiplexer, Demultiplexer - 1:4 and 1:8 demultiplexer (logic diagram and truth table of each), Realization of Full adder and Full Subtractor using Mux and decoder	6 hours
		Day 41 Day 42	Digital to Analog Converter: DAC with binary weighted resistor and R-2R resistor ladder network. Analog to Digital converter: Successive approximation method-performance characteristics.	2 hours
	2nd semester core		**UNIT 4**	**14 hours**
		Day 43 Day 44 Day 45	Sequential Logic Circuits: Flip-Flops - SR Latch, Level and Edge Triggered concept, Clocked RS, D, JK and T Flip-Flops.	3 hours
		Day 46	reset and Clear operations. Race- around	3 hours

		Day 47 Day 48	conditions in JK Flip-Flop. Master- Slave JK Flip-Flops.	
		Day 49 Day 50 Day 51 Day 52 Day 53 Day 54	Applications of Flip-Flops in semiconductor memories, RAM, ROM and types. Registers and Counters: Types of Shift Registers (up to 4-bits), its applications. Ring counter, Johnson counter applications. Asynchronous Counters: Logic diagram, Truth table and timing diagrams of 4-bit ripple counter, modulo-n counters, 4-bit Up-Down counter,	6 hours
		Day 55 Day 56	Synchronous Counter: 4-bit counter, Design of Mod 3, Mod 5 and decade Counters using K-maps.	2 hours

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Lesson plan for Even semester-2022-23

Name of the faculty: ASHARANI R
Name of the subject: ELE-OE 2.6: Digital Systems
Semester: 2nd semester open elective
Total hrs allotted for particular subject: 45 hrs

SL NO	CLASS	DATE	CONTENT	HOURS PLANNED
1	2nd semester open elective		**UNIT 1 : Combinational logic circuits**	**20 hours**
		Day 1 Day 2 Day 3 Day 4 Day 5	Combinational logic circuits: Definition, applications. Half Adder: Symbol, Logic circuits using XOR and basic gates, Truth table	5 hours
		Day 6 Day 7 Day 8 Day 9 Day 10	Full Adder: Symbol, Logic circuits using XOR and basic gates, Truth table, Half Subtractor: Symbol, Logic circuits using XOR and basic gates, Truth table.	5 hours
		Day 11 Day 12 Day 13 Day 14 Day 15	Full Subtractor: Symbol, Logic circuits using XOR and basic gates, Truth table. Adder – Subtractor; Logic circuit, Pin diagram	5 hours
		Day 16 Day 17 Day 18 Day 19 Day 20	IC 7483, IC 7486. Parallel Adder: 4 –bit parallel binary adder, BCD adder, IC 7483 NAND – NOR implementation of Adders.	5 hours
	2nd semester open elective		**UNIT 2: Sequential Circuits:**	**25 hours**
		Day 21 Day 22 Day 23 Day 24 Day 25	Importance of clock in digital circuit and introduction to flip flop. Flip –flop-difference between latch and flip-flop. Qualitative study of level and edge triggering.	5 hours
		Day 26 Day 27 Day 28 Day 29 Day 30	RS latch /unlocked, symbol and truth table. RS flip-flop using NAND gate, symbol, truth table and timing diagram. D flip –flop – Symbol, truth table,	5 hours
		Day 31	Realization of JK flip –flop using NAND gates,	5 hours

		Day 32 Day 33 Day 34 Day 35	working, and timing diagram. Race around condition, present and clear inputs, pin diagram of IC 7411	
		Day 36 Day 37 Day 38 Day 39 Day 40	T flip flop-Logic symbol, JK flip flop as a T flip –flop truth table and timing diagram. Master slave flip flop; Logic circuit, truth table and timing diagram, advantage of M/S flip-flop, pin diagram of IC 7473 IC 7476.	5 hours
		Day 41 Day 42 Day 43 Day 44 Day 45	Registers: Definition, types of registers-Serial in serial out, serial in parallel out, Parallel in serial out, Parallel in parallel our shift register (Block diagram representation for each), truth table, timing diagram and speed comparison.	5 hours

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Lesson Plan for V Sem B.Sc Electronics-2023

Sub – MICRO PROCESSOR and ELECTRONIC INSTRUMENTATION

Name of Faculty – Dr.Naveen Kumar R

Class	Sl No	Content	No of hours planned	Date	Remarks
III BSc (Vth SEM)		**Unit-1: (9 hrs)**			
	1	**Introduction to Microprocessor** Introduction, applications, basic block diagram, Features and classification of microprocessors	02	Day 1 &2	
	2	**Microprocessor 8085:** Architecture of 8085, Pin description of microprocessor 8085, Address pins	01	Day 3	
	3	Address/data pins, multiplexing, Vcc, ground, crystal pins, ALE pins, role of each pins	01	Day 4	
	4	Pins Read, write, HOLD, READY, Reset, Status pins,	01	Day 5	
	5	Multiplexing the data/address busses, Concept of memory, registers, ALU, accumulator, SP,IR. (Objective: practice the student to write pin diagram, architecture)	01	Day 6	
	6	**8085 Instructions:** Operation code, Operand & Mnemonics, classification of Instruction set of 8085.	01	Day 7	
	7	Addressing modes, Data transfer instructions and examples.	01	Day 8	
	8	Arithmetic instructions, increment & decrement instructions and examples	01	Day 9	
	9	Logical instructions, branch instructions and machine control instructions and its examples. (Objectives: practice the instructions set to the students and way of specifying the data)	01	Day 10	
			09hrs		

		UNIT 2: 09 hours			
	1	**Stack operations and Microprocessor Programming:** Stack operations, subroutine calls and return operations.	**01**	**Day 11**	
	2	Delay loops, use of counters, timing diagrams-instruction cycle, machine cycle, T- states, time delay-numerical examples.	**01**	**Day 12**	
	3	Programs for data transfer, memory operations, addition, subtraction and multiplication of two 8-bit & 16- bit numbers	**02**	**Day 13,14**	
	4	Programs to display of smallest / largest number in a given array of numbers, sorting of numbers in descending / ascending order.	**02**	**Day 15,16**	
	5	Number of 1's and 0's in a given byte, testing for zero condition. 1's and 2's complements.	**01**	**Day 17**	
	6	Verification of truth tables of logic gates, program to add two N byte numbers, program to generate Fibonacci series up to the limit.	**01**	**Day 18**	
	7	Program to find the factorial of a number, program to find the GCD of two integer numbers. (Objective: practice the students to learn how to implement the program logics)	**01**	**Day 19**	
			09hrs		
		UNIT 3: 08 hours			
	1	**I/O instructions and Interfacing:** I/O instructions and, interrupts in 8085.	**01**	**Day 20**	
	2	Basic interfacing concepts, compatible ICs of microprocessor 8085, data transfer, synchronous I/O data transfer using interrupts.	**01**	**Day 21**	
	3	Memory interfacing – address decoding, interfacing RAM and ROM.	**01**	**Day 22**	
	4	Interfacings I/O devices– input port, output port, IN & OUT instructions.	**02**	**Day 23&24**	
	5	Interfacing input devices (interfacing matrix key board-block diagram), interfacing output devices (LED display interfacing-block diagram).	**02**	**Day 25&26**	
		PPI IC 8255– features, pin diagram, functional block diagram, ports & their modes.	**01**	**Day 27**	

		(objectives: to taught students to learn how to connect microprocessor to external devices)	**08hrs**		
	1	**Unit –4** **Measurement systems, Transducers and Electronic Instrumentation** Introduction to general measurement systems; characteristics; static characteristics- Definition of instrument, measurement, accuracy, resolution, precision, expected value, error and sensitivity	**01**	**Day 28**	
	2	Transducers- Types of transducers; Explanation of strain gauges- bonded, unbonded, foil and semiconductor strain gauge	**01**	**Day 29**	
	3	Temperature transducers- Introduction; Thermistor- construction; advantages;	**02**	**Day 30**	
	4	Disadvantages and applications	**01**	**Day 31**	
	5	Explanation of thermocouples and ultrasonic temperature transducers			
		Photoelectric transducers- construction, working and applications of photoconductive cell, photodiode and photovoltaic cell	**01**	**Day 32**	
	6	Construction, working and applications of phototransistor; Pressure transducers- construction, working and applications of MIC and loud speaker	**01**	**Day 33**	
	7	Explanation of signal conditioning; Block diagram and qualitative explanation of chopper amplifier, carrier amplifier and lock in amplifier	**01**	**Day 34**	
		(Objectives: to taught them about the basics of transducers, instruments)	**08hrs**		

	1	**Unit –5** **Introduction to Bio-medical instruments:** Introduction, Explanation of origin of bio-electric signals	**01**	**Day 35**	
	2	Explanation of Resting potential, Action potential and propagation; Physiological transducers- active transducers for medical applications	**02**	**Day 36&37**	
	3	Passive transducers for medical applications; Diagnostic and analytical equipments- electrodes for ECG, EEG and EMG	**03**	**Day 38,39&40**	
	4	Block diagram of ECG and EEG systems	**02** **08 hrs**	**Day 41 &42**	

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Lesson plan for Even semester-2022-23

Name of the faculty: Dr.NAVEENKUMAR. R
Name of the subject: EL602T- MICROCONTROLLERS
Semester: 6TH semester
Total hrs allotted for particular subject: 42 hrs

SL NO	CLASS	DATE	CONTENT	HOURS PLANNED
1	6th semester		**UNIT 1**	**10 hours**
		Day 1 Day 2 Day 3 Day 4	Introduction to Microcontrollers: Basic block diagram, comparison with microprocessor. Classification of microcontrollers based on word length. Overview of 8051, 8052, 8031 and other families of microcontrollers 89C420, 440, 450 &ATMEL AT89C51, AT89LV51, etc. (objectives: The introduction to microcontroller with brief history and its family were discussed) Microcontroller 8051: Architecture of 8051, internal block diagram, features.	4 hours
		Day 5 Day 6 Day 7 Day 8	Pin description of 8051 (Objectives: The Structure of 8051 and its features are need to discuss and make students thorough in writing configuration of 8051) Memory organization: Internal RAM/ROM of 8051. General/special purpose registers, Program and data memory in 8051, external memory. (Objectives: Explanation of internal memory organization of 8051 in different form) Timers and counters: Oscillators, clock, Program counter. TCON,TMOD, timer/counter interrupts, timer mode of operation. (Objectives: Elucidate the operation of timers and counters in 8051)	4 hours

		Day 9 Day 10	**Input/output configuration in 8051:** serial communication in 8051 using SCON, PCON registers mode. (**Objectives :** the interfacing of 8051 for external devices communication in two techniques are discussed)	2 hours
	6th semester		**UNIT 2**	**14 hours**
		Day 11 Day 12 Day 13	**8051 Interrupts**: IE, IP, timer flag interrupts, serial port, external interrupt, reset, interrupt control and its priority. Interrupt destination, software interrupts **(Objectives:** describing the interrupt concept, software/hardware interrupts with 8051 configured pins.)	3 hours
		Day 14 Day 15 Day 16 Day 17	Addressing modes- immediate, register, direct and indirect addressing mode. **Instruction set in 8051:** Data transfer instructions: internal, external data exchange, code memory transfer, push and pop instruction.	4 hours
		Day 18 Day 19 Day 20	**Logical instructions:** byte/bit level logical operation, rotate and swap operation. **Arithmetic instructions:** Addition, subtraction, multiplication, division increment and decrement instructions and simple Assembly level language program. (Objectives: Describing about way of specifying operand and different types of mnemonics used in 8051)	3 hours
	6th semester		**UNIT 3**	**09 hours**
		Day 21 Day 22 Day 23 Day 24	Jump and Call instruction: range of jump, locations, subroutine in 8051. Programming in 8051: simple programs in assembly language program. (Objectives: The description about branching instructions and practicing the assembly programming for simple arithmetic operations) Programming 8051 using C: Data type and time delay program in 8051.	4 hours
		Day 25 Day 26	I/O programming, logical operations, data conversion program **(Objectives:** Thorough the concept of programming using C and simple program, I/O programming)	2 hours
		Day 27 Day 28 Day 29	Assessing code RAM space and serialization of data. **Timer/counter programming in 8051**:- Timer/counters initializations, configuring timer 0 and timer 1, examples of some program. (objectives: the programming the timers and counters using timer 0 and timer 1 for 8051 is explained with examples)	3 hours
	6th		**UNIT 4**	**09 hours**

	semester	Day 30 Day 31 Day 32 Day 33	**Interfacing with 8051:** Basic concepts of interfacing, Interrupt programming in 8051: timer interrupt, external interrupt hardware	4 hours
		Day 34 Day 35	Interfacing of 8051 with keyboard, seven segment display and stepper motor.	2 hours
		Day 36 Day 37 Day 38	Interfacing 8051 with DAC, ADC and traffic light controller circuit. (**Objectives:** Elucidation of Interfacing concept in 8051 to external devices and its software program)	3 hours
	6th semester		**UNIT 5**	**04 hours**
		Day 39 Day 40	PIC microcontrollers: Core features of PIC, various families of PIC	2 hours
		Day 41 Day 42	Pin configuration of PIC 16F877A, I/O port interface to LCD. (Objectives: the Pin specification and features of PIC, interfacing challenges in PIC were discussed with block diagrams)	2 hours

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Lesson Plan for VI Sem B.Sc Electronics-2023

Sub – Communication II

Name of Faculty – Mrs. Rithu R

Sl No	Class	Contents	No of Hrs planned	Date	Remarks
I.	VI Semester BSc(EMCs)	**Unit –I:** **DIGITAL COMMUNICATION (8 Hours)**			
1		Introduction to Digital Communication, Difference between analog and digital communication, advantages of digital communication, Basic elements of communication **Objective:** Learn the difference between analog and digital communication, advantages of digital communication and basic elements of communication	1	Day 1	
2		Digital radio, Sampling theorem and its proof, Aliasing and oversampling **Objective:** Learn the digital radio, sampling theorem and its proof, Aliasing and oversampling	1	Day 2	
3		Modulation, Types of modulation, Introduction to pulse modulation and its types, Analog pulse modulation – PAM, PPM and PWM. **Objective:** Learn modulation, types of modulation, pulse modulation and its types, analog pulse modulation – PAM, PPM and PWM.	1	Day 3	
4		Digital pulse modulation – PCM – Block diagram and its methods, Advantages and disadvantages of PCM and its applications, Quantization **Objective:** Learn digital pulse modulation PCM - B/D and its methods, advantages and disadvantages of PCM and its applications and Quantization	1	Day 4	
5		Advantages and Disadvantages of digital transmission, Digital modulation and its types, operation and waveforms – ASK,	1	Day 5	

		PSK, FSK			
		Objective: Learn advantages and disadvantages of digital transmission, digital modulation and its types, operation and waveforms – ASK, PSK and FSK			
6		Characteristics of data transmission – Bandwidth, Shanon theorem for information capacity, Data transmission speed, Crosstalk **Objective:** Learn characteristics of data transmission bandwidth, Shanon theorem for information capacity, data transmission speed and crosstalk	1	Day 6	
7		Noise, Echo suppressors, Distortion and Equalizers **Objective:** Learn noise, echo suppressors, distortion and equalizers	1	Day 7	
8		MODEM and its types, RS232 Interfacing **Objective:** Learn MODEM and its types and RS232 Interfacing	1	Day 8	
9		**Unit –II** **RADAR AND TELEVISION (9 Hours)** Introduction to RADAR and its principles **Objective:** Learn RADAR and its principles	1	Day 9	
10		Frequencies and power used in RADAR **Objective:** Learn frequencies and power used in RADAR	1	Day 10	
11		Maximum unambiguous range used in RADAR , RADAR fundamentals **Objective:** Learn maximum unambiguous range used in RADAR and RADAR fundamentals	1	Day 11	
12		Classification of RADARs, Block diagram of Pulsed RADARs. **Objective:** Learn classification and B/D of Pulsed RADARs.	1	Day 12	
13		RADAR range equation and its derivation **Objective:** Learn RADAR range equation and its derivation	1	Day 13	
14		Factors influencing maximum range of			

		RADAR, Doppler effect and derivation of Doppler frequency **Objective:** Learn factors influencing maximum range of RADAR, Doppler effect and derivation of Doppler frequency	**1**	Day 14	
15		MTI RADAR – Block diagram, advantages and applications **Objective:** Learn MTI RADAR block diagram, advantages and applications	**1**	Day 15	
16		CW RADAR – block diagram, advantages and applications **Objective:** Learn CW RADAR block diagram, advantages and applications	**1**	Day 16	
17		FMCW RADAR – block diagram, advantages and applications **Objective:** Learn FMCW RADAR – block diagram, advantages and applications	**1**	Day 17	
18		**Unit – III** **SATELLITE COMMUNICATION (8 Hours)** Introduction to satellite communication, Need for satellite communication, Basic orbital elements of satellites **Objective:** Learn what is satellite communication, need for satellite communication and basic orbital elements of satellites	**1**	Day 18	
19		Satellite orbits and its types, advantages and disadvantages of Geostationary satellites, Satellite visibility **Objective:** Learn satellite orbits and its types, advantages and disadvantages of Geostationary satellites and satellite visibility	**1**	Day 19	
20		Satellite system, Space segment, Block diagram of satellite subsystems **Objective:** Learn satellite system, Space segment and B/D of satellite subsystems	**1**	Day 20	
21		Block diagram of Uplink, downlink, crosslink and Transponders **Objective:** Learn block diagram of Uplink, downlink, crosslink and Transponders	**1**	Day 21	
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		Effect of solar ecllipse, Path loss, Ground station, Block diagram of Earth station **Objective:** Learn effect of solar ecllipse, Path loss, Ground station and block diagram of Earth station	1	Day 22
23		Satellite access – Multiple access techniques – TDMA, FDMA and CDMA concepts. **Objective:** Learn satellite access: Multiple access techniques like TDMA, FDMA and CDMA concepts.	1	Day 23
24		Comparison of TDMA, FDMA and CDMA, Satellite antenna **Objective:** Learn the comparison of TDMA, FDMA and CDMA and satellite antenna	1	Day 24
25		GPS services – SPS & PPS **Objective:** Learn the GPS services like SPS & PPS	1	Day 25
26		**Unit – IV** **OPTICAL FIBER COMMUNICATION (9 Hours)** Introduction and Need for optical fiber communication, Block diagram of OFC system **Objective:** Learn about optical fiber, need for optical fiber communication, B/D of OFC system	1	Day 26
27		Fiber optic cables and its types, Light propagation through fibers – Step index and graded index fibers **Objective:** Learn the fiber optic cables and its types, light propagation through fibers – Step index and graded index fibers	1	Day 27
28		Snell's law, Numerical apreture and its derivation, Light source requirements **Objective:** Learn Snell's law, numerical apreture and its derivation and light source requirements	1	Day 28
29		LEDs, Semiconductor LASER diodes **Objective:** Learn LEDs and Semiconductor LASER diodes	1	Day 29
30		Photodiodes, Types of photodiodes – PN, PIN, Avalanche photodiodes **Objective:** Learn photodiodes, types of	1	Day 30

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		photodiodes like PN, PIN, Avalanche photodiodes			
31		Losses in Optical fibers – Rayleigh scattering losses **Objective:** Learn the losses in Optical fibers andRayleigh scattering losses	**1**	Day 31	
32		Absorption losses, Leaky modes **Objective:** Learn absorption losses and leaky modes	**1**	Day 32	
33		Joint junction and bending losses **Objective:** Learn joint junction and bending losses	**1**	Day 33	
34		Advantages and disadvantages of optical fiber cables over metallic cables **Objective:** Learn advantages and disadvantages of optical fiber cables over metallic cables	**1**	Day 34	
35		**Unit – IV** **CELLULAR COMMUNICATION AND WIRELESS LANs (8 Hours)** Introduction to the concepts of cellular mobile communication, Cell Splitting, Frequency bands used in Cellular communication **Objective:** Learn the concepts of cellular mobile communication, Cell Splitting, and frequency bands used in cellular communication	**1**	Day 35	
36		ARFCN, Frequency reuse, Roaming and Hand-off **Objective:** Learn ARFCN, frequency reuse, Roaming and Hand-off	**1**	Day 36	
37		Authentication of SIM card of the subscribers, IMEI number **Objective:** Learn authentication of SIM card of the subscribers and IMEI number	**1**	Day 37	
38		Concept of data encryption, Block diagram of Cellular mobile communication network **Objective:** Learn the concept of data encryption and B/D of Cellular mobile communication network	**1**	Day 38	
39		CDMA technology, Comparison of	**1**	Day 39	

		CDMA and GSM, Block diagram of cellular phone handset **Objective:** Learn CDMA technology, Comparison of CDMA and GSM and B/D of cellular phone handset			
40		Comparitive study of GSM and CDMA, 2G, 3G and 4G concepts Major components of LAN, Primary characteristics of ethernet **Objective:** Learn comparitive study of GSM and CDMA, 2G, 3G and 4G concepts major components of LAN and primary characteristics of ethernet	**1**	Day 40	
41		Mobile IP, OSI Model, Wireless LAN requirements **Objective:** Learn Mobile IP, OSI Model and Wireless LAN requirements	**1**	Day 41	
42		Concept of Bluetooth, Wifi and WiMAX **Objective:** Learn the concept of Bluetooth, Wifi and WiMAX	**1**	Day 42	

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Monthly Lesson Plan for IV Sem B.Sc Electronics-2023

Subject : Electronics Communiction-I (ELE-CT4)

Faculty Name: Rithu R

Sl No	Class	Contents	No of Hrs planned	Date	Remarks
I.	IV Semester BSc (ECs)	Unit –II: **ANALOG MODULATION TECHNIQUES (16 Hours)**			
1		Block diagram of electronic communication system. Modulation-need Objective: Learn B/D of Communication system, need of modulation techniques.	1	Day 1	
2		Types of modulation-AM, FM & PM Objective: Learn the types of analog modulation techniques.	1	Day 2	
3		Amplitude modulation – representation, modulation index, Derivation of instantaneous voltage Objective: Learn expression for instantaneous voltage	1	Day 3	
4		Frequency spectrum, power relations, Limitations of AM Objective: Learn spectrum, DSBFC, DSBSC and SSBSC and limitations of AM.	1	Day 4	
5		FM - definition, modulation index, FM frequency spectrum, bandwidth requirements, frequency deviation and carrier swing Objective: Learn definition, MI, spectrum, bandwidth requirements, frequency deviation and carrier swing of FM.	1	Day 5	

6		Block diagram of AM transmitter. Objective: Learn B/D of AM transmitter.	1	Day 6	
7		Block diagram of FM transmitter. Objective: Learn B/D of FM transmitter with AFC.	1	Day 7	
8		Comparison of AM and FM, numerical examples wherever applicable. Objective: Learn Comparison of AM and FM and problems on AM and FM.	1	Day 8	
9		Introduction to pulse communication: types- PAM, PWM, PPM Objective: Learn pulse modulation and its types, analog pulse modulation – PAM, PPM ,PWM .	1	Day 9	
10		PCM – quantization, advantages, and applications. Objective: Learn PCM, quantizations, advantages and applications of pulse modulation techniques	1	Day 10	
11		Satellite Communication - Introduction, need Objective: Learn what is satellite communication, need for satellite communication and basic orbital elements of satellites	1	Day 11	
12		Geosynchronous satellite orbits, geostationary satellites, advantages of geostationary satellites. Objective: Learn satellite orbits and its types, advantages, and disadvantages of Geostationary satellites.	1	Day 12	
13		Satellite visibility, transponders (C - Band) Objective: Learn about Satellite visibility and transponders (C - Band)	1	Day 13	
14		Path loss, ground station Objective: Learn about Path loss and ground station	1	Day 14	

15		Simplified block diagram of earth station Objective: Learn about Simplified block diagram of earth station	1	Day 15
16		Uplink and downlink. Objective: Learn about Uplink and downlink.	1	Day 16
17		**UNIT –I** **NOISE AND TRANSMISSION LINES(14 Hours)** Noise and Transmission lines Noise-Introduction, internal and external noises Objective: Learn internal and external noises.	1	Day 17
18		Signal to noise ratio and noise figure, numerical examples Objective: Learn SNR, noise figure and numerical on noise figure.	1	Day 18
19		Transmission lines - types and equivalent circuit of T-lines, primary and secondary constants. Objective: Learn types and equivalent circuit of T-lines, primary and secondary constants.	1	Day 19
20		Reflection co-efficient, VSWR and CSWR Objective: Learn Reflection co-efficient, VSWR and CSWR.	1	Day 20
21		Numerical examples Objective: Learn problems on VSWR and CSWR.	1	Day 21
22		Losses and distortions in T lines Objective: Learn losses and distortions in T lines.	1	Day 22
			1	Day 23

23		Propagation of waves-ground wave, sky-wave and space wave propagations Objective: Learn propagation of waves-ground wave, sky-wave, and space wave propagations.			
24		Ionosphere and its effects Objective: Learn Ionosphere and its effects.	1	Day 24	
25		Radiation mechanism, wire Radiators in space-resonant antennas-radiation pattern and current distribution for different lengths Objective: Learn radiation mechanism, wire radiators in space-resonant antennas-radiation pattern and current distribution for different lengths.	1	Day 25	
26		Non - resonant antenna, antenna parameters-gain, directive gain, power gain, bandwidth Objective: Learn Non - resonant antenna, antenna parameters-gain, directive gain, power gain, bandwidth.	1	Day 26	
27		Beam width, polarisation, efficiency, radiation resistance, total effective resistance Objective: Learn beam width, polarisation, efficiency, radiation resistance, total effective resistance.	1	Day 27	
28		Expression of the power radiated by antenna and expression for radiation resistance. Objective: Learn the expression for the power radiated by antenna and expression for radiation resistance.	1	Day 28	
29		Ungrounded and grounded antennas, effect of antenna height Objective: Learn ungrounded and grounded antennas and effect of antenna height.	1	Day 29	

30		Qualitative study of –folded dipole, micro strip, dish, helical, horn, and loop antennas, numerical examples wherever applicable. Objective: Learn folded dipole,micro strip , dish, helical, horn, and loop antennas.	1	Day 30
31		**Unit –III RADAR COMMUNICATION SYSTEMS (12 hrs)** Introduction to Microwaves Objective: Learn Microwaves	1	Day 31
32		Frequency bands and applications Objective: Learn frequency bands and applications	1	Day 32
33		RADAR Systems: RADAR– principles Objective: Learn about RADAR Systems: RADAR– principles	1	Day 33
34		Maximum unambiguous range Objective: Learn maximum unambiguous range used in RADAR and RADAR fundamentals	1	Day 34
35		Detailed Block diagram of Pulsed RADARs Objective: Learn B/D of Pulsed RADARs	1	Day 35
36		RADAR range equation and its derivation Objective: Learn RADAR range equation and its derivation	1	Day 36
37		Factors influencing maximum range of RADAR, Doppler effect Objective: Learn factors influencing maximum range of RADAR, Doppler effect	1	Day 37

38		Doppler effect. Objective: Learn Doppler effect	1	Day 38	
39		MTI RADAR – Block diagram, Objective: Learn MTI RADAR block diagram, advantages and applications	1	Day 39	
40		CW RADAR – block diagram, Objective: Learn CW RADAR block diagram,	1	Day 40	
41		advantages ,applications and limitations Objective: CW RADAR advantages and applications	1	Day 41	
42		FMCW RADAR – block diagram, numerical examples wherever applicable. Objective: Learn FMCW RADAR – block diagram, advantages and applications	1	Day 42	
43		Unit – IV **OPTICAL FIBER COMMUNICATION (14 Hours)** Introduction and Need for optical fiber communication, Block diagram of OFC system **Objective:** Learn about optical fiber, need for optical fiber communication, B/D of OFC system	1	Day 43	
44		Fiber optic cables,Light propagation through fibers – Step index and graded index fibers **Objective:** Learn the fiber optic cables, light propagation through fibers – Step index and graded index fibers Snell's law **Objective:** Learn Snell's law,	1	Day 44	
			1	Day 45	

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46		Numerical aperture and its derivation, **Objective:** Learn numerical apreture and its derivation	1	Day 46	
47		Types of optical fiber cables **Objective:** Learn about the types of optical fiber cables	1	Day 47	
48		light sources – requirements **Objective:** Learn about the light sources	1	Day 48	
49		LEDs, Semiconductor LASER diodes **Objective:** Learn LEDs and Semiconductor LASER diodes	1	Day 49	
50		Photodiodes, Types of photodiodes – PN, PIN, Avalanche photodiodes **Objective:** Learn photodiodes, types of photodiodes like PN, PIN, Avalanche photodiodes	1	Day 50	
51		Avalanche photodiodes **Objective:** Learn Avalanche photodiodes	1	Day 51	
52		Losses in Optical fibers – Rayleigh scattering losses **Objective:** Learn the losses in Optical fibers and Rayleigh scattering losses	1	Day 52	
53		Absorption losses, Leaky modes **Objective:** Learn absorption losses and leaky modes	1	Day 53	
54		Joint junction and bending losses **Objective:** Learn joint junction and bending losses	1	Day 54	
			1	Day 55	

55 56		Advantages and disadvantages of optical fiber cables over metallic cables **Objective:** Learn advantages and disadvantages of optical fiber cables over metallic cables numerical examples wherever applicable. **Objective:** Solve numerical problems of fibre optic cable	1	Day 56	

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Lesson plan for Odd semester-2022-23

Name of the faculty: ASHARANI R
Name of the subject: ELE-CT3: PROGRAMMING IN C AND DIGITAL DESIGN USING VERILOG
Semester: 3rd semester
Total hrs allotted for particular subject: 28 hrs

SL NO	CLASS	DATE	CONTENT	HOURS PLANNED
1	3rd semester core		**UNIT 1 Introduction to C Programming**	**14 hours**
		Day 1 Day 2 Day 3 Day 4	C Programming: Introduction, Importance of C, Character set, Tokens, basic data types, variables: declaration & assigning values. Structure of C program	4 hours
		Day 5 Day 6	Arithmetic operators, relational operators, logical operators, assignment operators, increment and decrement	2 hours
		Day 7 Day 8 Day 9	operators, conditional operators, bitwise operators, expressions and evaluation of expressions, type cast operator, implicit conversions, precedence of operators.	3 hours
		Day 10 Day 11	Input output statement – sprintf(), scanf() and getch(), and math library functions.	2 hours
		Day 12 Day 13	Decision making, branching, and looping: if, if-else, else-if, switch statement, break,	2 hours
		Day 14	for loop, while loop and do loop. string related library functions.	1 hours
	3rd semester core		**UNIT 2**	**14 hours**
		Day 15 Day 16 Day 17	Arrays: Basics of arrays, declaration, accessing elements, storing elements, two-dimensional and multi-dimensional arrays.	3 hours
		Day 18 Day 19 Day 20	Functions: Defining functions, function arguments and passing, returning values from functions, example programs.	3 hours
		Day 21 Day 22 Day 23 Day 24	Pointers: Pointer declaration, assigning values to pointers, pointer arithmetic, array names used as pointers, pointers used as arrays, pointers and text strings, pointers as function parameters.	4 hours
		Day 25 Day 26 Day 27 Day 28	Structures: Structure type declarations, structure declarations, referencing structure members, referencing whole structures, initialization of structures, structure bit fields	4 hours

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Lesson plan for Odd semester-2022-23

Name of the faculty: ASHARANI R
Name of the subject: ELE - CT1: ELECTRONIC DEVICES AND CIRCUITS
Semester: 1st semester
Total hrs allotted for particular subject: 28 hrs

SL NO	CLASS	DATE	CONTENT	HOURS PLANNED
1	1st semester core		**UNIT 4 Number System**	**14 hours**
		Day 1 Day 2 Day 3 Day 4	Decimal, Binary, Octal and Hexadecimal number systems, base conversions.	4 hours
		Day 5 Day 6	Representation of signed and unsigned numbers, Binary arithmetic; addition, subtraction by 1's and 2's complement method,	2 hours
		Day 7 Day 8 Day 9	BCD code (8421, 2421, Excess-3), Self complementing property of Excess-3 and 2421 codes, Gray code, error checking and correction codes (Only parity check). ASCII and EBCDIC codes.	3 hours
		Day 10 Day 11	Boolean Algebra: Constants, variables, operators, Positive and negative logic, basic logic gates- AND, OR, NOT, Boolean laws, Duality Theorem, De Morgan's Theorems	2 hours
		Day 12 Day 13	simplification of Boolean expressions. Derived logic gates (NAND, NOR, XOR & XNOR). Universal property of NOR and NAND gates.	2 hours
		Day 14	Numerical examples	1 hours
	1st semester core		**UNIT 3**	**14 hours**
		Day 15 Day 16 Day 17	Transistor biasing and Stabilization circuits: Fixed Bias and Voltage Divider Bias. Thermal runaway, stability and stability factor. Numerical problems	3 hours
		Day 18 Day 19 Day 20	Amplifier: Small signal analysis of single stage CE amplifier using re- model. Input and Output impedances, Current and Voltage gains. Advantages of CC amplifier.	3 hours
		Day 21 Day 22 Day 23 Day 24	Types of coupling, two stage RC Coupled Amplifier – circuit, working and its Frequency Response, loading effect, GBW product, Darlington transistor, Current gain.	4 hours
		Day 25	Special semiconductor devices: LED, LCD and	4 hours

		Day 26 Day 27 Day 28	solar cell – construction, operation and applications, 7-segment display, concept of common anode and common cathode types	

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Lesson plan for Even semester-2022-23

Name of the faculty: ASHARANI R
Name of the subject: ELE-CT2: ANALOG AND DIGITAL ELECTRONICS
Semester: 2nd semester
Total hrs allotted for particular subject: 56 hrs

SL NO	CLASS	DATE	CONTENT	HOURS PLANNED
1	2nd semester core		**UNIT 1**	**14 hours**
		Day 1 Day 2 Day 3 Day 4	Varactor diode, Schottky diode, Tunnel diode - construction, characteristics, working, symbol, and applications for each. JFET–Types - p-channel and n-channel, working and I-V characteristics - n-channel JFET, parameters and their relationships, Comparison of BJT and JFET.	4 hours
		Day 5 Day 6 Day 7 Day 8 Day 9	MOSFET: E–MOSFET, D–MOSFET – n-channel and p-channel, Construction, working, symbols, biasing, drain and transfer characteristics, VMOS, UMOS Power MOSFETs, handling, MOS logic, symbols and switching action of MOS, NMOS inverter, CMOS logic, CMOS – inverter, circuit and working, CMOS characteristics, IGBT construction and working.	5 hours
		Day 10 Day 11	UJT: Construction, working, equivalent circuit and I-V characteristics, intrinsic stand-off ratio, Relaxation oscillator.	2 hours
		Day 12 Day 13	SCR: Construction, VI characteristics, working, symbol, and applications – HWR and FWR	2 hours
		Day 14	Diac and Triac: Construction, working, characteristics, applications. Numerical examples wherever applicable	1 hours
	2nd semester core		**UNIT 2**	**14 hours**
		Day 15 Day 16 Day 17	Op-Amp: Differential Amplifier, Block diagram of Op-Amp, Characteristics of an Ideal and Practical Op-Amp, Open and closed loop configuration, Frequency Response, CMRR, Slew Rate and concept of Virtual Ground	3 hours
		Day 18 Day 19 Day 20	Applications of op-amps: Concept of feedback, negative and positive feedback, advantages of negative feedback (Qualitative Study). Inverting and non- inverting amplifiers, Summing and Difference Amplifier, Differentiator,	3 hours

			Integrator, Comparator and Zero-crossing detector.	
		Day 21 Day 22 Day 23 Day 24 Day 25 Day 26	Filters: First and Second order active Low pass, High pass and Band pass Butterworth filters Oscillators: Barkhausen criterion for sustained oscillations, Colpitt's oscillator and crystal oscillators using transistor, Phase Shift oscillator, Wien-bridge oscillator – (no derivation for each)	6 hours
		Day 27 Day 28	IC 555Timer: Introduction, Block diagram, Astable and Monostable multivibrator circuits. (Numerical Examples wherever applicable).	2 hours
	2nd semester core		**UNIT 3**	**14 hours**
		Day 29 Day 30 Day 31	Logic Families: Pulse characteristics, Logic Families-classification of digital ICs. Characteristics of logic families, circuit description of TTL NAND gate with totem pole and open collector. TTL IC terminology. CMOS NAND, Comparison of TTL and CMOS families.	3 hours
		Day 32 Day 33 Day 34	Combinational Logic Circuits: SOP and POS, Minterm, Maxterm, SSOP, SPOS, Simplification of Boolean expressions, K-Map for 3 and 4 variables. Half Adder, Full Adder, Half Subtractor, Full Subtractor.	3 hours
		Day 35 Day 36 Day 37 Day 38 Day 39 Day 40	4-bit parallel binary adder, 2-bit and 4-bit magnitude comparator. Encoder, decimal to BCD priority encoder. Decoder, 2:4 decoder using AND gates, 3:8 decoder using NAND gates, BCD to decimal decoder, BCD to 7-Segment decoder, Multiplexer - 4:1 and 8:1 multiplexer, Demultiplexer - 1:4 and 1:8 demultiplexer (logic diagram and truth table of each), Realization of Full adder and Full Subtractor using Mux and decoder	6 hours
		Day 41 Day 42	Digital to Analog Converter: DAC with binary weighted resistor and R-2R resistor ladder network. Analog to Digital converter: Successive approximation method-performance characteristics.	2 hours
	2nd semester core		**UNIT 4**	**14 hours**
		Day 43 Day 44 Day 45	Sequential Logic Circuits: Flip-Flops - SR Latch, Level and Edge Triggered concept, Clocked RS, D, JK and T Flip-Flops.	3 hours
		Day 46	reset and Clear operations. Race- around	3 hours

		Day 47 Day 48	conditions in JK Flip-Flop. Master- Slave JK Flip-Flops.	
		Day 49 Day 50 Day 51 Day 52 Day 53 Day 54	Applications of Flip-Flops in semiconductor memories, RAM, ROM and types. Registers and Counters: Types of Shift Registers (up to 4-bits), its applications. Ring counter, Johnson counter applications. Asynchronous Counters: Logic diagram, Truth table and timing diagrams of 4-bit ripple counter, modulo-n counters, 4-bit Up-Down counter,	6 hours
		Day 55 Day 56	Synchronous Counter: 4-bit counter, Design of Mod 3, Mod 5 and decade Counters using K-maps.	2 hours

Signature of Faculty

Signature of HOD

Department of Electronics
M. S. Ramaiah College of
Arts, Science & Commerce
M.S.R. Nagar, Bangalore-560 054.

Vatsala 09/09/23.

Signature of Principal

Principal,
M.S. Ramaiah College of Arts, Science & Commerce
MSRIT Post, MSR Nagar
Bangalore - 560 054

RAMAIAH
College of Arts, Science & Commerce

Department of Electronics

Lesson plan for Even semester-2022-23

Name of the faculty: ASHARANI R
Name of the subject: ELE-OE 2.6: Digital Systems
Semester: 2nd semester open elective
Total hrs allotted for particular subject: 45 hrs

SL NO	CLASS	DATE	CONTENT	HOURS PLANNED
1	2nd semester open elective		**UNIT 1 : Combinational logic circuits**	**20 hours**
		Day 1 Day 2 Day 3 Day 4 Day 5	Combinational logic circuits: Definition, applications. Half Adder: Symbol, Logic circuits using XOR and basic gates, Truth table	5 hours
		Day 6 Day 7 Day 8 Day 9 Day 10	Full Adder: Symbol, Logic circuits using XOR and basic gates, Truth table, Half Subtractor: Symbol, Logic circuits using XOR and basic gates, Truth table.	5 hours
		Day 11 Day 12 Day 13 Day 14 Day 15	Full Subtractor: Symbol, Logic circuits using XOR and basic gates, Truth table. Adder – Subtractor; Logic circuit, Pin diagram	5 hours
		Day 16 Day 17 Day 18 Day 19 Day 20	IC 7483, IC 7486. Parallel Adder: 4 –bit parallel binary adder, BCD adder, IC 7483 NAND – NOR implementation of Adders.	5 hours
	2nd semester open elective		**UNIT 2: Sequential Circuits:**	**25 hours**
		Day 21 Day 22 Day 23 Day 24 Day 25	Importance of clock in digital circuit and introduction to flip flop. Flip –flop-difference between latch and flip-flop. Qualitative study of level and edge triggering.	5 hours
		Day 26 Day 27 Day 28 Day 29 Day 30	RS latch /unlocked, symbol and truth table. RS flip-flop using NAND gate, symbol, truth table and timing diagram. D flip –flop – Symbol, truth table,	5 hours
		Day 31	Realization of JK flip –flop using NAND gates,	5 hours

		Day 32 Day 33 Day 34 Day 35	working, and timing diagram. Race around condition, present and clear inputs, pin diagram of IC 7411	
		Day 36 Day 37 Day 38 Day 39 Day 40	T flip flop-Logic symbol, JK flip flop as a T flip –flop truth table and timing diagram. Master slave flip flop; Logic circuit, truth table and timing diagram, advantage of M/S flip-flop, pin diagram of IC 7473 IC 7476.	5 hours
		Day 41 Day 42 Day 43 Day 44 Day 45	Registers: Definition, types of registers-Serial in serial out, serial in parallel out, Parallel in serial out, Parallel in parallel our shift register (Block diagram representation for each), truth table, timing diagram and speed comparison.	5 hours

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RAMAIAH COLLEGE OF ARTS, SCIENCE AND COMMERCE

MONTHLY LESSON PLAN

2022-2023(EVEN SEM)

DEPARTMENT: MATHEMATICS

FACULTY NAME: HARITHA A SUBJECT NAME: B.SC MATHEMATICS

Sl No	Class	Contents	No of Hrs planned	Date
1.	VI Sem Paper 8	**Unit 1: Analysis III- Complex Analysis**	**28 hrs**	
		a. Complex numbers- Cartesian and polar form **Objective:** To teach basics about Complex Numbers	01	Day 1
		b. Euler's formula **Objective**: Giving statement and explanation	01	Day 2
		c. Functions of complex variable **Objective:** Explaining about variables	01	Day 3
		d. Limit ,continuity **Objective**: Giving definition and solving problems	01	Day 4
		e. Differentiability **Objective:** .Giving definition and solving problems	01	Day 5
		f. Analytic function **Objective**: To explaining about function and formula	01	Day 6
		g. Cauchy's –Reiman equations in Cartesian form **Objective:** Giving statement and proof	01	Day 7
		h. C-R equations in polar form **Objective**: Giving statement and proof	01	Day 8
		i. Harmonic functions **Objective**: Explanation of double differentiation and formula	01	Day 9
		j. Construction of H.F **Objective**: Explanation of how to find harmonic function	01	Day10

		k. Milne Thomson method **Objective**: Giving M-T method formula and problems	01	Day 11
		l. Complex integration **Objective**: To teach problems on complex integration	01	Day 12
		m. Cauchy's integral theorem **Objective**: Giving statement and proof	01	Day 13
		n. Cauchy's integral formula **Objective**: Giving statement and proof	01	Day 14
		o. Cauchy's generalized formula for derivative **Objective:** Giving formula and problems on derivative	01	Day 15
		p. Evaluation of simple line integrals **Objective:** To teach problems on line along with x and y axis	01	Day 16
		q. Cauchy's inequality **Objective**: Proving Cauchy's inequality theorem	01	Day 17
		r. Liouville's theorem **Objective**: Giving proof of liouville's theorem	01	Day 18
		s. Fundamental theorem **Objective**: Giving proof of fundamental theorem	01	Day 19
		t. Transformations **Objective**: Explanation of planes and graphs	01	Day 20
		u. Conformal transformations **Objective**: Giving explanation of transformation of curves from one plane to another plane	01	Day 21
		v. Transformation , rotation, magnification , inversion **Objective:** To teach about transformation of circles and rotation	01	Day 22

		w. Bilinear transformation **Objective:** Explaining about transformation of two curves	01	Day 23
		x. Cross-ratio of B.T **Objective**: To teach how to find w value	01	Day 24
		y. Preservation of C.B.T **Objective**: To teach how to find c.b.t	01	Day 25
		z. Finding images under B.T **Objective**: Explaining about images of curves	01	Day 26
		aa. Transformations of $w=z^2$, w=sinz **Objective:** Explaining how to find transformation of standard Function	01	Day 27
		bb. Transformations of w=coshz , $w= e^z$ **Objective**: Explaining transformation of standard curves	01	Day 28
2	**IV Sem**	**Unit 1: Integral Transforms**	**14Hrs**	
		a. Definition and basic properties Laplace transform **Objective**: Explaining basics of Laplace transform	01	Day 1
		b. Standard results **Objective**: Giving proof of results and solving problems	01	Day 2
		c. L.T of periodic function **Objective**: Giving formula and problems	01	Day 3
		d. Problems on P.F **Objective**: Explaining how to find Laplace of periodic functions	01	Day 4
		e. L.T of derivatives of a function. **Objective**: To give formula and problems on derivative of a function.	01	Day 5

		f. L.T of integral of a function. **Objective**: To give formula and problems on integral of a function.	01	Day 6
		g. Laplace of Heaviside function **Objective**: Giving formula and proof.	01	Day 7
		h. Dirac-delta function **Objective:** Explaining Dirac-delta function concept	01	Day 8
		i. Convolution theorem **Objective**: Giving statement and explaining c.t	01	Day 9
		j. Inverse laplace transformation **Objective**: Explaining i.l.t and giving formulas	01	Day 10
		k. Problems on Inverse laplace transformation **Objective**: Explaining procedure to find ILT	01	Day 11
		l. Properties of ILT **Objective :** Giving Properties of ILT	01	Day 12
		m. Solutions of differential equations by using LT **Objective** : Explaining procedure to find Solutions of differential equations by using LT	01	Day 13
		n. Properties to solve differential equations **Objective** : Giving Properties to solve differential equations	01	Day 14
		Unit 2:Fourier series	**14Hrs**	
		a. Periodic functions **Objective:** Giving definition of periodic function	01	Day 1
		b. Fourier coefficients **Objective:** Explaining Fourier coefficients.	01	Day 2
		c. Fourier series of Trigonometric function with period 2II **Objective:** Doing problems on trigonometric functions.	01	Day 3
		d. Fourier series of Algebraic function with period 2II **Objective:** Doing problems on algebraic functions.	01	Day 4

		e. Fourier series of Algebraic function with period 2L **Objective:** Doing problems on algebraic functions.	01	Day 5
		f. Half range cosine series with period II **Objective:** Explaining problems on cosine series with II	01	Day 6
		g. Half range cosine series with period L. **Objective:** Explaining problems on cosine with L.	01	Day 7
		h. Half range sine series with period II . **Objective:** Explaining problems on sine with II	01	Day 8
		i. Half range sine series with period L **Objective:** Explaining problems on sine with Period L.	01	Day 9
		j. Fourier series of even functions **Objective:** Explaining problems on Fourier series of even functions	01	Day 10
		k. Fourier series of odd functions **Objective:** Explaining problems on Fourier series of odd functions	01	Day 11
		l. Finite fourier cosine and sine transform **Objective:** Explaining Finite fourier cosine and sine transform	01	Day 12
		m. Transforms of derivates **Objective:** Doing problems on Transforms of derivates	01	Day 13
		n. Inverse fourier transforms **Objective:** Doing problems on Inverse fourier transforms	01	Day 14
3	**II Sem B.Sc(Core)**	**Unit 1: Integral Calculus**	**14 hrs**	
		a. Recapitulation of definite integrals **Objective:** To give Recapitulation of definite integrals	01	Day 1
		b. Introduction to Reduction formulae **Objective:** To teach about basics of Reduction formulae	01	Day 2
		c. Problems on Reduction formulae for ∫sin ^n(x)dx **Objective:** To teach about Problems on Reduction formulae for ∫sin^n(x) dx	01	Day 3
		d. Problems on Reduction formulae for ∫cos ^n(x)dx **Objective:** To teach about Problems on Reduction formulae for ∫cos^n(x) dx	01	Day 4

		e. Problems on Reduction formulae for ∫ sin ^n(x) *cos ^n(x)dx **Objective:** To teach about Problems on Reduction formulae for ∫ sin ^n(x)*cos^n(x) dx	01	Day 5
		f. Problems on Reduction formulae for ∫sin ^n(x)dx , ∫cos ^n(x)dx, ∫ sin ^n(x)*cos^n(x) dx with definite integral **Objective:** To teach about Problems on Reduction formulae for for ∫sin ^n(x)dx , ∫cos ^n(x)dx, ∫ sin ^n(x)*cos^n(x) dx with definite integral	01	Day 6
		g. Computation of length of an arc in Cartesian form **Objective**: Explaining problems on Computation of length of an arc in Cartesian form	01	Day 7
		h. Computation of length of an arc in polar form **Objective**: Explaining problems on Computation of length of an arc in polar form	01	Day 8
		i. Computation of area of plane curves in Cartesian form **Objective**: Explaining problems on Computation of area of plane curves in Cartesian form	01	Day 9
		j. Computation of area of plane curves in Polar form **Objective**: Explaining problems on Computation of area of plane curves in polar form	01	Day 10
		k. Computation of surface area in Cartesian form **Objective**: Explaining problems on Computation of surface area in Cartesian form	01	Day 11
		l. Computation of surface area in Polar form **Objective**: Explaining problems on Computation of surface area in polar form	01	Day 12
		m. Computation of volume in Cartesian form **Objective**: Explaining problems on Computation of volume in Cartesian form	01	Day 13
		n. Computation of volume in Polar form **Objective**: Explaining problems on Computation of volume in polar form	01	Day 14

4	**II Sem B.Sc(Open Elective)**	**Unit 1: Mathematics-II- Integral Calculus** **Line And Multiple Integrals** a. Definition of line integral **Objective:** To teach Definition of line integral b. Basic properties of line integral **Objective**: Giving Basic properties of line integral C. Examples of line integrals. **Objective:** Giving examples of line integrals. d. Evaluation of line integrals **Objective**: Explaining Evaluation of line integrals **e.** Definition of double integral **Objective:** .Giving Definition of double integral f. Its conversion to iterated integrals **Objective**: To explaining about its conversion to iterated Integrals g. Problems on double integral **Objective: Doing** More problems on double integral h. More problems on double integral **Objective: Doing** More problems on double integral i. computation of surface areas **Objective**: Explaining computation of surface area j. Definition of triple integral **Objective**: Giving Definition of triple integral k. Evaluation of triple integral **Objective**: Explaining Evaluation of triple integral l. Problems on triple integral **Objective**: Explaining problems on triple integral m. volume as a triple integral . **Objective:** To teach problems on volume n. More problems on volume as a triple integral . **Objective**: To teach More problems on volume as a triple integral.	**14 hrs** 01 01 01 01 01 01 01 01 01 01 01 01 01 01	 Day 1 Day 2 Day 3 Day 4 Day 5 Day 6 Day 7 Day 8 Day 9 Day 10 Day 11 Day 12 Day 13 Day 14

FACULTY SIGN

SIGN OF HOD

Principal
Principal,
U.S. Ramaiah College of Arts, Science & Commerce
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RAMAIAH COLLEGE OF ARTS, SCIENCE AND COMMERCE

MONTHLY LESSON PLAN

2022–2023 (EVEN SEMISTER)

DEPARTMENT: MATHEMATICS

FACULTY NAME: RAVINDRANATH.K SUBJECT NAME:B.SC MATHEMATICS

Sl no	Class	Contents	No of Hrs planned	Date	Remarks
1	VI Sem B.Sc Paper - 7 (Total Hours 28)	**Orthogonal Curvilinear Co-ordinates (14 HOURS)** 1.Introduction, definition—01hr **Objective:** To teach basics and definition. 2. Fundamental vectors—01hr **Objective:** To teach about Fundamental vectors 3.Scale factors--01 hr **Objective:** To teach about Scale factors 4. Quadrstic differential form --01 hr **Objective:** To teach about Ortho Curvilinear Coordinate system 5.Spherical curvilinear system--01 hr **Objective:** To teach about Spherical curvilinear system 6.problems on spherical curvilinear system--01 hr **Objective:** To teach about problems on spherical curvilinear system 7.problems on cylindrical co-ordinate system--01 hr **Objective:** To teach about problems on cylindrical co-ordinate system 8.cartesian to cylindrical form--01 hr **Objective:** To teach about cartesian to cylindrical form 9.Cartesian to spherical form--01 hr **Objective:** To teach about Cartesian to spherical form 10.Cylendrical and Spherical are Orthogonal systems--01 hr **Objective:** To teach they are orthogonal.	**10hrs** 01 01 01 01 01 01 01 01 01 01	Day 01 Day 02 Day 03 Day 04 Day 05 Day 06 Day 07 Day 08 Day 09 Day 10	
2	VI Sem B.Sc	**Unit 1:Numericals Methods -2 (14 hours)** 1.Introduction to numerical solution of algebraic equations	**14 hrs**		

	Paper-8 (Total Hours 14)	–01 hr **Objective:** To teach about numerical solution of algebraic equations 2.Bisection method—01 hr **Objective:**To teach about Bisection method and problems 3.RegulaFalsi method –01 hr **Objective:**To teach about RegulaFalsi method 4.Theory of newton – Raphson method—01 hr **Objective:**To teach about newton – Raphson method 5.Problems on NRM –01 hr **Objective:**To teach about newton – Raphson method and problems 6.Application problem NRM –01 hr **Objective:**To teach about newton – Raphson method problems 7.Theory of Jacobi iteration method –01 hr **Objective:**To teach about Theory of Jacobi iteration method 8.Problems on Jacobi iteration method--01 hr **Objective:**To teach about Problems on Jacobi iteration method 9.Gauss-Seidal method –01 hr **Objective:**To teach about Gauss –seidal method 10.Power method of finding eigen values—01 hr **Objective:**To teach about Power method of finding eigen values 11.Taylor's series methods –01 hr **Objective:**To teach about Taylor's series methods 12.Euler's method –01hr **Objective:**To teach about Euler's method 13.Theory of Runge- Kutta method—01 hr **Objective:**To teach about Theory of Runge- Kutta method 14.Problems on RKM –01 hr **Objective:**To teach about Problems on RKM	01 01 01 01 01 01 01 01 01 01 01 01 01 01	Day 01 Day 02 Day 03 Day 04 Day 05 Day 06 Day 07 Day 08 Day 09 Day 10 Day 11 Day 12 Day 13 Day 14	
3	**II Sem B.Sc Paper -2 (CORE)**	**Unit-1 GROUP THEORY(14 Hours)** 1.Defination and problems on Groups--01 Hr **Objective:** To teach about basics on Introduction to the Groups 2.Problem on groups using module m--01 Hr **Objective:** To explain about problem solving groups. 3.Properties on Groups--01 Hr **Objective:** To teach about problems on Finding Identity And Inverse Element of a group 4.Sub groups and problems---01 Hr **Objective:** To teach about properties of groups. 5. Theorems on sub groups--01 Hr	**14 Hours** 01 01 01 01 01	Day 01 Day 02 Day 03 Day 04 Day 05	

		Objective: To teach about problems on congruence. 6. .Order of elements and problems --01 Hr **Objective:** To teach about problems on On Groups Including Complex Number 7. Properties on order of an element--01 Hr **Objective:** To teach about problems on subgroups. 8Cyclic groups and problems-01—Hr **Objective:** To teach about problems on Center of groups. 9. Propeties on Cyclic groups--- 01hr **Objective:** To teach about order of an elment and its properties of a group. 10.Coset decomposition and problems --01hr **Objective:** To teach about cyclic groups and problems. 11. Factor groups and problems---01hr **Objective:** To teach about Coset decomposition of a group and problems. 12.Lagrange's theorem and problems—01hr **Objective:** To teach about Lagrange's theorem and problems 13.Consequences of Lagrange's theorem---01hr **Objective:** To teach about Consequences of Lagrange's theorem. 14.Fermat's theorem and Euler's pie function **Objective:** To teach about Fermat's theorem.	01 01 01 01 01 01 01 01 01 01	Day 06 Day 07 Day 08 Day 09 Day 10 Day 11 Day 12 Day 13 Day 14	
4	**II Sem BSc (O E)**	**Partial Differentiation (14hr)** 1.Introduction to partial differentation **Objective:** To teach about Introduction to function two or more variables. 2.Partial differentiation of explicit function. **Objective:** To teach about Introduction to partial derivatives and simple problems. 3.Simple problems on implicit function. **Objective:** To teach about Explict and implicit function and problems. 4.Standard problems on implicit functions. **Objective:** To teach about Homogeneous functions and problems. 5.Homogenous function and its derivatives. **Objective:** To teach about Euler's theorem and problem. 6.Euler's theorem and problems. **Objective:** To teach about total derivatives and problems. 7.Total derivatives and problems **Objective:** To teach about Composite function and problem. 8.Jacobian problems and properties. **Objective:** To teach about Jacobian and its properties. 9.Introduction to Taylor's Series. **Objective:** To teach about Problems on Jacobian. 10.Problems on Taylor's Series. **Objective:** To teach about Taylor's theorem. 11.Introduction to Maclaurin's series	**14 Hours** 01 01 01 01 01 01 01 01 01 01	Day 01 Day 02 Day 03 Day 04 Day 05 Day 06 Day 07 Day 08 Day 09 Day 10 Day 11	

		Objective: To teach about Problems on Taylor's theorem for function two variables. 12. Problems on Maclaurin's Series **Objective:** To teach about Maclaurin's series. 13.Introduction to Maxima-Minima for function two variables. **Objective:** To teach about Maxima-Minima. 14.Problems on Maxima-Minima. **Objective:** To teach about problems on Maxima-Minima.	01 01 01 01	Day 12 Day 13 Day 14	
5	**II Sem B.COM (OPTIONAL sUBJECT)**	**Business Mathematics** **Unit-I Matrices and Determinants** 1.Introduction and Definition of Matrices 2. Different types of Matrices along with examples 3. Basic operations problems on addition of Matrices 4. Problems on multiplication of Matrices. 5. Mixed Problems on Matrices 6. To find adjoint of a matrix 7. To find the inverse of a matrix 8. Matrix method to solve system of equations. 9. Cramer's rule to solve system of equations 10. Application problems on Matrices **Unit-II Progressions** 1.Introduction and basics 2. Types of progressions and examples 3. Arithmetic Progressions and basic problems 4. Properties of A.P 5. Problems on A.P 6. Sum of n terms problems on A.P	**10 Hours** **12 Hours**		

		7. Application problems on A.P 8. Geometric progression and basic problems 9. Properties of G.P 10. Problems on G.P 11. Problems on properties of G.P 12. Application problems on G.P **Unit-III Number system, Indices and Logarithms** 1.Introduction and different types of number systems 2. Problems on prime numbers 3. Definition of HCF ,LCM and basic problems 4. Problems on HCF and LCM 5. Basic laws of indices and problem 6.standard memory problem and laws of indices 7.application problem and laws and indices 8.Introduction and simple problems and logarithms 9. laws of logarithms and proof 10.Problems on laws of logarithms 11.common logarithms and problem 12Application problems on common logarithms	**12 Hours**		
6	**IV B.Com & BBA (OE)**	**Quatative Mathematics** **Unit I Theory of Equations** 1.Introduction to linear equations and basic problems 2.Application problems on linear equations 3.Introduction to quadratic equation and basic problems	**14 Hours**		

		4.Application problems on quadratic equation 5.Introduction to simultaneous equation and basic problems 6.Application problem on quadratic equation 7.simple problem on age 8.Standard problem on age 9.Basic problem on conditional age 10.Standard problems on conditional age 11.Simple problems on present and past age calculations 12.Standard problems on present age and past age calculations 13.Application problems on present and past age calculation 14.Mixed problems **Unit II Number Theory** 1.Introduction to number system 2.Definition of divisibility and problems 3.Definition of HCF and problems 4.Application problems on HCF 5. Mixed application problems on HCF 6.Definition of LCM and problems 7.Application problems on LCM 8.Problems related to HCF and LCM 9.Application problems on HCF AND LCM 10.Problems on decimals and Fractions 11.Problems on square root of a number 12.Problems on cube root of a number	**14 Hours**		

		13.Introduction to surds, indices and basic problem 14.Standard problem on surds and indices			

RAMAIAH COLLEGE OF ARTS, SCIENCE AND COMMERCE

MONTHLY LESSON PLAN

2022–2023 (OOD SEMISTER)

DEPARTMENT: MATHEMATICS

FACULTY NAME: RAVINDRANATH.K SUBJECT NAME: B.SC MATHEMATICS

Sl no	Class	Contents	No of Hrs planned	Date	Remarks
1	**VSem B.Sc Paper - 5**(Total Hours 28)	**Unit 1: DIFFERENTIAL CALCULUS OF SCALERS AND VECTORS (14 HOURS)** 1.Scalar field : introduction and definition --01 hr **Objective:** To teach basics and definition of Scalar field 2.Basic problem on Scalar field---01 hr **Objective:** To teach basic problems on Scalar field 3.Gradient of a Scalar field and problems--01 hr **Objective:** To teach Gradient of a Scalar field and problems 4.Geometrical meaning of directional derivatives, problems --01 hr **Objective:** To teach about Geometrical meaning of directional derivatives, problems 5.Maximum directional derivatives, problem --01 hr **Objective:**To teach theoretical problems onMaximum directional derivatives 6. Angle between two surfaces, problems. --01hr **Objective:** To teach Angle between two surfaces, problems 7. Vector field: introduction and definition, --01hr **Objective:** To teach basics of Vector field 8. Divergence and curl of vector field, problems. --01hr **Objective:** To teachDivergence and curl of vector field, problems 9. Solenoidal and irrotational fields, problem --01hr **Objective:** To teachSolenoidal and irrotational fields, problem 10. Scalar and vector potential, problems --01 hr **Objective:** To teach problems on Scalar and vector potential 11. Laplacian of a scalar field, problems --01hr **Objective:** To teach problems on Laplacian of a scalar field 12. Standered properties on Divergence and curl of vector field –01hr **Objective:** To teach proof of properties on Divergence and curl of vector field 13.Standared properties on Divergence and curl of vector field –01hr **Objective:** To teach the Standared properties on Divergence and curl of vector field	**14hrs** Day 1 Day 2 Day 3 Day 4 Day 5 Day 6 Day 7 Day 8 Day 9 Day 10 Day 11 Day 12 Day 13		

		14. Harmonic functions and problems –01hr **Objective:**To teach about Harmonic functions and problems	Day 14		
		2. NUMERICAL METHODS -- I(14 HOURS)	**14hrs**		
		1.Finite differences Introduction, definition—01hr **Objective:**To teach basics and definition of Finite differences	Day 15		
		2. Properties of delta, del, meu, shift opereters --0 **Objective:**To teach about Properties of delta, del, meu, shift opereters	Day 16		
		3. The relation between delta, del, meu, shift opereters --01 **Objective:**To teach about **the** relation between delta, del, meu, shift opereters	Day 17		
		4.nth difference of a polynomial and problems--01 **Objective:**To teach about nth difference of a polynomial and problems	Day 18		
		5. Factorial notations and problems--01 **Objective:**To teach about Factorial notations and problems	Day 19		
		6. Separation of symbols and problems--01 **Objective:**To teach about Separation of symbols and problems	Day 20		
		7. Divided differences and related theorems--01 **Objective:**To teach about Divided differences and related theorems	Day 21		
		8. Newton –Gregory forward and backward interpolation formulae --01 **Objective:**To teach about Newton –Gregory forward and backward interpolation formulae	Day 22 Day 23		
		9. Problems on NGFIF--01 **Objective:**To teach about Problems on NGFIF	Day 24		
		10. Problems on NGBIF--01 **Objective:**To teach about Problems on NGBIF	Day 25		
		11. Lagrange's and formulae for unequal intervals --01 **Objective:**To teach about	Day 26		
		12. Inverse interpolation and problems --01 **Objective:**To teach about Inverse interpolation and problems	Day 27		
		13. Trapezoidal rule and problems --01 **Objective:**To teach about Trapezoidal rule and problems	Day 28		
		14. Simpon's 1/3 and 3/8 rule(without proofs) and problems.--01 **Objective:**To teach about Simpon's 1/3 and 3/8 rule(without proofs) and problems			

02	**III Sem B.Sc Paper-3** (Total Hours 14)	**Groups (14 Hours)** 1.Intrduction to Order of an element of a group --01hr Objective: To teach aboutOrder of an element of a group 2.properties on order of an element --01hr Objective: To teach aboutproperties on order of an element 3.properties on order of an element --01hr Objective: To teach aboutproperties on order of an element 4.properties on order of an element --01hr Objective: To teach aboutproperties on order of an element 5.Subgroup generated by an element of a group --01hr Objective: To teach aboutSubgroup generated by an element of a group 6.Coset decomposition of a group, --01hr Objective: To teach aboutCoset decomposition of a group 7.Cyclic groups I type properties --01hr Objective: To teach aboutCyclic groups I type properties 8.Cyclic groups II type properties --01hr Objective: To teach aboutCyclic groups II type properties 9.Cyclic groups III type properties --01hr Objective: To teach aboutCyclic groups III type properties 10.Modulo relation- index of a group --01hr Objective: To teach aboutModulo relation- index of a group 11.Lagrange's theorem I- consequences --01hr Objective: To teach aboutLagrange's theorem I- consequences 12. Lagrange's theorem II - consequences problems --01hr Objective: To teach aboutLagrange's theorem II - consequences problems 13.Lagrange's theorem III - consequences --01hr Objective: To teach aboutLagrange's theorem III - consequences 14. Lagrange's theorem IV - consequences --01hr Objective: To teach about Lagrange's theorem IV - consequences	**14 Hours** Day 1 Day 2 Day 3 Day 4 Day 5 Day 6 Day 7 Day 8 Day 9 Day 10 Day 11 Day 12 Day 13 Day 14		
03	**I Sem B.Sc Paper-1** (Total	**Integral Calculus (14 Hours)** 1.Introduction to Reduction formulae --01 Hr Objective: To teach about basics of Reduction formulae 2. Problems on Reduction formulae for $\int \sin x\, dx$ and with	**14 hrs** Day 1		

	Hours 14)	definite limit --01 Hr Objective: To teach about Problems on Reduction formulae for ∫sin x dx 3. Reduction formulae for ∫ cos x dx and with definite limit nd problems --01 Hr Objective: To teach aboutReduction formulae for ∫ cos x dx 4. Reduction formulae for∫ tan x dx , and with definite limit Problems---01 Hr Objective: To teach aboutReduction formulae for∫ tan x dx 5. Reduction formulae for ∫cot x dx , and with definite limit Problems --01 Hr Objective: To teach aboutReduction formulae for ∫cot x dx 6. Reduction formulae for ∫ cosec x dx. and with definite limit problems --01 HrReduction formulae for ∫ cosec x dx. 7. Reduction formulae for ∫sec x dx and with definite limit Problems On -01 Hr Objective: To teach aboutReduction formulae for ∫sec x dx 8. Reduction formulae for ∫sin x cos x dx, and with definite limit Problems -01--Hr Objective: To teach about∫sin x cos x dx, and with definite limit Problems 9. Application problems on reduction formulae type I ---01hr Objective: To teach aboutApplication problems on reduction formulae type I 10. Application problems on reduction formulae type II --01hr Objective: To teach aboutApplication problems on reduction formulae type II 11. Introduction to Differentiation under integral sign by Leibnitz rule. --01hr Objective: To teach aboutIntroduction to Differentiation under integral sign by Leibnitz rule. 12. I type problems On Leibnitz rule.---01hr Objective: To teach aboutI type problems On Leibnitz rule 13. II type problems On Leibnitz rule.--01hr Objective: To teach about. II type problems On Leibnitz rule.--01hr Objective 14. III type problems On Leibnitz rule. ---01hr Objective: To teach aboutIII type problems On Leibnitz rule	Day 2 Day 3 Day 4 Day 5 Day 6 Day 7 Day 8 Day 9 Day 10 Day 11 Day 12 Day 13 Day 14		
04	**I SemBCA Paper-1** (Total	**Unit -1 Mathematial Logic and Relations (13 hrs)** 1. Introduction to Mathematical Logic Proposition and Truth values --01 hr	**13 hrs** Day 1		

	Hours 39)	Objective: To teach aboutIntroduction to Mathematical Logic Proposition and Truth values 2. Logical connectives and their truth tables --01 hr Objective: To teach aboutLogical connectives and their truth tables 3. problems on constructing truth tables --01 hr Objective: To teach aboutproblems on constructing truth tables 4. Tautology and Contrdiction --01 hr Objective: To teach aboutTautology and Contrdiction 5. Problems on Tautology and Contrdiction --01hr Objective: To teach aboutProblems on Tautology and Contrdiction 6. Logical equivalences and standard theorems --01hr Objective: To teach aboutLogical equivalences and standard theorems 7. Converse, Inverse and Contrpositive of an implication --01hr Objective: To teach aboutConverse, Inverse and Contrpositive of an implication 8. Switching circuits.and problems --01hr Objective: To teach aboutSwitching circuits.and problems 9. Sets and problems --01hr Objective: To teach aboutSets and problems 10. Sub sets, equal sets, Universal sets, Finite sets and infinite sets --01hr Objective: To teach aboutSub sets, equal sets, Universal sets, Finite sets and infinite sets 11. Operations on sets Union, intersection, compliments of sets and Cartisian products. Cardinality of sets --01hr Objective: To teach aboutOperations on sets Union, intersection, compliments of sets and Cartisian products. Cardinality of sets 12. Relations and Functions Domain and Range Onto, into, one-one and many-one functions --01hr Objective: To teach aboutRelations and Functions Domain and Range Onto, into, one-one and many-one functions 13. Composite and Inverse functions --01hr Objective: To teach aboutComposite and Inverse functions **Unit-2 Vectors and Groups(13hrs)** 1. Introduction to Vectors Definition of vector and scalar --01hr Objective: To teach about Introduction to Vectors Definition of vector and scalar	Day 2 Day 3 Day 4 Day 5 Day 6 Day 7 Day 8 Day 9 Day 10 Day 11 Day 12 Day 13 Day 14		

		2. Vector addition and scalar multiplication --01hr Objective: To teach about Vector addition and scalar multiplication	Day 15		
		3 Dot and cross product of two vectors problems -01hr Objective: To teach about Dot and cross product of two vectors problems	Day 16		
		4. Projection of one vector on another vector Area of a parallelogram and problems --01hr Objective: To teach about Projection of one vector on another vector Area of a parallelogram and problems	Day 17		
		5. Area of a triangle and problems --01hr Objective: To teach about . Area of a triangle and problems	Day 18		
		6. Scalar triple product and problems --01hr Objective: To teach about Scalar triple product and problems	Day 19		
		7. Volume of a parallelepiped and problems ,Co-planarity of three vectors and p roblems --01hr Objective: To teach about Volume of a parallelepiped and problems ,Co-planarity of three vectors and p roblems	Day 20		
		8. Vector triple product and problems --01hr Objective: To teach about Vector triple product and problems Objective	Day 21		
		9. introduction definition of binary operation problems on binary operation -01hr Objective: To teach about introduction definition of binary operation problems on binary operation	Day 22		
		10. Definition of Group and problems--01hr Objective: To teach about Definition of Group and problems	Day 23		
		11. problems on groups--01hr Objective: To teach about problems on groups	Day 24		
		12. Sub Group and problems --01hr Objective: To teach about Sub Group and problems	Day 25		
		13. Permutation group and problems--01hr Objective: To teach about Permutation group and problems	Day 26		
		3. Analytical Geometry (13 Hrs)			
		1.Introduction to Analytical Geometry--01hr Objective: To teach aboutIntroduction to Analytical Geometry	Day 27		
		2.The Co-ordinates of a Point Distance formula , problems--01hr Objective: To teach aboutThe Co-ordinates of a Point Distance formula , problems	Day 28		
		3. Distance formula and problems on triangle --01hr Objective: To teach aboutDistance formula and problems on triangle	Day 29		
		4.Distance formula and problems on parallelogram --01hr Objective: To teach about.Distance formula and problems on parallelogram	Day 30		
		5.Section formula and problems --01hr Objective: To teach aboutSection formula and problems	Day 31		

		6.Locus of a point and problems --01hr Objective: To teach aboutLocus of a point and problems 7. Slope of a straight and basic problems --01hr Objective: To teach aboutSlope of a straight and basic problems 8. Slope of a straight and problems --01hr Objective: To teach aboutSlope of a straight and problems 9. Various forms of equation of a straight line and problems--01hr Objective: To teach aboutVarious forms of equation of a straight line and problems 10. Equation of a straight line and problems--01hr Objective: To teach aboutEquation of a straight line and problems 11. point of intersection of two st. lines and problems --01hr Objective: To teach aboutpoint of intersection of two st. lines and problems 12. Angle between two st. lines and problems --01hr Objective: To teach aboutAngle between two st. lines and problems 13. Perpendicular distance of a point from a straight line and problems --01hr Objective: To teach aboutPerpendicular distance of a point from a straight line and problems	Day 32 Day 33 Day 34 Day 35 Day 36 Day 37 Day 38 Day 39		

SEMESTER PLAN

Topic	Date	Class	Contents	No of Hrs Planned
Unit I		IV BSc	नाटकस्य उद्भव विकासे	
Teaching Objective			सामुदायिक वाद:, ग्रीक उत्पत्ति:। लक्षणानि, पारिभाषिक	4
Content			शब्दा:। भास:, समस्या, साम्यांशा:, भास नाटकानि, श्रद्रक कवे: देश काल कृतीनां परिचय:। अवधूति: तस्य कृतीनां परिचय:।	2 3 3 6
Teaching Pedogogy			कृष्ण फलकस्य उपयोग: वाचनालयम्, अन्तर्जालस्य प्रयोग:।	
Unit II			भट्टनारायण: तस्य देश काल कृतीनां परिचय:।	4
Teaching Objective				
Content		IV BSc	नाटकम् - वेणी संहार:। महाभारत कथाया: संक्षेप कथनम् वेणी संहार नाटकस्य विवरणं आन्तरिक परीक्षा प्रश्न पत्रिकाया: पुनरावरणं	20 2 2 2
Teaching Pedogogy			अन्तर्जाल: वाचनालयम्, कृष्ण फलकं च।	52

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SEMESTER PLAN

Topic	Date	Class	Contents	No of Hrs Planned
Unit I		IV BSc	नाटकस्य उद्भव विकासे सामुदायिक वाद:, ग्रीक उद्भूति:। लक्षणानि, पारिभाषिक	4
Teaching Objective				
Content			शब्दा:। भास:, समस्या, सामयांशा:, भास नाटकानि, शूद्रक कवे: देश काल कृतीनां परिचय:। अवभूति: तस्य कृतीनां परिचय:।	2 3 3 6
Teaching Pedogogy			कृष्ण फलकस्य उपयोग: वाचनालयम्, अन्तर्जालस्य प्रयोग:।	
Unit II			भट्टनारायण: तस्य देश काल कृतीनां परिचय:।	4
Teaching Objective				
Content		IV BSc	नाटकम् - वेणी संहार:। महाभारत कथाया: संक्षेपकथनम् वेणी संहार नाटकस्य विवरणं आन्तरिक परीक्षा प्रश्न पत्रिकाया: पुनर-मारणं	20 2 2 2
Teaching Pedogogy			अन्तर्जाल: वाचनालयम्, कृष्ण फलकं च।	52

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SEMESTER PLAN

Topic	Date	Class	Contents	No of Hrs Planned
Unit I				
Teaching Objective		IV BCA	नाटकस्य उत्पत्ति विचार: नाटक लक्षणानि, साम्प्रदायिक वाद: रूपक वाद: ।	6
Content			पारिभाषिक शब्दा: । भवभूति देशकाल कृतय: कालिदासस्य देशकालकृतय: श्री हर्ष: देशकाल कृतय: च ।	8 4
Teaching Pedogogy			कृष्ण कलक:, रत्नावलय: अन्तर्जालस्य उपयोग: ।	
Unit II				
Teaching Objective			भासस्य देश काल कृतय: भास समस्या, साम्यांशा: च ।	4
Content		IV BCA	पाठ्यक्रमे नाटकस्य सर्वे अङ्गा: संस्कृते विज्ञानम् । अन्तरिक परीक्षा । पुनस्मारणम् ।	22 6 2
Teaching Pedogogy			कृष्ण कलकम: अन्तर्जालम्, वाचनालयम्	52

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2022-23.

SEMESTER PLAN

Topic	Date	Class	Contents	No of Hrs Planned
Unit I		IV BBA	नाटकस्य उत्पत्ति विकास:	2
Teaching Objective			नाटक स्य लक्षणानि	4
			पारिभाषिक शब्दा: ।	2
Content			(कालिदासस्य) कवि कृति परिचय,	4
			~~इतर~~ अन्य नाटकानां परिचय:	
			श्रीहर्ष : तस्य देश काल कृतीनं	4
			परिचय: । भास :, दासस्वप्नस्य	
			साम्यांशा:, कृतय: च ।	9
Teaching Pedogogy			अन्तर्जालस्य प्रयोगा: ।	
			श्रव्य दृश्य काव्यानां प्रयोजनम्	
			कृष्ण फलक: च ।	
Unit II		IV BBA	शूद्रक कवे: देशकाल	3
Teaching Objective			कृतीनां परिचय: ।	
Content			मालविकाग्नि मित्रं नाटकम्	20
			आन्तरिक परीक्षा -	2.
			मौल्यमापनम्,	
			पद्यस्य पुनस्मारणम्	
			प्रश्न पत्रिकाया: पुनस्मारणं	2
Teaching Pedogogy			कृष्ण फलक प्रयोगा:	52
			अन्तर्जाल उपयोगा:	

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Department of Business Administration – BBA
Lesson Plan – Academic Year 2022-23(Even Semesters)

Faculty Name: Dr. M.LAKSHMIPATHI NAIDU **Subject:** ITB – II
Semester: VI Semester - A & B **Hours:** 56 Hrs – 12 Hrs per week

Sl No	Class	Contents	No of Hrs planned	Day	Remarks
1.	VI SEM A, B and C	**UNIT 1: INTERNET AS A NETWORK INFRASTRUCTURE** Internet-Technology Background, ***Obj:*** To make understand Internet-Technology Background, The Internet Today, The Future Infrastructure, ***Obj:*** To make understand The Internet Today, The Future Infrastructure, The Intranet-Definition, Application of Intranet, ***Obj:*** To make understand The Intranet-Definition, Application of Intranet, Industry Specific Solutions, The Extranet - Definition, Application of Intranet, ***Obj:*** To make understand The Extranet - Definition, Application of Intranet, Industry Specific Solutions, Introduction to Email, Common Email Features, ***Obj:*** To make understand Introduction to Email, Common Email Features, Google and its features (Google Drive, Google Docs, Google Forms, Google Sheets, Google Hangouts) ***Obj:*** To make understand Google and its features	**12 Hrs** 2 Hrs 2 Hrs 2 Hrs 2 Hrs 2 Hrs	1 – 2 3 – 4 5 - 6 7 – 8 9 - 10 11 - 12	
2		**UNIT 2: INTRODUCTION TO ECOMMERCE** Introduction to E Commerce Framework for E Commerce, ***Obj:*** To make understand Introduction to E Commerce Framework for E Commerce, Difference Between E Commerce and M Commerce, ***Obj:*** To make understand Difference Between E Commerce and M Commerce, Features of E Commerce, ***Obj:*** To make understand Features of E Commerce, Types of E Commerce, ***Obj:*** To make understand Types of E Commerce, Types of B2C Business Models, ***Obj:*** To make understand Types of B2C	**12 Hrs.** 2 Hrs 2 Hrs 1 Hr 2 Hrs	3-14 15-16 17 18-19	

		Obj: To make understand Permission marketing, Affiliate marketing, Viral Marketing, Blog marketing, Email Marketing, Social Media Marketing, ***Obj:*** To make understand Blog marketing, Email Marketing, Social Media Marketing, Search Engine marketing. Customer Relationship Management system, ***Obj:*** To make understand Search Engine marketing. Customer Relationship Management system, Customer Retention: Strengthening the Customer Relationship, ***Obj:*** To make understand Customer Retention: Strengthening the Customer Relationship, Personalization and One-to-One Marketing, ***Obj:*** To make understand Personalization and One-to-One Marketing, Customization and Customer Co-Production, ***Obj:*** To make understand Customization and Customer CoProduction, Transactive Content, ***Obj:*** To make understand Transactive Content, Customer Service. ***Obj:*** To make understand Customer Service.	1 Hr 1 Hr 1 Hr 1 Hr 1 Hr 1 Hr 1 Hr	40 41 42 43 44 45 46	
5		**UNIT 5: SOCIAL NETWORKS AND ONLINE COMMUNITIES** What Is an Online Social Network? ***Obj:*** To make understand What Is an Online Social Network? The Difference Between Social Networks and Portals, ***Obj:*** To make understand The Difference Between Social Networks and Portals, The Growth of Social Networks and Online Communities, ***Obj:*** To make understand The Growth of Social Networks and Online Communities, Turning Social Networks into Businesses, ***Obj:*** To make understand Turning Social Networks into Businesses, Types of Social Networks and Their Business Models, ***Obj:*** To make understand Types of Social Networks and Their Business Models, Social Network Features and Technologies,	**10 Hrs** 2 Hrs 2 Hrs 2Hrs 1 Hr 1 Hr	 47 – 48 49 – 50 51 – 52 53 54	

RAMAIAH
College of Arts, Science & Commerce

Department of Business Administration – BBA
Lesson Plan – Academic Year 2022-23(Even Semesters)

		Obj: To make understand Social Network Features and Technologies, The Future of Social Networks. *Obj:* To make understand The Future of Social Networks.	1 Hr 1 Hr	55 56	
		Revision: Revision of all the chapters and discussion of previous year university question paper	**04 Hrs**	57 – 60	Previous years Question Papers

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Dept. of Business Administration
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RAMAIAH College of Arts, Science & Commerce

DEPARTMENT OF MANAGEMENT STUDIES - BBA

Lesson Plan – Academic Year 2022-23

Faculty Name: Yashodha G
Subject: Financial Accounting

Semester: II Semester A, B & C
Hours: 56 Hrs – 12 Hrs per week

Sl. No.	Class	Contents	Hours Planned	Day	Remarks
1	2nd Sem A, B & C	**Module -1: Conversion of Single-Entry System into Double Entry System**	**10 Hrs**		
		Single entry system - Meaning – Features	1	1	
		Obj: To make students understand Single entry system - Meaning – Features			PPTs & Board
		Merits – Demerits	1	2	
		Obj: To make students understand Merits – Demerits			Students can Take notes & Q&A
		Conversion into Double Entry system – Need for Conversion	1	3	
	CO 1	***Obj:*** To make students understand Conversion into Double Entry system – Need for Conversion			
		Preparation of Statement of Affairs	2	4-5	Assist students to prepare the balance sheet with balancing figure.
		Obj: To make students understand Preparation of Statement of Affairs			
		Cash book – Memorandum Trading Account	1	6	
		Obj: To make students understand Cash book – Memorandum Trading Account			
		Total Debtors Account – Total Creditors Account – Bills Receivable Account – Bills Payable Account	1	7	
		Obj: To make students understand Total Debtors Account – Total Creditors Account – Bills Receivable Account – Bills Payable Account			
		Trading and Profit & Loss Account and Balance Sheet.	3	8-10	
		Obj: To make students understand Trading and Profit & Loss Account and Balance Sheet.			
2		**Module -2: Final Accounts of Partnership Firms**	**10 Hrs**		
		Meaning of Partnership Firm	1	11	
		Obj: To make students understand Meaning of Partnership Firm			PPT & Board
		Features of Partnership. Partnership deed-contents of partnership deed	1	12	
	CO 2	***Obj:*** To make students understand Features of Partnership. Partnership deed-contents of partnership deed			Students can Take notes And(Q&A)

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DEPARTMENT OF MANAGEMENT STUDIES - BBA

Lesson Plan – Academic Year 2022-23

	CO 4	Treatment of Special Items, Tax deducted at source, Advance payment of Tax, Provision for Tax, Depreciation, Interest on debentures ***Obj:*** To make students understand Treatment of Special Items, Tax deducted at source, Advance payment of Tax, Provision for Tax, Depreciation, Interest on debentures	2	37-38	Collect annual reports of any two companies and prepare financial statements
		Dividends, Rules regarding payment of dividends, Transfer to Reserves ***Obj:*** To make students understand Dividends, Rules regarding payment of dividends, Transfer to Reserves	10	39-48	
		Preparation of Statement of Profit and Loss and Balance Sheet Schedule -III of Companies Act,2013 ***Obj:*** To make students understand Preparation of Statement of Profit and Loss and Balance Sheet Schedule -III of Companies Act,2013			
5		**Module -5: Analysis of Financial Statements** Meaning of financial analysis ***Obj:*** To make students understand Meaning of financial analysis	**08 Hrs** 1	49	PPTs and Board
		Types of Analysis ***Obj:*** To make students understand Types of Analysis Methods of Financial Analysis ***Obj:*** To make students understand Methods of Financial Analysis	1	50	Collect annual reports of any two companies and analyze the statements and prepare a report thereon
	CO 5	Comparative Statements ***Obj:*** To make students understand Comparative Statements	2	51-52	
		Common Size Statements ***Obj:*** To make students understand Common Size Statements	2	53-54	
		Trend Analysis – Problems. ***Obj:*** To make students understand Trend Analysis – Problems.	2	55-56	
		Revision	2	57-58	

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RAMAIAH
College of Arts, Science and Commerce

Department of Management Studies – UG (BBA)

Lesson Plan – Academic Year 2022-23

Faculty Name: Namrata Deshpande
Semester: IV Semester A, B & C Section

Subject: MANAGEMENT ACCOUNTING
Hours: 56 Hrs – 12 Hrs per week

Sl No	Class	Contents	No of Hrs planned	Day	Pedagogy and Activity
1.	IV Sem A, B & C	**Module No. 1: Introduction to Management Accounting** Introduction- Meaning and Definition – Objectives – **Obj:** To understand the meaning and need for management accounting	8 Hrs 1 Hr	1	**Usage of PPT and explanation of concepts**
		Nature and Scope– **Obj:** To understand the Scope and its applicability in various areas of accounting	1 Hr	2	
		Functions- **Obj:** To understand the broad areas in which management accounting is applied	1 Hr	3	
		Role of Management Accountant, **Obj:** To know the role and function of management accountant	1 Hr	4	
		Relationship between Financial Accounting and Management Accounting, **Obj:** To understand the relation between Financial Accounting and Management Accounting	1 Hr	5	
		Relationship between Cost Accounting and Management Accounting, **Obj:** To understand the relation between Cost and Management Accounting	1 Hr	6	
		Advantages and limitations of Management, **Obj:** To understand the uses and the drawbacks of management accounting	1 Hr	7	
		Technique of Management Accounting (Concept Only).	1 Hr	8	

Lesson Plan – Academic Year 2022-23

		Incomes –Taxable under the head other sources Obj: To understand the Income from other heads securities –Kinds of Securities-Rules for Grossing Up- Ex-Interest securities Cum- Interest –Bond Washing transactions Obj: To understand the securities and kinds of securities and Its Rules Problems on Income from Other sources. Obj: Problems and Solutions	02Hrs 04Hrs	34-35 36-39	Securities and its sample format. 2. List of Income from other sources
4.		**UNIT-4: DEDUCTIONS FROM GROSS TOTAL INCOME** Deductions u/s: 80C, 80 CCC, 80 CCD, 80 DD, 80 E, , 80 G, 80 GG, 80 GGA, 80 QQB, 80 U. (Theory Only) Obj: To understand the deductions	**06Hrs** 06Hrs	40-45	**PPTs** **Assignment:** 1.Table of rates of tax deducted at source
5.		**UNIT-5: SET –OFF & CARRY FORWARD AND LOSSES AND ASSESSMENT OF INDIVIDUALS** Meaning-Provision for Set-off & Carry forward of losses (Theory Only) Obj: To understand the provision for set-off & Carry forward of losses Computation of Total Income and Tax liability of an Individual Assessee Obj: To understand the computation of Total Income and tax liability of an Individual assessee (Problems –in case of Income from salary and House property –Computed Income may be given). **Obj:** Problems and Solution	**10Hrs** **02Hrs** **04Hrs** **04Hrs**	46-47 48-51 52-55	**PPTs** **Assignment:** 1.Filing of IT returns of individuals 2. List of enclosures for IT returns.

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Bengaluru

COURSE BOOK

Period of the Semester: **From** 2 Sep 2022 **To** 16 Jun 2023

Dept-Sem-Sec: MBA-1-A

Subject with Code: BUSINESS PLANNING AND REGULATIONS (1.3)

Time Slot		
MON:	**TUE :** 14:30 - 16:30	**WED:** 11:40 - 13:40
THU :	**FRI :**	**SAT :**

Name of the Teacher : Dr Shaista Banu Harris

Lesson Plan & Execution	
Name of the Faculty	***Dr Shaista Banu Harris***
Dept-Sem-Sec	***MBA-1-A***
Date of Commencement	***2 Sep 2022***
Last Working Day of Semester	***16 Jun 2023***
Source Material List	
TEXT 1	Aswathappa K, Essentials of Business Environment, Himalaya Publishing House Francis Cherunilam, Business Environment, Himalaya Publishing House RBI Bulletins Public Sector Enterprises Survey Dr. K. Ramachandra, Legal Aspects of Business B.D.Singh, "Labor Laws for Managers ", Excel Books C.S Venkata Ratnam, "Industrial Relations ", Oxford University Press National Sample Survey Organization reports Labour Regulations Reports
Course Outcome List	
1	By the end of this course, a student would learn Identifying Strategic alternatives, Applying Ethical corporate behavior and Governance Mechanism

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
Module 1								
1	P	1 Feb 2023	Components of Business Planning, Marketing Planning				Lecture	
1	E	1 Feb 2023	Components of Business Planning, Marketing Planning		CO 1		Lecture	
2	P	7 Feb 2023	Financial Planning, HR Planning				Lecture	
2	E	7 Feb 2023	Financial Planning, HR Planning		CO 1		Lecture	
3	P	8 Feb 2023	Production Planning				Lecture	
3	E	8 Feb 2023	Production Planning		CO 1		Lecture	
4	P	14 Feb 2023	R & D Planning				Lecture	
4	E	14 Feb 2023	R & D Planning		CO 1		Lecture	
Module 2								
5	P	15 Feb 2023	Economic Environment,Economic Factors, Claims and Counter Claims, New Economic Policy, Make in India, The Second Generation Reforms				Lecture	
5	E	15 Feb 2023	Economic Environment, Economic Factors, Claims and Counter Claims, New Economic Policy, Make in India, The Second Generation Reforms		CO 1		Lecture	
6	P	21 Feb 2023	Agriculture,Role Of Agriculture, Extent of Farm Output, Problems, Agenda for Action, Agricultural Policy				Lecture	
6	E	21 Feb 2023	Agriculture, Role Of Agriculture, Extent of Farm Output, Problems, Agenda for Action, Agricultural Policy		CO 1		Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
7	P	22 Feb 2023	National Commission on Farmers, Industry, Industrial Policy Resolution 1948, Industrial Policy 1956, Industrial Policy 1991				Lecture	
7	E	22 Feb 2023	National Commission on Farmers, Industry, Industrial Policy Resolution 1948, Industrial Policy 1956, Industrial Policy 1991		CO 1		Lecture	
8	P	28 Feb 2023	Services, Finance, Marketing, Banking, Insurance				Lecture	
8	E	28 Feb 2023	Services, Finance, Marketing, Banking, Insurance		CO 1	APPLY	Lecture	
9	P	1 Mar 2023	Healthcare, Education, Travel and Tourism, Telecommunication, Transport				Lecture	
9	E	1 Mar 2023	Healthcare, Education, Travel and Tourism, Telecommunication, Transport				Lecture	
Module 3								
10	P	7 Mar 2023	Indian Contract Act,Agreement and Contract, Essential of a valid Contract, Classification of Contracts				Lecture	
10	E	7 Mar 2023	Indian Contract Act, Agreement and Contract, Essential of a valid Contract, Classification of Contracts				Lecture	
11	P	8 Mar 2023	Remedies for breach of Contract, Negotiable Instruments, Promissory Note, Bills of Exchange Company Act 2013 and 2017				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
11	E	8 Mar 2023	Remedies for breach of Contract, Negotiable Instruments, Promissory Note, Bills of ExchangeCompany Act 2013 and 2017				Lecture	
12	P	14 Mar 2023	Major principles, Formation, Memorandum and Articles of Association, Prospectus				Lecture	
12	E	14 Mar 2023	Major principles, Formation, Memorandum and Articles of Association, Prospectus				Lecture	
13	P	15 Mar 2023	Power, Duties and Liabilities of Directors, Winding up of Companies				Lecture	
13	E	15 Mar 2023	Power, Duties and Liabilities of Directors, Winding up of Companies				Lecture	
14	P	21 Mar 2023	Intellectual Property Right, Trade Marks, Patents				Lecture	
14	E							
15	P	22 Mar 2023	Copyright, Trade Secrets, Geographical Indications				Lecture	
15	E							
Module 4								
16	P	28 Mar 2023	The Consumer Regulations Act 1986 and 2019, Consumer Disputes, Complaint				Lecture	
16	E							
17	P	29 Mar 2023	Unfair Trade Practices, Restrictive Trade Practices, Redressal of Consumer Disputes				Lecture	
17	E							

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
18	P	4 Apr 2023	State Commission, National Commission, Procedure applicable to the National Commission				Lecture	
18	E							
19	P	5 Apr 2023	Consumer Protection Councils, Information Technology Act 2002, 2008 Amendment				Lecture	
19	E							
20	P	11 Apr 2023	Cyber Law in India, Salient features of IT Act, Digital Signature				Lecture	
20	E							
Module 5								
21	P	12 Apr 2023	Environmental Protection Act 1986, Salient features of the Act				Lecture	
21	E							
22	P	18 Apr 2023	Global Warming				Lecture	
22	E							
23	P	19 Apr 2023	Sustainable Development				Lecture	
23	E							
24	P	25 Apr 2023	Carbon Credit Accounting				Lecture	
24	E							
Module 6								
25	P	26 Apr 2023	Labour Compliances in India, Laws on Wages				Lecture	
25	E							
26	P	2 May 2023	Social Security				Lecture	
26	E							
27	P	3 May 2023	Industrial Safety & Welfare and Industrial Relations				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
27	E							
28	P	9 May 2023	The Sexual Harassment of Women at Workplace Prevention				Lecture	
28	E							
29	P	10 May 2023	Prohibition and Redressal Act				Lecture	
29	E							
30	P	16 May 2023	2013				Lecture	
30	E							

Module No.	*# of Classes Planned(till date)*	*Planned Effort(till date)*	*# of Classes Executed(till date)*	*Actual Effort (till date)*	*% Coverage*
1	4	8hrs 0min	4	8hrs 0min	100.0
2	5	10hrs 0min	5	10hrs 0min	100.0
3	6	12hrs 0min	4	8hrs 0min	66.67
4	5	10hrs 0min	0	0hrs 0min	0.0
5	4	8hrs 0min	0	0hrs 0min	0.0
6	6	12hrs 0min	0	0hrs 0min	0.0

Faculty in charge

HOD's Signature

Signature of Principal (remark if any)

M S Ramaiah College of Arts, Science and Commerce

Bengaluru

COURSE BOOK

Period of the Semester : **From** 4 Jan 2023 **To** 30 Apr 2023

Dept-Sem-Sec: M.Com-1-A

Subject with Code: KNOWLEDGE MANAGEMENT & INNOVATION (MS06)

Time Slot

MON:	**TUE :** 11:40 - 13:40	**WED:**
THU : 11:40 - 13:40	**FRI :**	**SAT :**

Name of the Teacher : Mrs Karanam Kavitha

Lesson Plan & Execution

Name of the Faculty	***Mrs Karanam Kavitha***
Dept-Sem-Sec	***M.Com-1-A***
Date of Commencement	***4 Jan 2023***
Last Working Day of Semester	***30 Apr 2023***

Source Material List

REF 1	1. Dr. B. Rathan Reddy, Knowledge Management, HPH
REF 2	2. P. Krishna Shankar & S. Nithyanantham, Knowledge Management, ARS Publications
REF 3	3. Michael E. D. Koenig, Taverekere Srikantaiah, Knowledge Management in Practice: Connections and Context, Information Today - American Society for Information Science and Technology.
REF 4	4. Kai Mertins, Petre Heisig, Jens Vorbeck, Knowledge Management: Concepts and Best practices, Springer Publications
REF 5	5. Miller, W.L. and Morris, L. , Fourth Generation R&D — Managing Knowledge, Technology and Innovation, John Wiley and Sons, Inc, NY, 1999.
REF 6	6. Eds: Parr, R.L. and Sullivan, P.H., Technology Licensing - Corporate Strategy for Maximizing Value, John Wiley and Sons, Inc, NY, 1996
REF 7	7. Stuart Barnes, Knowledge Management Systems: Theory and Practice, Cengage Learning EMEA.
REF 8	8. SIA Experts, Talent and Knowledge Management, SIA Publishers & Distributors Pvt Ltd
REF 9	9. Irma Becerra-Fernandez, Rajiv Sabherwal, Knowledge Management: Systems and Processes, Routledge.

REF 10	10. Todd Groff, Thomas Jones, Introduction to Knowledge Management, Routledge

Course Outcome List

1	Learn in details with application, if applicable, INTRODUCTION
2	Learn the characteristics of LEARNING THEORIES
3	Deliberate in details with examples of SOCIAL NATURE OF KNOWLEDGE
4	Deliberate in details with examples of KNOWLEDGE MANAGEMENT STRATEGIES
5	Learn in details with application, if applicable, LEARNING ORGANIZATION

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
Module 1								
1	P	5 Jan 2023	Introduction to Knowledge Management (KM): Meaning & Definition, History (Physical Assets to Knowledge Assets), Multidisciplinary Nature of KM, Objectives				Lecture	
1	E	5 Jan 2023	Introduction to Knowledge Management (KM): Meaning & Definition, History (Physical Assets to Knowledge Assets), Multidisciplinary Nature of KM, Objectives				Lecture	
2	P	10 Jan 2023	Characteristics, Importance, Interventions, Drivers				Lecture	
2	E	10 Jan 2023	Characteristics, Importance, Interventions, Drivers				Lecture	
3	P	12 Jan 2023	Types, Information Management to KM, KM Cycle,Organizational Perspectives on KM: Knowledge				Lecture	
3	E	12 Jan 2023	Types, Information Management to KM, KM Cycle, Organizational Perspectives on KM: Knowledge				Lecture	
4	P	17 Jan 2023	Intelligence, Experience, Common Sense				Lecture	
4	E							
5	P	19 Jan 2023	Cognition and KM, Knowledge Management Architecture and Implementation Strategies, Industrial Economy to Knowledge Economy				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
5	E	19 Jan 2023	Cognition and KM, Knowledge Management Architecture and Implementation Strategies, Industrial Economy to Knowledge Economy				Lecture	
Module 2								
6	P	24 Jan 2023	Measurement of Learning, Learning Organizations, Learning Excellence in Corporate Organizations, Mechanics of Knowledge Management				Lecture	
6	E	24 Jan 2023	Measurement of Learning, Learning Organizations, Learning Excellence in Corporate Organizations, Mechanics of Knowledge Management				Lecture	
7	P	31 Jan 2023	Tools and Technologies, Knowledge Capture & Creation Tools, Knowledge Sharing & Dissemination Tools				Lecture	
7	E	31 Jan 2023	Tools and Technologies, Knowledge Capture & Creation Tools, Knowledge Sharing & Dissemination Tools				Lecture	
8	P	2 Feb 2023	Knowledge Acquisition & Application Tools, Nonaka's Model, Major Theoretical KM Models				Lecture	
8	E	2 Feb 2023	Knowledge Acquisition & Application Tools, Nonaka's Model, Major Theoretical KM Models				Lecture	
9	P	7 Feb 2023	Takeuchi Knowledge Spiral Model, Knowledge Conversion, Knowledge Management System Life Cycle				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
9	E	7 Feb 2023	Takeuchi Knowledge Spiral Model, Knowledge Conversion, Knowledge Management System Life Cycle				Lecture	
10	P	9 Feb 2023	Major Approaches to the KM Cycle, The Zack KM Cycle, The Bukowitz and Williams KM Cycle				Lecture	
10	E	9 Feb 2023	Major Approaches to the KM Cycle, The Zack KM Cycle, The Bukowitz and Williams KM Cycle				Lecture	
Module 3								
11	P	14 Feb 2023	The Social Nature of Knowledge: Social Network Analysis, Obstacles to Knowledge Sharing, Organizational Learning & Social Capital				Lecture	
11	E	14 Feb 2023	The Social Nature of Knowledge: Social Network Analysis, Obstacles to Knowledge Sharing, Organizational Learning & Social Capital				Lecture	
12	P	16 Feb 2023	Knowledge Application , Individual level, Group level & Organization Level				Lecture	
12	E							
13	P	21 Feb 2023	Sharing Communities: Types of Communities, Communities of Practice and Knowledge Conversion, Roles and Responsibilities in Cops				Lecture	
13	E	21 Feb 2023	Sharing Communities: Types of Communities, Communities of Practice and Knowledge Conversion, Roles and Responsibilities in Cops				Lecture	
14	P	23 Feb 2023	Knowledge Sharing in Virtual CoPs, Data Mining and Knowledge Discovery, Blogs				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
14	E	23 Feb 2023	Knowledge Sharing in Virtual CoPs, Data Mining and Knowledge Discovery, Blogs				Lecture	
15	P	28 Feb 2023	Content Management Tools, Knowledge Sharing and Dissemination Tools				Lecture	
15	E	28 Feb 2023	Content Management Tools, Knowledge Sharing and Dissemination Tools				Lecture	
Module 4								
16	P	2 Mar 2023	Knowledge Management Strategy, Knowledge Audit, GAP Analysis				Lecture	
16	E	2 Mar 2023	Knowledge Management Strategy, Knowledge Audit, GAP Analysis				Lecture	
17	P	7 Mar 2023	The KM Strategy Road Map, The Management of Organizational Memory, Balancing Innovation and Organizational Structure				Lecture	
17	E	7 Mar 2023	The KM Strategy Road Map, The Management of Organizational Memory, Balancing Innovation and Organizational Structure				Lecture	
18	P	9 Mar 2023	Historical Overview of Metrics in KM, KM Metrics, The Benchmarking Method				Lecture	
18	E	9 Mar 2023	Historical Overview of Metrics in KM, KM Metrics, The Benchmarking Method				Lecture	
19	P	14 Mar 2023	The Balanced Scorecard Method,Tacit and Explicit Knowledge				Lecture	
19	E							

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
20	P	16 Mar 2023	Innovation and Organizational Intellectual Capital: Measurement of Innovation and Intellectual Capital in Corporate Organizations; Role of Open Innovation and Open Source,Training & Development in KM				Lecture	
20	E							
Module 5								
21	P	21 Mar 2023	The mystique of Learning Organization, Learning and Change, RICE Model				Lecture	
21	E							
22	P	23 Mar 2023	Major Categories of KM Roles, Senior Management Roles, KM Roles and Responsibilities within Organizations				Lecture	
22	E	23 Mar 2023	Major Categories of KM Roles, Senior Management Roles, KM Roles and Responsibilities within Organizations				Lecture	
23	P	28 Mar 2023	KM Profession, Ethical, legal and managerial issues				Lecture	
23	E	28 Mar 2023	KM Profession, Ethical, legal and managerial issues				Lecture	
24	P	30 Mar 2023	Future of Knowledge Management , Knowledge Economy				Lecture	
24	E	30 Mar 2023	Future of Knowledge Management, Knowledge Economy				Lecture	
25	P	4 Apr 2023	Knowledge Brokering, Business Decision Making				Lecture	
25	E							

M S Ramaiah College of Arts, Science and Commerce

Bengaluru

COURSE BOOK

Period of the Semester : **From** 4 Jan 2023 **To** 30 Apr 2023

Dept-Sem-Sec: M.Com-1-A

Subject with Code: ADVANCED FINANCIAL MANAGEMENT & PRACTICES (MS05)

Time Slot

MON:	**TUE :**	**WED:** 11:40 - 13:40
THU :	**FRI :** 09:30 - 11:30	**SAT :**

Name of the Teacher : Mrs Karanam Kavitha

Lesson Plan & Execution

Name of the Faculty	***Mrs Karanam Kavitha***
Dept-Sem-Sec	***M.Com-1-A***
Date of Commencement	***4 Jan 2023***
Last Working Day of Semester	***30 Apr 2023***

Source Material List

REF 1	1. G. Sudarsana Reddy, Financial Management, HPH.
REF 2	2. Khan & Jain, Financial Management, Tata McGraw Hill.
REF 3	3. I.M. Pandey, Financial Management, Viaks Publishing House
REF 4	4. Prasanna Chandra, Financial Management, Theory and Practice, Tata McGraw Hill
REF 5	5. Schall & Haley, Financial Management, McGraw Hill, New york.
REF 6	6. Sudhindra Bhat, Financial Management: Principles and Practice, Excel Books India
REF 7	7. Patel Bhavesh, Fundamentals of Financial Management, Vikas Publications
REF 8	8. Sharan, Fundamentals of Financial Management, Pearson Education India
REF 9	9. Shri. Narendra Singh, Advanced Financial Management, HPH.
REF 10	10. Dr. B. G. Sathya Prasad & M. N. Arora, Management Accounting and Financial Management, HPH

Course Outcome List

1	Learn in details with application, if applicable, FINANCE
2	Learn the characteristics of INVESTMENT DECISIONS
3	Deliberate in details with examples of RISK ANALYSIS AND CAPITAL BUDGET
4	Deliberate in details with examples of CORPORATE RESTRUCTURING
5	Learn in details with application, if applicable, DIVIDEND AND WORKING CAPITAL DECISIONS

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
Module 1								
10	P	8 Feb 2023	Introduction to Finance: Concept, Meaning, Principles & Types of Finance, Functions of Finance, Financing Decisions, Factors influencing Financial Decisions				Lecture	
10	E	8 Feb 2023	Introduction to Finance: Concept, Meaning, Principles & Types of Finance, Functions of Finance, Financing Decisions, Factors influencing Financial Decisions				Lecture	
12	P	10 Feb 2023	Objectives of Corporate Financial Decisions, Introduction to Financial Management, Meaning & Definition, Evolution, Scope				Lecture	
12	E	10 Feb 2023	Objectives of Corporate Financial Decisions, Introduction to Financial Management, Meaning & Definition, Evolution, Scope				Lecture	
14	P	15 Feb 2023	Methods, Importance, Functional areas of Modern Financial Management, Financial Management Process, Organization of Finance Functions				Lecture	
14	E	15 Feb 2023	Methods, Importance, Functional areas of Modern Financial Management, Financial Management Process, Organization of Finance Functions				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
15	P	17 Feb 2023	Capital Structure Planning and Policy; Introduction to Capital Structure Theories: Net Income Approach, Net Operating Income Approach, The Traditional approach, Modigliani & Miller Approach,Concept & Problems				Lecture	
15	E	17 Feb 2023	Capital Structure Planning and Policy; Introduction to Capital Structure Theories: Net Income Approach, Net Operating Income Approach, The Traditional approach, Modigliani & Miller Approach, Concept & Problems				Lecture	
17	P	22 Feb 2023	Optimal Capital Structure: Meaning & Concept, Trade-OffTheory v/s Pecking Order Theory, EBIT,EPS Approach,Concept & Problems				Lecture	
17	E	22 Feb 2023	Optimal Capital Structure: Meaning & Concept, Trade-OffTheory v/s Pecking Order Theory, EBIT, EPS Approach, Concept & Problems				Lecture	
Module 2								
19	P	24 Feb 2023	Introduction to Investment Decisions: Meaning, Need and Factors, Efficient Investment Analysis, Introduction to Capital Budgeting Decisions,Meaning				Lecture	
19	E	24 Feb 2023	Introduction to Investment Decisions: Meaning, Need and Factors, Efficient Investment Analysis, Introduction to Capital Budgeting Decisions, Meaning				Lecture	

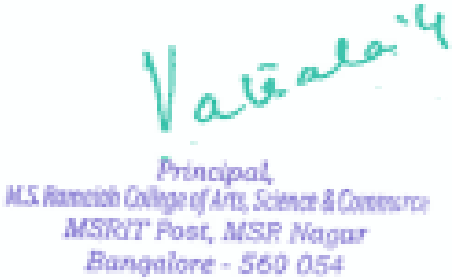
Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
21	P	1 Mar 2023	Features, Process and Factors, Capital Budgeting Techniques: Traditional and Modern Techniques, Varying Opportunity Cost of Capital				Lecture	
21	E	1 Mar 2023	Features, Process and Factors, Capital Budgeting Techniques: Traditional and Modern Techniques, Varying Opportunity Cost of Capital				Lecture	
23	P	3 Mar 2023	NPV v/ s IRR, Incremental IRR, Modified Internal Rate of Return (MIRR) , Concept				Lecture	
23	E	3 Mar 2023	NPV v/ s IRR, Incremental IRR, Modified Internal Rate of Return (MIRR), Concept				Lecture	
24	P	8 Mar 2023	Evaluation Criteria & Problems, Fisher's Rate and Aggregate Capital Needs in Investment Decisions, Project Selection under Capital Rationing: Meaning, Types				Lecture	
24	E							
25	P	10 Mar 2023	Pros & Cons, Problems on Divisible & Indivisible Projects, Multi-Period Capital Rationing, Capital Budgeting under Inflationary Conditions				Lecture	
25	E							
Module 3								
1	P	6 Jan 2023	Risk Analysis in Capital Budgeting,Meaning, Analysis of Risk and Uncertainty, Sources and Perspectives of Risk, Measurement of Risk				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
1	E	6 Jan 2023	Risk Analysis in Capital Budgeting, Meaning, Analysis of Risk and Uncertainty, Sources and Perspectives of Risk, Measurement of Risk				Lecture	
2	P	11 Jan 2023	Nature of Risk in Capital Budgeting Decisions, Techniques for Risk Analysis: Risk Adjusted Discount Rate, Certainty Equivalent Method, Probability Method				Lecture	
2	E	11 Jan 2023	Nature of Risk in Capital Budgeting Decisions, Techniques for Risk Analysis: Risk Adjusted Discount Rate, Certainty Equivalent Method, Probability Method				Lecture	
3	P	13 Jan 2023	Sensitivity Analysis, Scenario Analysis, Simulation Analysis, Hiller Model				Lecture	
3	E	13 Jan 2023	Sensitivity Analysis, Scenario Analysis, Simulation Analysis, Hiller Model				Lecture	
4	P	18 Jan 2023	Break-Even Analysis, Corporate Risk Analysis, Decision Tree Analysis,Sequential Investment Decisions				Lecture	
4	E	18 Jan 2023	Break-Even Analysis, Corporate Risk Analysis, Decision Tree Analysis, Sequential Investment Decisions				Lecture	
5	P	20 Jan 2023	Market Risk Analysis,Concept & Problems, Backward Induction Method, Utility Theory and Capital Budgeting				Lecture	
5	E	20 Jan 2023	Market Risk Analysis, Concept & Problems, Backward Induction Method, Utility Theory and Capital Budgeting				Lecture	
Module 4								

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
6	P	25 Jan 2023	Introduction to Corporate Restructuring: Mergers, Acquisitions, Takeovers, Spinoff, Synergies				Lecture	
6	E	25 Jan 2023	Introduction to Corporate Restructuring: Mergers, Acquisitions, Takeovers, Spinoff, Synergies				Lecture	
7	P	27 Jan 2023	Strategic Alliance, Joint Venture, Leveraged Buyouts, Management Buyouts (MBO) & Buy-in (MBI), Franchising				Lecture	
7	E	27 Jan 2023	Strategic Alliance, Joint Venture, Leveraged Buyouts, Management Buyouts (MBO) & Buy-in (MBI), Franchising				Lecture	
8	P	1 Feb 2023	Intellectual Property Rights (IPRs), Sell-off, Demerger, Disinvestment v/ s Divestment, Slump Sale				Lecture	
8	E	1 Feb 2023	Intellectual Property Rights (IPRs), Sell-off, Demerger, Disinvestment v/ s Divestment, Slump Sale				Lecture	
9	P	3 Feb 2023	Reverse Merger, Equity Carveout , Concept & Types, Valuation under M&A: Discounted Cash Flow Method (DCF), Price-Earnings Ratio (P/E Ratio)				Lecture	
9	E	3 Feb 2023	Reverse Merger, Equity Carveout, Concept & Types, Valuation under M&A: Discounted Cash Flow Method (DCF), Price-Earnings Ratio (P/E Ratio)				Lecture	
11	P	8 Feb 2023	EPS Approach, Enterprise-value-to-sales Ratio (EV/Sa1es), Replacement Cost Method,Concept & Problems				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
11	E	8 Feb 2023	EPS Approach, Enterprise-value-to-sales Ratio (EV/Sa1es), Replacement Cost Method, Concept & Problems				Lecture	
Module 5								
13	P	10 Feb 2023	Introduction to Dividend Decisions, Meaning & Definition, Forms of Dividend, Types of Dividend Policy, Significance of Dividend				Lecture	
13	E	10 Feb 2023	Introduction to Dividend Decisions, Meaning & Definition, Forms of Dividend, Types of Dividend Policy, Significance of Dividend				Lecture	
16	P	17 Feb 2023	Impact of Dividend Policy on Company, Factors affecting Dividend Policy, Dividend Decision Theories,Walter's Model, Gordon's Model				Lecture	
16	E	17 Feb 2023	Impact of Dividend Policy on Company, Factors affecting Dividend Policy, Dividend Decision Theories, Walter's Model, Gordon's Model				Lecture	
18	P	22 Feb 2023	MM Theory,Concept, Assumptions, Formula, Criticisms & Problems				Lecture	
18	E	22 Feb 2023	MM Theory, Concept, Assumptions, Formula, Criticisms & Problems				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
20	P	24 Feb 2023	Introduction to Working Capital, Meaning & Definition, Types of Working Capital, Significance of Adequate Working Capital,Evils of Excess or Inadequate Working Capital				Lecture	
20	E	24 Feb 2023	Introduction to Working Capital, Meaning & Definition, Types of Working Capital, Significance of Adequate Working Capital, Evils of Excess or Inadequate Working Capital				Lecture	
22	P	1 Mar 2023	Determinants of Working Capital , Sources of Working Capital, Techniques for managing Working Capital,Concept & Problems				Lecture	
22	E	1 Mar 2023	Determinants of Working Capital, Sources of Working Capital, Techniques for managing Working Capital, Concept & Problems				Lecture	



M S Ramaiah College of Arts, Science and Commerce

Bengaluru

COURSE BOOK

Period of the Semester : **From** 19 Dec 2022 **To** 15 Apr 2023

Dept-Sem-Sec: M.Com-3-A

Subject with Code: CORPORATE TAX PLANNING (3.5)

Time Slot

MON: 11:40 - 13:40	**TUE :**	**WED:** 09:30 - 11:30
THU :	**FRI :**	**SAT :**

Name of the Teacher : Mrs Karanam Kavitha

Lesson Plan & Execution	
Name of the Faculty	***Mrs Karanam Kavitha***
Dept-Sem-Sec	***M.Com-3-A***
Date of Commencement	***19 Dec 2022***
Last Working Day of Semester	***15 Apr 2023***
Source Material List	
Course Outcome List	

1	Learn in details with application, if applicable, CORPORATE INCOME TAX
2	Learn the characteristics of TAX PLANNING
3	Deliberate in details with examples of FINANCIAL MANAGEMENT DECISIONS
4	Deliberate in details with examples of MANAGERIAL DECISIONS
5	Learn in details with application, if applicable, TAX PAYMENTS

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
Module 1								
1	P	21 Dec 2022	Corporate Income tax				Lecture	
1	E	21 Dec 2022	Corporate Income tax				Lecture	
2	P	21 Dec 2022	Corporate Income tax				Lecture	
2	E		Corporate Income tax				Lecture	
3	P	26 Dec 2022	Corporate Income tax				Lecture	
3	E	24 Dec 2022	Corporate Income tax				Lecture	
4	P	28 Dec 2022	Corporate Income tax				Lecture	
4	E							
5	P	2 Jan 2023	Corporate Income tax				Lecture	
5	E	4 Jan 2023	Corporate Income tax				Lecture	
Module 2								
6	P	9 Jan 2023	Tax Planning				Lecture	
6	E	9 Jan 2023	Tax Planning				Lecture	
7	P	11 Jan 2023	Tax Planning				Lecture	
7	E	11 Jan 2023	Tax Planning				Lecture	
8	P	16 Jan 2023	Tax Planning				Lecture	
8	E							
9	P	18 Jan 2023	Tax Planning				Lecture	
9	E	18 Jan 2023	Tax Planning				Lecture	
10	P	23 Jan 2023	Tax Planning				Lecture	
10	E	23 Jan 2023	Tax Planning				Lecture	
Module 3								
11	P	25 Jan 2023	Tax Planning and Financial Mgt Decisions				Lecture	
11	E	25 Jan 2023	Tax Planning and Financial Mgt Decisions				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
12	P	30 Jan 2023	Tax Planning and Financial Mgt Decisions				Lecture	
12	E	30 Jan 2023	Tax Planning and Financial Mgt Decisions				Lecture	
13	P	1 Feb 2023	Tax Planning and Financial Mgt Decisions				Lecture	
13	E	1 Feb 2023	Tax Planning and Financial Mgt Decisions				Lecture	
14	P	6 Feb 2023	Tax Planning and Financial Mgt Decisions				Lecture	
14	E	6 Feb 2023	Tax Planning and Financial Mgt Decisions				Lecture	
15	P	8 Feb 2023	Tax Planning and Financial Mgt Decisions				Lecture	
15	E							
Module 4								
16	P	13 Feb 2023	Tax Planning and Managerial Decisions				Lecture	
16	E							
17	P	15 Feb 2023	Tax Planning and Managerial Decisions				Lecture	
17	E	15 Feb 2023	Tax Planning and Managerial Decisions				Lecture	
18	P	20 Feb 2023	Tax Planning and Managerial Decisions				Lecture	
18	E	20 Feb 2023	Tax Planning and Managerial Decisions				Lecture	
19	P	22 Feb 2023	Tax Planning and Managerial Decisions				Lecture	
19	E	22 Feb 2023	Tax Planning and Managerial Decisions				Lecture	
20	P	27 Feb 2023	Tax Planning and Managerial Decisions				Lecture	
20	E	27 Feb 2023	Tax Planning and Managerial Decisions				Lecture	
Module 5								
21	P	1 Mar 2023	Tax Payments				Lecture	
21	E	1 Mar 2023	Tax Payments				Lecture	

Period	*Plan/ Execution*	*Date*	*Topic*	*Source material to be referred*	*Course Outcome*	*Bloom's Level*	*Execution Methods*	*Learning Validation Method*
22	P	6 Mar 2023	Tax Payments				Lecture	
22	E	6 Mar 2023	Tax Payments				Lecture	
23	P	8 Mar 2023	Tax Payments				Lecture	
23	E	8 Mar 2023	Tax Payments				Lecture	
24	P	13 Mar 2023	Tax Payments				Lecture	
24	E	13 Mar 2023	Tax Payments				Lecture	
25	P	15 Mar 2023	Tax Payments				Lecture	
25	E							

Ramaiah College of Arts, Science and Commerce
Department of Biotechnology and Genetics

Semester Lesson Plan

Term: VI **Year: 2022-23**

Department of **: Biotechnology & Genetics**
Faculty name **: Dr.Vinutha M.**
Subject Name **: Biotechnology (P-8)**
Paper **: BTP602 Bioinformatics Bioentrepreneurship& Research**

Sl. No	Class	Contents	No.hrs planned	Date of completion	Remarks
		Unit 2: IPR, Bioethics &Bioentrepreneurship	**[15hrs]**		
Teaching Objectives:		*Students will understand the milestones in Genetic Engineering and tools required to perform cloning and expression of foreign gene.*			
1	IIIB.Sc–BT V Sem.	**Unit 2.1: Biotechnology and IPR** 1. Patents, Trade secrets, Copyright,	01	Day 1	
2		2. Trade mark and geographical index	01	Day 2	
3		3. Choice of IPR, Plant genetics resource (PGR),	01	Day 3	
4		4.GAAT, TRIPS	01	Day 4	
5		5.examples of IPR in India	01	Day 5	
Teaching pedagogy		*Power Point presentation, video clips from YouTube, videos, etc.*			
		Unit 2.2: Bioethics	[**5hrs**]		
Teaching Objectives:		*Students will be able to understand the construction of Recombinant DNA Technology.*			
7	III B.Sc–BT V Sem.	1. Positive and Negative effects, Rice with Vit A	01	Day 6	
8		2. No till agriculture	01	Day 7	
9		3. Biological pest control	01	Day 8	
10		4. Ban on glyphosate GM plants & environmental concerns	01	Day 9	
11		5.Biodiversity regulations in India	01	Day 10	
Teaching pedagogy		*Power Point presentation, video clips from YouTube, videos, etc.*			
		Unit 2.3:Bio-entrepreneurship	**[5hrs]**		
Teaching Objectives:		*Students will be able to describe the key features of membranes and transport of recombinant vectors into the cell and selection of recombinants.*			
12	III B.Sc–BT V Sem.	1.Introduction & scope, Types of biodiversities	01	Day 11	
13		2.Basic requirements & challenges of an entrepreneur	01	Day 12	

14		3.entrepreneurship development programs-MSME, DBT, BIRAC & Make in India	01	Day 13	
15		4. Negotiating the road from lab to the market- strategies & processes of negotiation with financiers.	01	Day 14	
16		5.Government and regulatory agencies.	01	Day 15	
Teaching pedagogy		*Power Point presentation, video clips from YouTube, videos, etc.*			
		Unit 3:Importance of research in biology	**[15hrs]**		
		Unit 3.1: Introduction & Importance of research in biology.	**[5 hrs]**		
Teaching Objectives:		*Students will able understand significance of genomic library and cDNA library*			
17	III B.Sc– BT V Sem.	1. Introduction & Importance of research in biology.	01	Day 16	
18		2. Objectives, motivation & types of research, Significance of research	01	Day 17	
19		3. Major biological research institutes in India – IISc, NCBS, CCMB, ICMR, IBAB, NIV,	01	Day 18	
20		4. Serum Institute, JNCASR & IARI	01	Day 19	
		5. Major Biotech companies in India & world and their products.	01	Day 20	
Teaching pedagogy		*Power Point presentation, video clips from YouTube, videos, etc.*			
		Unit 3.2 : Research Problem	**[5hrs]**		
Teaching Objectives:		*Students will able to identify the characteristics and sub-phases of cell division and know the role of cyclins and cytokinesis in cell cycle regulation and inhibition*			
21	III B.Sc– BT V Sem.	1. Research problem identification and formulation	01	Day 21	
22		2. Necessity of a research design, and experimental design	01	Day 22	
23		3. Features of a good research design	01	Day 23	
		4. Features of experimental design	01	Day 24	
		5. Data preparation, Data analysis and Data interpretation	01	Day 25	
Teaching pedagogy		*Power Point presentation, video clips from YouTube, videos, etc.*			
		Unit 3.3 : Research Paper and Project writing	**[5hrs]**		

Teaching Objectives:		*Students will able understand the mechanism of molecular techniques and its usefor mankind.*			
24	III B.Sc– BT V Sem.	1. Layout of research paper	01	Day 26	
25		2.Use of encyclopedias	01	Day 27	
26		3.Research guides and handbooks	01	Day 28	
27		4. Publications, Impact factor for journals and Palgiarism	01	Day 29	
28		5. Basic skills of project writing, Importance of documentation	01	Day 30	
Teaching pedagogy		Power Point presentation, video clips from YouTube, videos, etc.			

B.Sc VI Semester Genetics Semeter plan
Lecturer : Mr.Ramakrishnaiah T N
Dept: Biotech/Genetics

SL.NO	Contents	No of hrs Alloted	Date of Completion	Remarks
	Paper GNT 601: Developmental and Evolutionary Genetics	**40Hrs.**		
UNIT I	**Developmental Genetics:**	**13hrs**		
	•General topics: - Role of Nuclear transplantation in development: Ex.:Amphibians and Acetabularia.	**2hrs**	Day 1	
	Switching genes on and off during development - Tissue specific methylation. Ex. Differential expression of haemoglobingenes.	**2hrs**	2, 3	
	Fate mapping	**1hrs**	4	
	•The genetics of development in plants - Arabidopsis : Flower development (floral morphogenesis	**2hrs**	5,6	
	Homeotic gene expression).	**1hrs**	7	
	•The genetics of development in Animals -Drosophila:Early development; Origin of anterior –posterior polarity	**1hrs**	8	
	:- Role of Maternal genes, Segmentation genes (gap, pair rule and segment polarity genes)	**2hrs**	9, 10	
	Homeotic selector genes; Establishment of dorso-ventral polarity.	**2hrs**	11, 12	
UNIT I	**a. Evolutionary Genetics :**	**14 Hrs**		
	Darwinism	**1**	13	
	Mutation theory	**1**	14	
	And Neo Darwinism, Synthetic Theory.	**1**	15	
	Evolution at molecular level:- Nucleotidesequence.	**1**	16	
	Isolation Premating and post mating isolating mechanisms , role of isolation in Speciation.	**2**	17, 18	
	Speciation: Methods of speciation -Allopatric and sympatric	**1**	19	

B.Sc VI Semester Genetics Semeter plan
Lecturer : Mr.Ramakrishnaiah T N
Dept: Biotech/Genetics

	b.Population Genetics:			
	Genepool, Gene and genotype frequencies: Hardy -Weinberg principle, Evolutionary agents:	**1**	20	
	Selection–differential selection, gametic selection, zygotic selection,fitness;	**1**	21	
	Migration; Mutation and Random drift. Problems related	**1**	22	
	c.Quantitative characters & inheri tance:			
	•Quantitative Characters:- Types- Continuous, meristic and thresh hold characters with examples.	**1**	23	
	•Quantitative inheritance:- Features of polygenic traits in relation to oligogenic traits. Assumptions of polygenic inheritance. Inheritance of kernel color in wheat, and skin colour in human.	**2**	24, 25	
	•Transgressive inheritance. Environmental effects.	**1**	26	
UNIT III	**Biometrical Genetics:**	**13 Hrs**		
	•An introduction to Correlation, Regression and ANOVA (Analysis of Variance)	**2**	27, 28	
	•Genetic analysis of quantitative trait:- Ear length in Corn	**2**	29, 30	
	•Variances in polygenic traits:- Phenotypic , genotypic, environmental, additive, dominance and Epistatic variance; Genotype and environmental interaction.	**2**	31, 32	
	•Heritability:-Broad sense and Narrow sense heritability, Methods of estimation of heritability, Response to selection.	**2**	33, 34	
	•Quantitative trait loci (QTL).	**2**	35, 36	
	•Significance of polygenic inheritance in as animal breeds.	**1**	37	
	•Problems related to Variance and Heritability**.**	**2**	38, 39	

Sign of Faculty **Sign of HOD** **Sign of Principal**

M S RAMAIAH COLLEGE OF ARTS SCIENCE AND COMMERCE
MSR NAGAR, MSRIT POST, BENGALURU – 560054.

Department: Biotechnology and Genetics **Faculty Name:** Dr. Pavithra Kumari H.G

TEACHER'S LESSON PLAN

SEMESTER PLAN - CLASS: B.Sc. VI Semester 'C' Section, Genetics
GNT 602: APPLIED AND BEHAVIORAL GENETICS

Topic	Day	Class	Contents	No. of Hours planned
Teaching Objective	**Day 1 to 4**	VI Sem	**Genetics in Medicine and Industry**	**4 h**
Content	Day 1 2 3-4		Production of recombinant insulin, interferon and human growth hormone (HGH) Vaccines: Hepatitis B vaccine. Preparation of molecular probes, Monoclonal antibodies and diagnostic kits Microarray	1 h 1 2
Teaching Pedagogy			Chalk and talk	
Teaching Objective	**5 to 8**	VI Sem	**DNA Fingerprinting**	**4**
Content	5 6 7 8		Methods of DNA fingerprinting Molecular markers –RAPD, RFLP. Microsatellite, SNPs, STR. Applications in Forensic science, Medicolegal aspects.	1 1 1 1
Teaching Pedagogy			Power point presentation Chalk and talk	
Teaching Objective	**9 to 13**	VI Sem	**Bioinformatics**	**5**
Content	9 10 11 12 13		Introduction to bioinformatics. Tools of Bioinformatics FASTA, BLAST search tools RASMOL and in silico tools Applications of Bioinformatics	1 1 1 1 1
Teaching Pedagogy			Power point presentation	
Teaching Objective	**14 to 19**	VI Sem	**Genetic resources and Biodiversity**	**6**
Content	14-15		Germplasm, Classification, Germplasm activities and organization associated with germplasm (NBPGR, IBPGR).	2

	16-17 18-19		Genetic erosion, biodiversity, Red data book, endangered species, ex-situ and in-situ conservation, Vavilovian center for biodiversity. Gene bank and cryopreservation – Types and methods.	2 2
Teaching Pedagogy			Chalk and talk Power point presentation	
Teaching Objective	**20 to 24**		**Behavioral Genetics**	**5**
Content	20 21 22 23-24	VI Sem	Mating behavior in Drosophila Hygienic behavior in Honeybee Nesting behavior in Ants Territoriality and conflict behavior in Primates.	1 1 1 2
Teaching Pedagogy			Chalk and talk	
Teaching Objective	**25 to 28**		**Molecular markers**	**4**
Content	25-26 27 28	VI Sem	Molecular markers as diagnostic tools Her2 testing for breast cancer – (FISH), Fragile X syndrome –Microsatellite marker analysis	2 1 1
Teaching Pedagogy			Power point presentation (PPT) Chalk and talk	
Teaching Objective	**29 to 30**		**Heterosis in animal and plants**	**2**
Content	29-30	VI Sem	Introduction to heterosis and characteristics features in animal and plants	2
Teaching Pedagogy			Chalk and talk	
Teaching Objective	**31 to 35**		**Animal breeding**	**5**
Content	31-32 33 34	VI Sem	Introduction, inbreeding, grading, cross breeding, artificial insemination in cattle. Fish breeding (Selection, Induced Polyploidy, Gynogenesis and Androgenesis, Inbreeding). Breeding strategies for improvement of livestock for milk, meat, wool production.	2 1 1

	35		Breeding strategies for improvement of Poultry – Giriraja.	1
Teaching Pedagogy			Power point presentation and Chalk and talk	
Teaching Objective	**36 to 40**		**Plant breeding**	**5**
Content	36 37-38 39 40	VI Sem	Genetic concepts – Dominance and Over dominance. Hybridization techniques – Intergeneric and interspecific hybridization, Identification of hybrid plants. Inbreeding depression. Hybrid vigor exploitation in Rice and Tomato.	1 2 1 1
Teaching Pedagogy			Chalk and talk	

M S Ramaiah College of Arts, Science and Commerce
Department of Biotechnology and Genetics

Semester Lesson Plan

Term: VI **Year: 2022-23**

Department of	**: Biotechnology & Genetics**	Subject Name	**: Biotechnology (P-7)**
Faculty name	**: Dr. Geetika Pant.**	Paper	**: Industrial Biotechnology**

Sl. No	Class	Contents	No. hrs planned	Date of completion	Remarks
		Unit 2: Process development and Downstream process	**[15 hrs]**		
Teaching Objectives:		*Students will understand the basic concepts of types of fermentation and downstream process.*			
1	III B.Sc– BT VI Sem.	**2.1:** Scaleup process- shake flask culture to pilot plant	02	Day 1, 2	
2		**2.2:** Sterilization of fermenter- Heat sterilization	01	Day3	
		Sterilization of media- Heat, radiation and filtration	02	Day4,5	
		Sterilization of air- filtration (sintered glass filter and membrane filter)	01	Day6	
3		**2.3:** 1. Inoculum preparation	01	Day7	
4		**2.4:** Downstream Process: Separation of cells and spent media-Filtration and centrifugation	02	Day 8, 9	
		Disintegration of cells	01	Day10	
		Extraction, Concentration and purification of product	03	Day11, 12, 13	
5		**2.5:** Product quality assurance and packaging	02	Day14, 15	
Teaching pedagogy		*Chalk and Talk, Power Point presentation, video clips*			
		Unit 3: Industrial production and microbial products	**[15 hrs]**		

Teaching Objectives:		*Students will able to understand the production process of various food items, beverages, antibiotics, enzymes at the industrial level*			
6	III B.Sc– BT VI Sem.	**3.1**: Production of alcohol- Ethanol	01	Day 16	
		Production of alcoholic beverages wine and beer	02	Day 17, 18	
7		**3.2:** Production of organic acids- Citric acid Antibiotic Penicillin G	01 01	Day 19 Day 20	
		Amino Acids-Glutamic Acid MSG	01	Day 21	
		Vitamins- VitB12	01	Day 22	
		Microbial Polysaccharides- Xanthan Gum	01	Day 23	
		SCP production from bacteria	02	Day24,25	
8		**3.3:** Production of industrially used bacterial and fungal amylases and proteases	02	Day 26, 27	
		Uses of enzymes in various industries- detergent, leather, food and beverage, pharma	03	Day 28, 29, 30	
Teaching pedagogy		*Chalk and Talk, Power Point presentation, video clips*			