COMMISSONERATE OF COLLEGIATE EDUCATION,

GOVT. DEGREE COLLEGE

RAJAMPET, KADAPA Dt.

(Affiliated to Yogivemana University, Kadapa)

TEACHING PLAN

ACADEMIC YEAR 2024-2025

Name of the Department : Computer Applications

NAME OF THE LECTURER : A. Anwar Kumar

Course / Group : BSc (CA)

Subject / Pape :

Sl.No.	Subject	Paper	Page No.
1	DBMS		
2	OAT		
3	Digital literacy		
4	Cyber Security.		

Name of the Topic	Introduction to Data Science.
Hours required	12H
Learning Objectives	Cognitive, Affective, Psychomotor, Result-Oriented.
Previous knowledge to be reminded	yes - Refer text book.
Examples / Illustrations	yes Explained.
Additional inputs	Materials supplies, notes.
Teaching Aids used	digital classroom teaching, PPTs etc.
References cited	yes, Study.com, Tutorials.com, w3.com
Student Activity Planned after the teaching	providing labs, practically engaged.
Activity planned outside the class room, if any	—
Any other activity	—
Topic Synopsis	*(Continue on the reverse side if needed)* Introduction to data science, process, Responsibility, qualification, data scientists.

Teaching Plan / Lesson No. 2

Name of the Topic	Introduction to Python
Hours required	14.
Learning Objectives	Cognitive, Affective, Psychomotor Result-oriented
Previous knowledge to be reminded	yes, Refer text books.
Examples / Illustrations	yes Explained.
Additional inputs	Material Supplied, Notes.
Teaching Aids used	Digital class Room, PPTs. etc
References cited	ppts, Study-am, Tutorial-am with-am
Student Activity Planned after the teaching	Assembly lab, Practically Explained
Activity planned outside the class room, if any	-
Any other activity	-
Topic Synopsis	*(Continue on the reverse side if needed)* What is Python, Features, History, Basic Syntax, Variables, Keywords, Identifiers, Operators.

Signature of the Lecturer

Teaching Plan / Lesson No. 3

Name of the Topic	Control Structures and Strings.
Hours required	10
Learning Objectives	Cognitive, Affective, psychomotor, Result oriented.
Previous knowledge to be reminded	yes - Refer text books.
Examples / Illustrations	yes Explained.
Additional inputs	Material supplied, Notes given
Teaching Aids used	digital class room, ppt etc.
References cited	yes. Study.com. Tutorial.com, w3schools
Student Activity Planned after the teaching	practically explained
Activity planned outside the class room, if any	—
Any other activity	—
Topic Synopsis	*(Continue on the reverse side if needed)* Strings, Lists, Tuples, Dictionaries

Signature of the Lecturer

Teaching Plan / Lesson No. 4

Name of the Topic	functions and modules
Hours required	12 H
Learning Objectives	Cognitive, Affective, Psychomotor, Result oriented
Previous knowledge to be reminded	yes, Refer Text book
Examples / Illustrations	yes, Explained.
Additional inputs	Material supplied, Notes.
Teaching Aids used	Digital classroom, MBs etc.
References cited	yes, study.com, tutorial.com, w3.com
Student Activity Planned after the teaching	practically lab, practically exp.
Activity planned outside the class room, if any	–
Any other activity	–
Topic Synopsis	(*Continue on the reverse side if needed*) functions, modules.

Signature of the Lecturer

Teaching Plan / Lesson No. 5

Name of the Topic	Class & Objects.
Hours required	1 + 1
Learning Objectives	Syntax, Attributes, Behaviour, Result oriented.
Previous knowledge to be reminded	yes, Refer Text Books.
Examples / Illustrations	yes Explained.
Additional inputs	Material Supplied. Notes.
Teaching Aids used	Digital class Room, PPT.
References cited	yes. Study on, W3th.com, Tutorial on
Student Activity Planned after the teaching	Practically bb, practically explained.
Activity planned outside the class room, if any	—
Any other activity	—
Topic Synopsis	*(Continue on the reverse side if needed)* class & Objects.

Teaching Plan / Lesson No. 1 E-Com

Name of the Topic	Basics & Definition E-Com
Hours required	18
Learning Objectives	Cognitive, Affective, Psychomotor Result-oriented.
Previous knowledge to be reminded	yes — Refer Text Books
Examples / Illustrations	yes Explained.
Additional inputs	Materials & notes.
Teaching Aids used	Digital class Rooms, PPT
References cited	yes Study-Com, WWW-Com
Student Activity Planned after the teaching	Model lab, Practicals Explained.
Activity planned outside the class room, if any	—
Any other activity	—
Topic Synopsis	*(Continue on the reverse side if needed)* Identify different E-Commerce websites and write their functionality.

Teaching Plan / Lesson No. 8.

Name of the Topic	B2C Customers
Hours required	18
Learning Objectives	Cognitive, Affectively Result Oriented,
Previous knowledge to be reminded	yes Refer Text books
Examples / Illustrations	yes Explained,
Additional inputs	Material, Notes.
Teaching Aids used	Digital class room, ppts,
References cited	yes Study.com. WSH.com
Student Activity Planned after the teaching	practical lab practical,
Activity planned outside the class room, if any	—
Any other activity	—
Topic Synopsis	*(Continue on the reverse side if needed)* Understanding the different payment Methods.

Signature of the Lecturer

Teaching Plan / Lesson No. 3

Name of the Topic	Security & Compliance, Budget.
Hours required	8
Learning Objectives	Cognitive, Affectively Result oriented.
Previous knowledge to be reminded	yes - Refer text books
Examples / Illustrations	yes Explained.
Additional inputs	Materials & notes.
Teaching Aids used	Digital classroom, PPT.
References cited	yes studyguide.com, [illegible]
Student Activity Planned after the teaching	providing lab, practical oriented class.
Activity planned outside the class room, if any	—
Any other activity	—
Topic Synopsis	*(Continue on the reverse side if needed)* identifying different payments used in pursuing of goals.

Signature of the Lecturer

Teaching Plan / Lesson No. 4

Name of the Topic	Introduction to web programming
Hours required	1 Hr
Learning Objectives	Cognitive, Affective, Result Oriented.
Previous knowledge to be reminded	yes - Refer text books.
Examples / Illustrations	yes Explained.
Additional inputs	Hotels Tables.
Teaching Aids used	Digital classRoom, ppt.
References cited	yes study.com, W3H.com
Student Activity Planned after the teaching	Reading lab, practical oriented class
Activity planned outside the class room, if any	—
Any other activity	—
Topic Synopsis	*(Continue on the reverse side if needed)* coding standards, Books & links

Teaching Plan / Lesson No. 5

Name of the Topic	Cascading Style Sheets.
Hours required	12
Learning Objectives	Organization, Applicability Products Oriented.
Previous knowledge to be reminded	yes Before That well
Examples / Illustrations	yes Explained.
Additional inputs	Materials Notes.
Teaching Aids used	Digital class room & ppt
References cited	yes study.com, w3.com
Student Activity Planned after the teaching	Practical lab, practical oriented day
Activity planned outside the class room, if any	—
Any other activity	—
Topic Synopsis	(Continue on the reverse side if needed) Coding standard, body Elements.

Signature of the Lecturer

Teaching Plan / Lesson No.

Name of the Topic	Introduction to Big data.
Hours required	18
Learning Objectives	Cognitive, Affectively, Result oriented.
Previous knowledge to be reminded	yes Refer text books
Examples / Illustrations	yes Explained.
Additional inputs	Hadoop & above
Teaching Aids used	Digital class Room & ppt
References cited	yes Ntt.com, Study.com
Student Activity Planned after the teaching	providing lab, practical oriented class
Activity planned outside the class room, if any	—
Any other activity	—
Topic Synopsis	*(Continue on the reverse side if needed)* Refer Text books & websites.

Name of the Topic	R&P Data Analytics.
Hours required	18
Learning Objectives	Cognitive, Affective Skills Result oriented.
Previous knowledge to be reminded	yes - Refer Text books.
Examples / Illustrations	yes Explained.
Additional inputs	Digital classRoom, ppts, Notes.
Teaching Aids used	Digital classRooms, ppts.
References cited	yes, with com, study.com
Student Activity Planned after the teaching	possibly bb, practical Oriented class.
Activity planned outside the class room, if any	—
Any other activity	—
Topic Synopsis	*(Continue on the reverse side if needed)* Refer Text books & websites.

Signature of the Lecturer

Hours required	18
Learning Objectives	Cognitive, Affectively, Result oriented,
Previous knowledge to be reminded	yes Refer Text books.
Examples / Illustrations	yes Included.
Additional inputs	Worksheets & Notes.
Teaching Aids used	Digital classRooms, PPTs
References cited	yes, Web [illegible] Study.com etc.
Student Activity Planned after the teaching	Worksheet, Lab practical oriented class
Activity planned outside the class room, if any	—
Any other activity	—
Topic Synopsis	*(Continue on the reverse side if needed)* Refer Text books.

Signature of the Lecturer

Teaching Plan / Lesson No. 4

Name of the Topic	Syllabus details
Hours required	18
Learning Objectives	Cognitive, Affective, Result oriented.
Previous knowledge to be reminded	yes Refer text books
Examples / Illustrations	yes explained.
Additional inputs	Material & Notes.
Teaching Aids used	Digital class Room, PPT.
References cited	yes with, study.com etc
Student Activity Planned after the teaching	possible lab, practical oriented class,
Activity planned outside the class room, if any	—
Any other activity	—
Topic Synopsis	*(Continue on the reverse side if needed)* Refer Text books & Notes.

Name of the Topic	Data visualization using R.
Hours required	18
Learning Objectives	Cognitive, Affectively, Result oriented,
Previous knowledge to be reminded	yes, Refer Text book.
Examples / Illustrations	yes Explained,
Additional inputs	worksheet & articles
Teaching Aids used	Digital class, Board, ppt
References cited	yes, w3th.com, study.com
Student Activity Planned after the teaching	practically lab practical oriented class
Activity planned outside the class room, if any	—
Any other activity	—
Topic Synopsis	*(Continue on the reverse side if needed)* Refer text books & website.

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TEACHING PLAN

ACADEMIC YEAR 2024-2025

Name of the Department : TELUGU

NAME OF THE LECTURER : O. Geetha

Course / Group : BA, BCom, & BSC

Subject / Page : TELUGU

Sl.No.	Subject	Paper	Page No.
1	సాహిత్య సౌరభం - జనరల్ తెలుగు	I (Sem	
2	SEC KE, SEC II, తెలుగు II UNITS	III	
3	సృజనాత్మక రచన	II (Sem)	
4	ఆధునిక కవిత్వం Minor	Sem II	

Teaching Plan / Lesson No. I

Name of the Topic	రాజనీతి
Hours required	10.
Learning Objectives	ఆంధ్ర మహాభారతం ను గురించి విద్యార్థులకు అవగాహన కల్పించడం
Previous knowledge to be reminded	నన్నయ కవి పరిచయం, రుంబిన రచనలు. లక్షణాలను గురించి వివరించి చెప్పుట.
Examples / Illustrations	మహాభారతంలోని అనేక సంఘటనలను. ఉదాహరణగా తో విద్యార్థులకు వివరించుట
Additional inputs	భారతంలోని వివిధ ఘట్టాలనుగురించి వివరించుట
Teaching Aids used	బోధనా పద్ధతులు.
References cited	ఆంధ్ర మహాభారతం – (వేదవ్యాస మహర్షి.)
Student Activity Planned after the teaching	18 పర్వాలను గురించి విద్యార్థుల అభిప్రాయాలను. తెలపమని చెప్పడం.
Activity planned outside the class room, if any	కవుల ఫోటోలను సేకరించుట.
Any other activity	అసైన్‌మెంట్ ఇవ్వడం
Topic Synopsis	*(Continue on the reverse side if needed)* *రాజనీతి పాఠ్యాంశాన్ని నన్నయ రుంబారు. *. రుచులు, లక్షణాలను గురించి తెలుపుట * రాజు ప్రజలకు చేయవలసి కార్యాలను గురించి నారదుడు ధర్మరాజుతో చెప్పిన నీతి * పాఠ్యాంశం వివరించుట మొదలు * మహాభారత ఘట్టాలను వివరించుట

Signature of the Lecturer

Teaching Plan / Lesson No. 11

Name of the Topic	గబ్బిలం.
Hours required	10.
Learning Objectives	జాషువా రచనలు గురించి తెలియజేయడం గబ్బిలం కావ్యంలో ఉన్న పరిస్థితులను వివరించుట
Previous knowledge to be reminded	దళిత సాహిత్య కవులను పరిచయం. చేయుట వారి రచనలు తెలుపుట
Examples / Illustrations	దళిత సాహిత్యంను ఉదాహరణలతో వివరించుట
Additional inputs	దళిత సాహిత్యాంశాలు తెల్పటం
Teaching Aids used	బోధనా పద్ధతులు.
References cited	గబ్బిలం — దళిత సాహిత్యం గుర్రం జాషువా.
Student Activity Planned after the teaching	కవుల గురించి విద్యార్థులు తెలుసుకొనేలా చేయటం
Activity planned outside the class room, if any	కవుల బొమ్మలను సేకరించేలా చేయటం.
Any other activity	ప్రశ్నల మెంట
Topic Synopsis	*(Continue on the reverse side if needed)* * జాషువా గారి రచనలు తెలుపుట * గబ్బిలం కావ్యాన్ని వివరించుటం. * పంచముడు గబ్బిలంతో చెప్పిన విషయాలను. తెలియపరుచుట * దళిత సాహిత్యంలోని వర్ణించుట

Signature of the Lecturer

Teaching Plan / Lesson No. III

Name of the Topic	అలరాస పుత్తళ్ళు - కళ్యాణ సుందరీ జగన్నాథ్
Hours required	10.
Learning Objectives	ధనవంతులు, పేదల మధ్య ఉన్న భావ జాలాన్ని తెలపటం.
Previous knowledge to be reminded	కథానికను విద్యార్థులకు తెలుపుట
Examples / Illustrations	అనేక కథలను విద్యార్థులకు తెలియజేయుట
Additional inputs	కథానికల నేపథ్యాన్ని తెలపటం.
Teaching Aids used	బోధనా పద్ధతులు.
References cited	అలరాస పుత్తళ్ళు — కళ్యాణ సుందరీ జగన్నాథ్
Student Activity Planned after the teaching	మనుషుల జీవితాలలోని అనేక విషయాలను. ఎలా వారి జీవితాలను మలుచుకొంటారో తెలుపుట
Activity planned outside the class room, if any	అనేక కథలను చదివించుట
Any other activity	వివిధ రకాల కథలను చదివించుట.
Topic Synopsis	*(Continue on the reverse side if needed)* * కళ్యాణ సుందరీ జగన్నాథ్ రచయిత్రి పరిచయం * కథాంశాన్ని తెలియపరుచుట * కథానేపథ్యాన్ని సందేశాన్ని పాత్ర చిత్రణను తెలియపరుచుట

Signature of the Lecturer

Teaching Plan / Lesson No. IV

Name of the Topic	అనవర్తని శివయోత్ర నవల
Hours required	10.
Learning Objectives	త్రిపురనేని గోపిచంద్ గారి రచనా విధానం తెలుపుట
Previous knowledge to be reminded	మనోవిశ్లేషణాత్మక నవలను పరిచయం చేయుట
Examples / Illustrations	అనవర్తని శివయోత్ర నవలను వివరించుట
Additional inputs	సామాజిక పరమైన రచనలు తెలుపుట
Teaching Aids used	భావనా పద్ధతులు
References cited	అనవర్తని శివయోత్ర – గోపీచంద్
Student Activity Planned after the teaching	అనేక నవలను పరిచయం చేసి వివరించుట
Activity planned outside the class room, if any	మనుషుల మనస్తత్వాలను తెలియచేయుట
Any other activity	నవలను తెలపడం.
Topic Synopsis	*(Continue on the reverse side if needed)* * గోపీచంద్ పరిచయం * నవల ఇతివృత్తాన్ని తెలపడం, దానిలోని * పాత్రలను వర్ణించుట, * నవల సంవిధానాన్ని తెలుపుట * నవలా శైలిని వివరించుట మొ॥వి.

Signature of the Lecturer

Teaching Plan / Lesson No. V

Name of the Topic	సి. పి. బ్రౌన్ చరిత్ర
Hours required	08 (సాహిత్యం సాహిత్యకారుల పరిచయాలు)
Learning Objectives	కవులను గురించి పరిచయం.
Previous knowledge to be reminded	కవితా రచనలు ఉదాహరణలతో తెలుపుట
Examples / Illustrations	బోధన
Additional inputs	బోధనా పద్ధతులు
Teaching Aids used	సాహిత్య చరిత్ర
References cited	సి.పి.బ్రౌన్ చరిత్ర.- సాహిత్య గ్రంథాలు కవులగురించి వివరించుట
Student Activity Planned after the teaching	బ్రౌన్ చరిత్ర ఆయన చేసిన కార్యాలను వివరించుట
Activity planned outside the class room, if any	కవుల రచనలు తెలుసుకునేలా చేయుట
Any other activity	విద్యార్థులలో ప్రశ్నించే తత్వం కలిగించుట. (Continue on the reverse side if needed)
Topic Synopsis	* సి. పి. బ్రౌన్ చరిత్రను వివరించుట * కవితారచనలు తెలుపుట * కవుల సి.పి బ్రౌన్ గ్రంథాలయములలోని విశదీకరణగా వివరించుట సాహిత్య సేవను గురించి తెలుపుట

Signature of the Lecturer

Teaching Plan / Lesson No. Gramer

Name of the Topic	వ్యాకరణాంశాలు.
Hours required	10.
Learning Objectives	సంధులు, సమాసాలు వివరణాత్మకంగను తెలుపుట
Previous knowledge to be reminded	ఛందస్సు, అలంకారాలు అంతకు ముందు. చదివిన అంశాలను పునశ్చరణ చేయటం.
Examples / Illustrations	ఉదాహరణలతో వివరించి తెలుపుట.
Additional inputs	పద్యరీతి ఉదాహరణ.
Teaching Aids used	బోధనా పుస్తకము.
References cited	చిన్నయసూరి – బాల వ్యాకరణం [illegible] – భాషా వ్యాకరణం
Student Activity Planned after the teaching	విద్యార్థులచే గణ విభజన చేయించటం. సమాస వ్యాకరణం నేర్పించటం.
Activity planned outside the class room, if any	సంధి కార్యాలను విడదీసి విధానం చేయించుట అలంకార సమన్వయ రీతి తెలుసుకొనేలా చేయుట
Any other activity	విద్యార్థులచే పద్యరీతిని చేయించటం.
Topic Synopsis	*(Continue on the reverse side if needed)* సంధులు → తెలుగు, సంస్కృత సంధులు వివరణా-త్మకత. సమాసాలు వివరణాత్మకత. ఛందస్సు → వృత్తాలు, జాతులు, ఉపజాతులు/ఉపవిభాగాలు అలంకారాలు → శబ్దాలంకారాలు, అర్థాలంకారాలు వివరణాత్మకంగా తెలుపుట.

Signature of the Lecturer

SeK & Sel.

Teaching Plan / Lesson No.

Name of the Topic	EMCC frame WORK.
Hours required	7
Learning Objectives	Awareness. arises from Paying. attention.
Previous knowledge to be reminded	Affective. EMPathy The ability to feel another Persons EMotions.
Examples / Illustrations	Examples.
Additional inputs	EMCC frame WORK.
Teaching Aids used	Black Board Teaching.
References cited	SeeK & SeL. UNESCO.
Student Activity Planned after the teaching	Emotional thinking Power.
Activity planned outside the class room, if any	Handle challenging situations.
Any other activity	Experience, thinking,
Topic Synopsis	*(Continue on the reverse side if needed)* * EMPAthy. → Affective EMPathy * Mind full ness. Benifits of being Mindful. * compassion. — self com Passion. * Critical Inquiry Experience. Thinking, Reasoning and Judgment.

Signature of the Lecturer

Teaching Plan / Lesson No.

Name of the Topic	Claiming the body and Mind.
Hours required	8
Learning Objectives	Ethical Mind fullness:, feeling., happens. Ex!
Previous knowledge to be reminded	Wheel of Emotions
Examples / Illustrations	Our system in survival mode.
Additional inputs	Parasym Pathetic System; sympathetic system.
Teaching Aids used	Block Board Teaching. PPT shared,
References cited	Seek & Sel.
Student Activity Planned after the teaching	Tracking activity; sit a comfortable. Position; different experience
Activity planned outside the class room, if any	Resourcing. Build your own. Resource.
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* * claiming the body and mind. * Ethical Mind fullness, Awareness. * object of Attention. * understanding of the concept. * At the root of the tree. (Values).

Signature of the Lecturer

Teaching Plan / Lesson No.

Name of the Topic	Emotional Awareness, Self-compassion
Hours required	8.
Learning Objectives	Emotions, experience, fear, Excitement, Happiness etc.
Previous knowledge to be reminded	self-compassion is ability to understand our innate value.
Examples / Illustrations	Harmful Emotions.
Additional inputs	creating thoughts, emotional speech
Teaching Aids used	Teaching.
References cited	Seek & Sel.
Student Activity Planned after the teaching	different situations have turned out differenty.
Activity planned outside the class room, if any	self-compassion. is the ability to understand our innate values.
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* * Beneficial mental state. * Harmful mental state. * external circumstances. * Setting Healthy Boundaries * self care. ideas: time spent, Readabook, social Media, hobby etc.

Signature of the Lecturer

Teaching Plan / Lesson No.

Name of the Topic	common Humanity, Forgiveness and Gratitude
Hours required	1- Empathic concern.
Learning Objectives	focusing on the humain beings. common Humanity stories.
Previous knowledge to be reminded	Strategies to cultivate forgiveness activity.
Examples / Illustrations	Reflective questions.
Additional inputs	Affective and cognitive Empathy
Teaching Aids used	Teaching.
References cited	Seek & Feel.
Student Activity Planned after the teaching	common Humanity stories.
Activity planned outside the class room, if any	Forgiveness activity
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* * Affective and cognitive Empathy * components of compassion. * Levels of compassion * Appreciating Interdependence. * Motivation, understanding, self etc. Activity

Signature of the Lecturer

Teaching Plan / Lesson No. IV

Name of the Topic	ఆధునిక కథా సాహిత్యం
Hours required	10
Learning Objectives	కథలను గురించి విద్యార్థులకు అవగాహన కల్గించుట. వల్లంపాటి పిపీలికం. తలపాలం ఓబులయ్య, ఆరుద్ర వాసన
Previous knowledge to be reminded	రావి, శాస్త్రి, వేంపల్లె షరీఫ్, రాజ్యలక్ష్మి, ఆరుద్ర ల (రచయితల) పరిచయం చేయుట.
Examples / Illustrations	కథా సాహిత్యం ను విద్యార్థులకు తెలుపుట
Additional inputs	కథలలోని పాత్రల గురించి తెలుపుట
Teaching Aids used	బోధనా పద్ధతులు.
References cited	వల్లంపాటి పిపీలికం - రావిశాస్త్రి, ఆరుద్ర వాసన - వేంపల్లె షరీఫ్
Student Activity Planned after the teaching	కథల పుస్తకాలను సేకరించి చదివించుట
Activity planned outside the class room, if any	కథలు విద్యార్థులచే రాయించుట. కథల పుస్తకాలలోని పాత్రల స్వభావాన్ని గురించి తెలుసుకొనుట
Any other activity	కథలు వ్రాసే విధానం తెలుసుకోవడం.
Topic Synopsis	(Continue on the reverse side if needed) * కథా సాహిత్యానికి పరిచయం చేయడం. * కథలలోని విభిన్న సాంప్రదాయాలు కట్టు బాట్లు గురించి తెలుసుకొనుట * వల్లంపాటి సాహిత్యం తెలుపుట పిపీలికం కథ, తలపాలం ఓబులయ్య, ఆరుద్ర వాసన కథ మొదలైన తెలుసుకొనుట

Signature of the Lecturer

బోధనాప్రణాళిక రచన

Semister - II **Teaching Plan / Lesson No.** I

Name of the Topic	వ్యక్తీకరణ. నైపుణ్యాలు.
Hours required	10.
Learning Objectives	భాషను వివరణాత్మకంగా తెలియపరుచుట
Previous knowledge to be reminded	వ్యక్తీకరణ నైపుణ్యాలను విద్యార్థులతో కల్పించుట పాఠంలో కొత్త నైపుణ్యాలను పెంపొందించుట
Examples / Illustrations	భాషా, వర్ణం, ధ్వని, పదం, వాక్యం. మొదలగు తెలుపుట
Additional inputs	వ్యక్తీకరణ నైపుణ్యాలను పెంపొందించుట.
Teaching Aids used	బోధనా పద్ధతులు.
References cited	ఆధునిక భాషాశాస్త్ర సిద్ధాంతాలు డా॥ పి. సుబ్రహ్మణ్యం
Student Activity Planned after the teaching	భాషా భాగాలను గుర్తించే లా చేయుట. ధ్వని వర్ణ పద వాక్య సముదాయములను తెల్పుట
Activity planned outside the class room, if any	పరిసరాలలోని భాషాలను వ్యక్తీకరించే కథలను వ్రాయించుట
Any other activity	అసైన్‌మెంట్ వ్రాయించుట
Topic Synopsis	*(Continue on the reverse side if needed)* * భాష – నిర్వచనాలు లక్షణాలు తెలుపుట భాష ఆవశ్యకత ప్రయోజనాలు వివరించుట భాష ఉత్పత్తి సిద్ధాంతాలు వివరణాత్మకత తెల్పుట వర్ణం, పదం, వాక్యం ఉదాహరణలతో వివరించుట మొదలగు.

Signature of the Lecturer

Teaching Plan / Lesson No.

Name of the Topic	అనువాదరచన.
Hours required	10.
Learning Objectives	అనువాద విధానం తెలిపి వాని పద్ధతులను సమస్యలు, భిన్నభాషల భావ సంస్కృతి సామ్యతలు
Previous knowledge to be reminded	తెలుగు నుండి ఇంగ్లీషులోకి అనువదించేలా చేయుట.
Examples / Illustrations	ఇంగ్లీషు నుండి తెలుగులోకి. తెలుగు నుండి ఇంగ్లీషులోకి ఎలా అనువదించాలో తెలపటం.
Additional inputs	బోధనా పద్ధతులు నల్లబల్ల ద్వారా
Teaching Aids used	బోధనా పద్ధతులు.
References cited	అనువాద సమస్యలు – రామచంద్రారెడ్డి.
Student Activity Planned after the teaching	ఇంగ్లీషులోకి ఎలా వ్రాయాలో ప్రశ్నల ద్వారా చేయించడం.
Activity planned outside the class room, if any	భాషాంతరీకరణ ఎలా వ్రాయాలో తెలుసుకోవడం
Any other activity	భాషాంతరీకరణ తెలుసుకోవడం.
Topic Synopsis	(Continue on the reverse side if needed) * అనువాదం విధానం వాని పద్ధతులు తెలపటం. * అనువాద సమస్యలు భౌగోళిక భాషాంతరీకరణ సమస్యలు. పరిష్కారాలు వివరించుట. అనువాదం (Translation) గురించి వారు వివరణాత్మకంగా తెలుసుకునేలా చేయడం.

Signature of the Lecturer

Teaching Plan / Lesson No.

Name of the Topic	మాధ్యమాలకు రచన.
Hours required	10.
Learning Objectives	ప్రసార మాధ్యమాలకు గురించి స్పష్టంగా వివరించుట
Previous knowledge to be reminded	వార్తా పత్రికలు, సంపాదకీయాలు, ముఖ్యాంశాలు మొదలైన వాటి గురించి స్పష్టంగా తెలుపుట
Examples / Illustrations	మాధ్యమాలను పరిచయం చేయుట
Additional inputs	ముద్రణా మాధ్యమాలు, శ్రవ్య దృశ్య మాధ్యమాలను తెలుపుట
Teaching Aids used	ఉపన్యాసపద్ధతి
References cited	మాధ్యమాలరచన ప్రసారమాధ్యమం డా॥ బి. ఆర్. అంబేద్కర్ విశ్వవిద్యాలయ ప్రచురణ.
Student Activity Planned after the teaching	వార్తా పత్రికలు సేకరించుట. యాంకరింగ్ ఎలా చేయాలో నేర్పించుట
Activity planned outside the class room, if any	మాధ్యమాలకు ఎలా వ్రాయాలో విద్యార్థులు తెలుసుకునేలా చేయుట
Any other activity	సంపాదకీయాలు, పుస్తకసమీక్షలు వ్రాసే విధానం నేర్పడం
Topic Synopsis	*(Continue on the reverse side if needed)* వివిధ రకాల పత్రికా రచన పత్రికా భాష శైలి మొ॥ వార్తారచన సంపాదకీయాలు, పుస్తక సమీక్షలు లలితగేయ శ్రవణ మాధ్యమాలు రేడియో రచన ప్రయోగాలు. దృశ్య మాధ్యమాలు టెలివిజన్ కైవారా రచన. యాంకరింగ్ మొ॥. ముద్రణా మాధ్యమం శ్రవ్య దృశ్య మాధ్యమాలరచన విద్యార్థులతో చేయించుట

Signature of the Lecturer

Teaching Plan / Lesson No.

Name of the Topic	తెలుగు వ్యాసరచన
Hours required	10
Learning Objectives	వ్యాసరచన, ఉత్తమ వ్యాస లక్షణాలు. వ్యాస విన్యాసం, సాక్షి వ్యాసాలు, ఉపాధ్యాయులతో
Previous knowledge to be reminded	వ్యాస లక్షణాలు, పానుగంటి లక్ష్మీనరసింహారావు గురించి సంఘాలః పంతులు శాస్త్రి గురించి తెలుపుట
Examples / Illustrations	వ్యాసం ఎలా వ్రాయాలో నేర్పించుట ఉపాధ్యాయ వేష : మునిమాణిక్యం
Additional inputs	ఉత్తమ వ్యాస లక్షణాలను స్పష్టంగా తెలుపుట
Teaching Aids used	బోధనా పుస్తకము
References cited	సాక్షి వ్యాసం - పానుగంటి లక్ష్మీనరసింహారావు
Student Activity Planned after the teaching	స్వతంత్ర రచన పెంపొందించేలా వ్యాసాలను వ్రాసే విధానాన్ని కల్పించుట
Activity planned outside the class room, if any	స్వభాష మాతృభాషను మరచకుండా ఉండేలా చేయడం ఉపాధ్యాయులు విద్యార్థులతో మెలిగే విధానం
Any other activity	వ్యాసం గురించి సొంతంగా వ్రాసేలా చేయడం.
Topic Synopsis	*(Continue on the reverse side if needed)* తెలుగు వ్యాసంను విశ్లేషించి వాటి లక్షణాలను తెలుపుట సాక్షి వ్యాసం స్వభాషను గురించి తెలుపుట ఉపాధ్యాయులు విద్యార్థులతో ప్రవర్తించవలసిన తీరు మునిమాణిక్యం నరసింహారావు గురించి తెలుపుట విద్యార్థి చేత వ్యాసరచన చేయించడం.

Signature of the Lecturer

Teaching Plan / Lesson No. UNIT – V

Name of the Topic	తెలుగు సాంకేతికత – తెలుగు లిపి
Hours required	10
Learning Objectives	తెలుగుభాష సాంకేతికతను తెలుపుట. లిపిని గురించి వర్ణించుట.
Previous knowledge to be reminded	అచ్చులు, హల్లులు, పురాతన బ్రాహ్మీలిపి తెలియజేయడం.
Examples / Illustrations	లిపి ఎలా ప్రయోగించాలో తెలపడం
Additional inputs	బోధన పద్ధతుల సూచనలు.
Teaching Aids used	(సాంకేతిక) బోధనా పద్ధతులు
References cited	సాంకేతిక లిపి పుట్టుపూర్వోత్తరాలు.
Student Activity Planned after the teaching	యూనికోడ్ కోసం గురించిన వివరాలు/కంగా అందించుట ex:- HP, IBM ISO మొదలైనవి.
Activity planned outside the class room, if any	కంప్యూటరీకరణ. తెలుసుకునేలా చేయించడం.
Any other activity	ఎలక్ట్రానిక్ వస్తుగతమైన గురించి తెలపడం
Topic Synopsis	*(Continue on the reverse side if needed)* * తెలుగు లిపి యూనికోడ్ ను వివరించుట. * అచ్చులు, హల్లులు పరిచయం. * తెలుగు లిపి సాంస్కృతిక ప్రయత్నాల తెల్పుట. * సాంకేతిక పద్ధతిని తెలియజేయడం. * ఒత్తి, ఒత్తుల విశేషాలు గురించి తెలియజేయడం.

Signature of the Lecturer

Teaching Plan / Lesson No. I మైనర తెలుగు

Name of the Topic	జన్మభూమి.
Hours required	10
Learning Objectives	భారతదేశం అతని గురించి స్పష్టంగా వివరించు ఆధునిక కవిత్వంలో భావుకతను తెల్పడం.
Previous knowledge to be reminded	రాయప్రోలు వారి రచనా విధానంను తెలియజేయుట తెలుగు జాతీయతకు సంబంధించిన విషయాలను తెల్పుట
Examples / Illustrations	కవిత్వం రాసే విధానం. తెలుపుట
Additional inputs	రచనా శైలులను వర్ణించుట
Teaching Aids used	బోధనా పద్ధతులు
References cited	ఆధునిక కవిత్వం డా॥ సి.నా.రె.
Student Activity Planned after the teaching	కవితలు రాసే విధానం. / కథలు రాసే విధానం } విద్యార్థి ఆలోచనలు రేకెత్తేలా తెలుపుట.
Activity planned outside the class room, if any	అసైన్ మెంట్
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* జన్మభూమి గేయాన్ని రాయప్రోలు సుబ్బారావు రచించారు. రచయిత గురించి వివరించుట. జాతీయోద్యమం, దేశభక్తి గురించి వివరించుట రాయప్రోలు జాతీయభావన గురించి తెల్పుట యువతలో జాతీయ భావాలను పెంపొందించుట సాహిత్య సేవను గురించి వివరించుట.

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Teaching Plan / Lesson No. I

Name of the Topic	మాకొద్దీ తెల్ల దొరతనం.
Hours required	8.
Learning Objectives	గరిమెళ్ళ సత్యనారాయణ గురించి తెల్పడం. బ్రిటిష్ వారి పాలనా విధానాన్ని తెల్పడం
Previous knowledge to be reminded	కవిత రీతిలో కవి ఆవేదనను వర్ణించుట
Examples / Illustrations	బానిసత్వం లేకుండా జీవించటం రచయిత ఉద్దేశం
Additional inputs	ఉద్యమాలు గురించి వివరించుట
Teaching Aids used	బోధనా పద్ధతులు
References cited	మాకొద్దీ తెల్ల దొరతనం — గరిమెళ్ళ.
Student Activity Planned after the teaching	విద్యార్థులతో సరళ భాష ఉపన్యాసాలివ్వటానికి ప్రోత్సహించటం.
Activity planned outside the class room, if any	Seminar.
Any other activity	కవితలు సేకరించుట.
Topic Synopsis	(Continue on the reverse side if needed) రచయిత గురించి పరిచయం చేయుట రచనా వర్ణన స్వాతంత్ర్య భారత నేపథ్యాన్ని వివరించుట. బ్రిటిష్ పాలన వల్ల వారు ప్రజలను బానిసలు గా చూస్తున్నారని. అలాంటి పరిస్థితి ఉండకూడద ని తెలియజేయుట హిందూ మత ధర్మాన్ని కాపాడుకోవాలని చెప్పటం.

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UNIT II

Teaching Plan / Lesson No. III

Name of the Topic	స్వప్నగానం.
Hours required	06
Learning Objectives	దేవులపల్లి కృష్ణశాస్త్రి గురించి వివరణాత్మకంగా తెలుపుట
Previous knowledge to be reminded	భావకవిత్వంను గురించి వివరించిన రీతిని తెలుపుట
Examples / Illustrations	కవితాభావాలను వివరించటం
Additional inputs	కృష్ణశాస్త్రి స్వప్నగానాన్ని వివరించటం
Teaching Aids used	బోధనా పద్ధతులు
References cited	భావకవిత్వం — డా॥ సి.నా.రె.
Student Activity Planned after the teaching	విద్యార్థులలో భావుకతను కల్గించేలా చేయటం
Activity planned outside the class room, if any	కవుల చిత్రాలను సేకరించుట
Any other activity	కవితలు సేకరించుట
Topic Synopsis	(Continue on the reverse side if needed) కృష్ణశాస్త్రి స్వప్నగానాన్ని వివరణాత్మకంగా తెలుపుట రచనలు వర్ణించుట భావకవిత్వం గురించి విద్యార్థులలో ఉత్తేజాన్ని కల్పించేలా చేయటం భావకవిత్వం అర్థమయ్యేవిధంగా, ఆసక్తి కలిగేలా హృదయానికి హత్తుకునేలా [illegible]

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Teaching Plan / Lesson No. IV

Name of the Topic	అమృతం కురిసిన రాత్రి.
Hours required	08
Learning Objectives	బాలగంగాధర తిలక్ గురించి ఆధునిక కవిగా తెలిపి వర్ణించడం
Previous knowledge to be reminded	నా అక్షరాలు కన్నీటి జడులతో తడిసే దయాపారావతాలు నా అక్షరాలు ప్రజాశక్తుల వహించే విజయ ధ్వజాలు అని తిలక్ చెప్పినదాని విశదీకరణ
Examples / Illustrations	కవితారూపాలు వివరించుట
Additional inputs	తిలక్ కవితా ఖండికలు వివరించడం
Teaching Aids used	బోధనా పద్ధతులు
References cited	అమృతం కురిసిన రాత్రి — తిలక్
Student Activity Planned after the teaching	కవిత్వం వ్రాసేలా ప్రోత్సహించుట
Activity planned outside the class room, if any	భావకవులను స్మరించేలా చేయడం
Any other activity	కవితా రచన
Topic Synopsis	*(Continue on the reverse side if needed)* అమృతం కురిసిన రాత్రి కవితా రచనలు గురించి వివరించుట కవితా రచనలు వివరించుట భావకవిత్వం గురించి వివరించుట ఆధునిక సాహిత్యం గురించి తిలక్ వర్ణించినవిధానం అప్పారావులను గురించి వర్ణించిన విధానం వివరించుట

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UNIT III

Teaching Plan / Lesson No. 5)

Name of the Topic	ఆధునిక వచనభారతం (పరిచయం వచనాలు).
Hours required	07
Learning Objectives	గుంటూరు శేషేంద్ర శర్మ గురించి వివరించుట కవితాలక్షణాలు తెలుపుట
Previous knowledge to be reminded	అభ్యుదయ కవిత్వం గురించి తెలుపుట
Examples / Illustrations	ఉదాహరణలు తెలుపుట
Additional inputs	శేషేంద్రగారి ఆధునికాంధ్ర కవిత్వాలను తెలుపుట
Teaching Aids used	బోధనా పద్ధతులు
References cited	ఆధునిక వచనభారతం — గుంటూరు శేషేంద్రశర్మ.
Student Activity Planned after the teaching	శేషేంద్ర రచనలు సేకరించుట
Activity planned outside the class room, if any	కవితా విశేషాలు ఏమిటో తెలియజేయుట
Any other activity	కవిత్వ లక్షణాలు వివరించుట
Topic Synopsis	*(Continue on the reverse side if needed)* * ఆధునిక వచనభారతం గురించి తెలుపుట * కవితా రచనలు తెలుపుట * అభ్యుదయ కవిత్వాన్ని గురించి వివరించుట కవితాలక్షణాలు వివిధ కవిత్వం లో నిర్వచన కవితాలక్షణం వివరించుట

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Teaching Plan / Lesson No.

Name of the Topic	నరుడా - భాస్కరుడా
Hours required	05
Learning Objectives	విప్లవ కవిత్వాన్ని గురించి తెలుపుట
Previous knowledge to be reminded	శివసాగర్ రచనలు, విప్లవ భావాలను ప్రభావితం చేసిన పరిస్థితుల గురించి వివరించుట
Examples / Illustrations	రచనలు వివరించటం
Additional inputs	ప్రామాణ్యాన్ని తెలపటం
Teaching Aids used	బోధనా పద్ధతులు
References cited	నరుడా - భాస్కరుడా - శివసాగర్
Student Activity Planned after the teaching	విప్లవ గీతాలు, పాటలు సేకరించుట
Activity planned outside the class room, if any	క్విజ్ పోటీ
Any other activity	కవిత్వ ప్రక్రియ విధానం తెలపటం
Topic Synopsis	*(Continue on the reverse side if needed)* విప్లవ కవిత్వాన్ని వివరించటం శివసాగర్ రచనలు తెలుపుట సాయుధ పోరాటాన్ని వివరించటం బంధాలు, అనుబంధాలు త్రెంచి ఉద్యమానికి వెళ్ళిన యువకుల సంఘర్షణను భావాల గురించి వివరించుట

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యూనిట్ V

Teaching Plan / Lesson No. IX

Name of the Topic	బందిపోట్లు
Hours required	04
Learning Objectives	స్త్రీవాద రచయితలను పరిచయం చేయుట
Previous knowledge to be reminded	స్త్రీలు సమాజంలో ఎదుర్కొన్న పరిస్థితులను వివరించుట
Examples / Illustrations	రచయితల గురించి తెలుపుట
Additional inputs	రచనలు తెలుపుట
Teaching Aids used	బోధనా పద్ధతులు
References cited	స్త్రీవాద కవిత్వం – [illegible]
Student Activity Planned after the teaching	స్త్రీవాద కవితలు సేకరించుట
Activity planned outside the class room, if any	కవిత్వ రచన ప్రోత్సహించుట
Any other activity	—
Topic Synopsis	*(Continue on the reverse side if needed)* బందిపోట్లు గురించి సావిత్రి వివరించినవిధా నను తెలుపుట రచయిత్రి రచనలు వివరించుట భారతీయ వివాహ వ్యవస్థలో పురుషాధిక్యతను విశ్లే షించుట స్త్రీలు సమాజంలో ఎదుర్కొంటున్న పరిస్థితులను రచయిత్రి వివరించిన తీరును [illegible]

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Teaching Plan / Lesson No. X

Name of the Topic	సౌందర్యాత్మక హింస
Hours required	06.
Learning Objectives	స్త్రీవాద రచయితలను గురించి విద్యార్థులకు తెలుపుట
Previous knowledge to be reminded	స్త్రీవాద కవిత్వం గురించి వివరించుట విమల రచనలు తెలుపుట
Examples / Illustrations	విమల అనుభవాలను వర్ణించుట
Additional inputs	స్త్రీల సమస్యల పరిష్కారాలను ఉదాహరణలతో తెలుపుట
Teaching Aids used	చిత్రపటములు
References cited	విమల - సౌందర్యాత్మక హింస
Student Activity Planned after the teaching	స్త్రీవాద రచయితల పేర్లు వ్రాయించుట
Activity planned outside the class room, if any	స్త్రీవాద కవితలు సేకరించుట
Any other activity	కవిత్వం వ్రాసేలా ప్రోత్సహించుట
	(Continue on the reverse side if needed)
Topic Synopsis	సౌందర్యాత్మక హింసను గురించి తెలుపుట విమల రచనలు వివరించుట స్త్రీ సౌందర్యం లో సమస్య ఇబ్బందులను గురించి తెలుపుట మానసిక బాధలను గురించి వివరించుట అప్పటి సమాజ సౌందర్య భావాల ప్రభావాన్ని స్పష్టించుట

Signature of the Lecturer

COMMISSONERATE OF COLLEGIATE EDUCATION,

GOVT. DEGREE COLLEGE

RAJAMPET, KADAPA. Dt.

(Affiliated to Yogi Vemana University, Kadapa.)

TEACHING PLAN

ACADEMIC YEAR 2024-2025

Name of the Department : Mathematics

NAME OF THE LECTURER : Dr M. Jayachandra Babu

Course / Group : '

Subject / Page : Mathematics – Group Theory,
Computer Science – Data Structures, Operating System

Sl.No.	Subject	Paper	Page No.
1			
2			
3			
4			

Teaching Plan / Lesson No.

Name of the Topic	Groups
Hours required	5
Learning Objectives	After completion of this topic, students will be able to define group and discuss some properties related to groups
Previous knowledge to be reminded	sets, functions
Examples / Illustrations	$(\mathbb{Z}, +)$ is a group
Additional inputs	Application of group theory
Teaching Aids used	Blackboard, chalkpiece
References cited	Topics in Algebra By I.N. Herstein
Student Activity Planned after the teaching	Assignment, Seminar, slip test
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* Group: Let G be a non-empty set and $*$ be a binary operation on G then $(G, *)$ is said to be a group if it satisfies the following 1. Associative property: $a*(b*c) = (a*b)*c$ $\forall a, b, c \in G$ 2. Identity property: For each $a \in G$, there exists an element $e \in G$ such that $a*e = e*a = a$ 3. Inverse property: For each $a \in G$, there exists an element $b \in G$ such that $a*b = b*a = e$

M. Jayan

Signature of the Lecturer

* In a group G, identity element is unique

* In a group G, inverse of any element is unique

* The set $\mathbb{Q}_+$ of all positive rational numbers form an abelian group under the composition defined by $\circ$ such that $a \circ b = \frac{ab}{3}$ for $a, b \in \mathbb{Q}_+$

* The set of matrices $A_\alpha = \begin{pmatrix} \cos\alpha & -\sin\alpha \\ \sin\alpha & \cos\alpha \end{pmatrix}$, $\alpha \in \mathbb{R}$ form a group w.r.t matrix multiplication if $\cos\theta = \cos\phi \Rightarrow \theta = \phi$

* The set Z of all integers form an abelian group w.r.t the operation defined by $a \circ b = a + b + 2$ for all $a, b \in Z$

* Let $(G, \cdot)$ be an algebraic structure. Then $(G, \cdot)$ is a group iff (i) $a, b, c \in G \Rightarrow (ab)c = a(bc)$ (ii) $ax = b$, $ya = b$ have unique solutions in G for every $a, b \in G$

* The fourth of roots of unity form an abelian group w.r.t multiplication

* If every element of a group G is its own inverse then $(G, \cdot)$ is an abelian group.

* The set $G = \{ \cdots -3m, -2m, -m, 0, m, 2m, 3m, \cdots \}$ is an abelian group w.r.t usual addition, m being a fixed integer

Teaching Plan / Lesson No.

Name of the Topic	Groups (Cont:,)
Hours required	5
Learning Objectives	After completion of this topic, Students will be able to use the addition and multiplication modulo m
Previous knowledge to be reminded	Groups
Examples / Illustrations	$\mathbb{Z}_5 = \{0,1,2,3,4\}$ is an abelian group w.r.t addition modulo 5 ie $+_5$
Additional inputs	–
Teaching Aids used	Blackboard, chalkpiece
References cited	Topics in Algebra By I.N. Herstein
Student Activity Planned after the teaching	Assignment, slip test
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* Cancellation laws: Let G be a group. Then for $a,b,c \in G$, $ab = ac \Rightarrow b = c$ (left cancellation law) and $ba = ca \Rightarrow b = c$ (right cancellation law) * In a non-identity group G, for $a, b, x, y \in G$, the equations $ax = b$ and $ya = b$ have unique solutions

M. Rajesh

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* Let G be a set of n^{th} roots of unity Then G is an abelian group w.r.t multiplication

Addition modulo m

Let $a, b \in Z$ and m be a fixed positive integer. If r is the remainder $(0 \le r < m)$ when $a+b$ is divided by m Then we define $a +_m b = r$ and we read '$a +_m b$' as 'a addition modulo m b'

Ex: $2 +_5 4 = 1$

Multiplication modulo m

If a and b are integers and p is a fixed positive integer and if ab is divided by p such that r is the remainder $(0 \le r < p)$, we define $a \times_p b = r$. we read $a \times_p b$ as 'a multiplication modulo p' b

Ex: $2 \times_6 5 = 1$, $2 \times_5 3 = 1$

* The set $G = \{0, 1, 2, \cdots m-1\}$ of first m non-negative integers is an abelian group w.r.t the operation addition modulo m.

* The set of non-zero residue classes modulo a prime integer p forms an abelian grp of order $p-1$ w.r.t multiplication of residue classes.

Teaching Plan / Lesson No.

Name of the Topic	order of an element of a group
Hours required	5
Learning Objectives	After completion of this topic, students will be able to find the order of any element of a finite group
Previous knowledge to be reminded	Groups
Examples / Illustrations	In $\mathbb{Z}_6$, $O(2)=3$ $(3\cdot 2=0)$ In $G=\{1,-1\}$, $O(-1)=2$ $((-1)^2=1)$
Additional inputs	
Teaching Aids used	Blackboard, Chalkpiece
References cited	Topics in Algebra By I.N. Herstein
Student Activity Planned after the teaching	Assignment
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* * Let G be a group and a be any element of G. Then the order of the element a is defined as the least positive integer n such that $a^n = e$ If there exists no positive integer n such that $a^n = e$ then we say that a is of infinite order (or) zero order

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* The order of every element of a finite group is finite and less than or equal to the order of the group

* In a group G, $o(a) = o(a^{-1})$ $\forall a \in G$

* If a is an element of a group G such that $o(a) = n$ then $a^m = e$ iff $n | m$

* If a is an element of order n of a group G and $(p, n) = 1$ then $o(a^p) = n$

* Let G be an abelian group. If $a, b \in G$ such that $o(a) = m$, $o(b) = n$ and $(m, n) = 1$ then $o(ab) = mn$

* In a group G, if $a \in G$ and $o(a) = m$ then $o(a^k) = \frac{m}{(m, k)}$

* For any two elements $a, b \in G$, $o(a) = o(b^{-1}ab)$

* In $\mathbb{Z}_6 = \{0, 1, 2, 3, 4, 5\}$

$o(1) = 6$, $o(2) = 3$, $o(3) = 2$, $o(4) = 3$, $o(5) = 6$ and $o(0) = 1$

* If every element of a group G except the identity element is of order two then the group is abelian.

Teaching Plan / Lesson No.

Name of the Topic	Subgroups
Hours required	5
Learning Objectives	After completion of this topic, students will be able to find the subgroups of a group and discuss some properties of subgroups
Previous knowledge to be reminded	Groups
Examples / Illustrations	$(\mathbb{Z}, +)$ is a subgroup of $(\mathbb{Q}, +)$ $(\mathbb{Z}, \cdot)$ is not a subgroup of $(\mathbb{Q}, \cdot)$ because $(\mathbb{Z}, \cdot)$ is not a group
Additional inputs	–
Teaching Aids used	Blackboard, Chalkpiece
References cited	Topics in Algebra By I. N. Herstein
Student Activity Planned after the teaching	Assignment, slip test
Activity planned outside the class room, if any	–
Any other activity	–
Topic Synopsis	*(Continue on the reverse side if needed)* Subgroup: Let G be a group and H be a non-empty subset of G. If H is also a group under the same operation as in G then H is called a subgroup of G. * The identity of a subgroup H of a group is same as the identity of G

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* If H is a subgroup of G then $H = H^{-1}$

* If H is any subgroup of a group G then $HH = H$

* A non-empty subset H of a group G is a subgroup of G iff

(i) $a, b \in H \Rightarrow ab \in H$ (ii) $a \in H \Rightarrow a^{-1} \in H$

* A non-empty subset H of a group G is a subgroup of G iff $a, b \in H \Rightarrow ab^{-1} \in H$

* A necessary and sufficient conditions for a non-empty subset of a group G to be a subgroup of G is $HH^{-1} \subseteq H$

* A necessary and sufficient condition for a non-empty subset of a group G to be a subgroup of G is $HH^{-1} = H$

* The necessary and sufficient condition for a finite subset H of a group G to be a subgroup of G is $a, b \in H \Rightarrow ab \in H$

Teaching Plan / Lesson No.

Name of the Topic	Subgroups
Hours required	5
Learning Objectives	After completion of this topic, Students will be able to discuss the algebra of Subgroups
Previous knowledge to be reminded	Subgroups
Examples / Illustrations	$H_1 = \{0,3\}$ and $H_2 = \{0,2,4\}$ are subgroups of $(\mathbb{Z}_6 = \{0,1,2,3,4,5\}, +_6)$ and $H_1 \cap H_2 = \{0\}$ is also the same
Additional inputs	
Teaching Aids used	Blackboard, Chalkpiece
References cited	Topics in Algebra By I.N. Herstein
Student Activity Planned after the teaching	Seminar
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* * If H and K are two subgroups of a group G then HK is a subgroup of G iff $HK = KH$ Proof: $HK = (HK)^{-1} = K^{-1}H^{-1} = KH$ $(HK)(HK)^{-1} = (HK)(K^{-1}H^{-1}) = H(KK^{-1})H^{-1} = HKH^{-1}$ $= HHH^{-1} = KH = HK$

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* If H_1 and H_2 are two subgroups of a group G then $H_1 \cap H_2$ is a subgroup of G

* The ~~necessary~~ union of two subgroups of a group need not be a subgroup of the group.

For example, $H_1 = \{0, 3\}$ and $H_2 = \{0, 2, 4\}$ are subgroups of $\mathbb{Z}_6$

but $H_1 \cup H_2 = \{0, 2, 3, 4\}$ is not a subgroup of $\mathbb{Z}_6$

because $2 + 3 = 5 \notin H_1 \cup H_2$

* The union of two subgroups of a group is a subgroup iff one is contained in the other.

* Every subgroup of an abelian group is an abelian group

Teaching Plan / Lesson No.

Name of the Topic	Cosets and Lagrange's theorem
Hours required	5
Learning Objectives	After completion of this topic, students will be able to define the coset and discuss some properties of cosets
Previous knowledge to be reminded	Subgroups
Examples / Illustrations	For $H = \{3n \mid n \in \mathbb{Z}\}$, $0+H$, $1+H$ and $2+H$ are the only distinct left cosets
Additional inputs	Applications of Lagrange's theorem
Teaching Aids used	Blackboard, Chalkpiece
References cited	Topics in Algebra By I. N. Herstein
Student Activity Planned after the teaching	Skip test
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* Coset: Let H be a subgroup of a group G and $a \in G$. Then the set $aH = \{ah \mid h \in H\}$ is called a left coset of H in G generated by a and $Ha = \{ha \mid h \in H\}$ is called a right coset of H in G generated by a

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* If H is any subgroup of a group G and $h \in G$ then $hH = H = Hh$
* If a, b are any two elements of a group G and H is any subgroup of G then $Ha = Hb \Leftrightarrow ab^{-1} \in H$ and $aH = bH \Leftrightarrow a^{-1}b \in H$
* If a, b are any two elements of a group G and H is any subgroup of G then $a \in bH \Leftrightarrow aH = bH$ and $a \in Hb \Leftrightarrow Ha = Hb$
* Any two left (right) cosets of a subgroup are either disjoint or identical
* Let H be any subgroup of a group G. Then there exists a bijection between any left cosets of H in G.
* If H is any subgroup of a group G then there is a one-to-one correspondence between the set of all distinct left cosets of H in G and the set of all distinct right cosets of H in G

Lagrange's Theorem

The order of a subgroup of a finite group divides the order of the group

Converse of the above Theorem is not true

For example, Take $H = \{1, -1\}$ and $G = \{1, -1, i, -i\}$

Then H is a subset of G and $o(H) = 2 / 4 = o(G)$

but H is not a subgroup of G

Teaching Plan / Lesson No.

Name of the Topic	Normal Subgroups
Hours required	15
Learning Objectives	After completion of this topic, students will be able to define normal subgroup and discuss some properties of normal subgroups
Previous knowledge to be reminded	Subgroups and Cosets
Examples / Illustrations	$H = \{1, -1\}$ is a normal subgroup of $G = \{1, -1, i, -i\}$
Additional inputs	Sylow Theorems
Teaching Aids used	Blackboard, Chalkpiece
References cited	Topics in Algebra By I.N. Herstein
Student Activity Planned after the teaching	Assignment, Seminar, Slip Test
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* Normal Subgroup: A subgroup H of a group G is said to be a normal subgroup of G if $xhx^{-1} \in H$ $\forall x \in G, h \in H$ or A subgroup H of a group G is normal iff $xHx^{-1} = H \ \forall x \in G$

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* A Subgroup H of a group G is a normal Subgroup of G iff each left coset of H in G is a right coset of H in G

* A Subgroup H of a group G is a normal Subgroup of G iff the product of two right (left) cosets of H in G is again a right (left) coset of H in G.

* Every Subgroup of an abelian group is normal.

* If G is a group and H is a subgroup of index 2 in G then H is a normal subgroup of G

* The intersection of any two normal subgroups of a group G is a normal subgroup of G

* A normal subgroup of a group G is commutative with every coset of G

* If N is any normal subgroup of G and H is any subgroup of G then HN is a subgroup of G

* If H is a subgroup of G and N is a normal subgroup of G then
(i) $H \cap N$ is a normal subgroup of N (ii) N is a normal subgroup of HN

* If N, M are normal subgroups of G then NM is also a normal subgroup of G

* If M, N are two normal subgroups of G such that $M \cap N = \{e\}$ then every element of M commutes with every element of N

Teaching Plan / Lesson No.

Name of the Topic	Homomorphism, Isomorphism of Groups
Hours required	15
Learning Objectives	After completion of this topic, students will be able to find that given map is a homomorphism and learn some properties related to homomorphism
Previous knowledge to be reminded	Groups and normal subgroups
Examples / Illustrations	$f:(\mathbb{Z},+)\to(\mathbb{Z},+)$ defined as $f(x)=x+1$ is not a homomorphism
Additional inputs	
Teaching Aids used	Blackboard, Chalkpiece
References cited	Topics in Algebra By I.N. Herestein
Student Activity Planned after the teaching	Slip test, Assignment and Seminar
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* $(G,*)$ and $(G',\circ)$ are two groups. If $f:G\to G'$ is a function satisfying the condition $f(x*y)=f(x)\circ f(y)$ for $x,y\in G$ then f is called a group homomorphism Kernel of a homomorphism f is defined as $\ker f=\{x\in G / f(x)=e'\}$ (e' is identity in G')

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* Every homomorphic image of a group is a group

* Every homomorphic image of an abelian group is an abelian group

* Let G, G' be two group, $f: G \to G'$ be a homomorphism and e, e' be identities in G, G' respectively then (i) $f(e) = e'$ (ii) $f(a^{-1}) = [f(a)]^{-1}$ $\forall a \in G$

* If $f: G \to G'$ is a homomorphism then $\ker f$ is a normal subgroup of G

* If $f: G \to G'$ is an epimorphism then $\ker f = \{e\}$ iff f is an isomorphism

* Fundamental Theorem of homomorphism of groups

Every homomorphic image is isomorphic to some quotient group

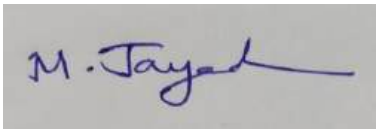
Teaching Notes

For

Database Management Systems

Teaching Plan No.-1

Name of the topic	**Overview of Database Management System**
Hours required	12
Learning Objectives	Differentiate between database systems and file based systems
Previous Knowledge to be reminded	Data & information, spread sheets
Eaxmples/Illustrations	College database
Additional Inputs	
Teaching Aids used	PPT, LCD Projector, Computer Lab
References cited	Database Management Systems by Raghu Ramakrishnan, McGrawhill
Student Activity planned after teaching	Seminar Presentation on Database Management Systems
Activity planned outside the Class room, if any	
Any other activity	
Topic Synopsis	Introduction to data, information, database, database management systems, file-based system, Drawbacks of file-Based System, database approach, Classification of Database Management Systems, advantages of database approach, Various Data Models, Components of Database Management System, three schema architecture of data base, costs and risks of database approach.



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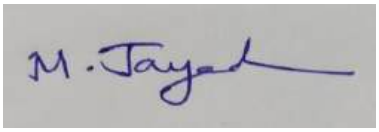
Teaching Plan No.-2

Name of the topic	**Entity-Relationship Model**
Hours required	12
Learning Objectives	Understand the building blocks of ER model Design a database using ER model
Previous Knowledge to be reminded	Data & information, spread sheets
Eaxmples/Illustrations	ER diagram Hospital administration
Additional Inputs	
Teaching Aids used	PPT, LCD Projector, Computer Lab
References cited	Database Management Systems by Raghu Ramakrishnan, McGrawhill
Student Activity planned after teaching	Case Study on ER model and EER model
Activity planned outside the Class room, if any	
Any other activity	
Topic Synopsis	Introduction, the building blocks of an entity relationship diagram, classification of entity sets, attribute classification, relationship degree, relationship classification, reducing ER diagram to tables, enhanced entity-relationship model (EER model), generalization and specialization, **IS A** relationship and attribute inheritance, multiple inheritance, constraints on specialization and generalization, advantages of ER modeling.



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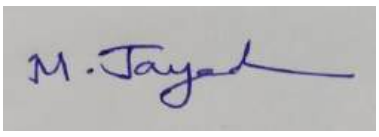
Teaching Plan No.-3

Name of the topic	**Relational Model**
Hours required	12
Learning Objectives	Understand the concept of Relational model Use relational model in database design Understand relational algebra Learn Normalization of databse schema
Previous Knowledge to be reminded	Data & information, spread sheets
Eaxmples/Illustrations	Creation of college database and establish relationships between tables
Additional Inputs	
Teaching Aids used	PPT, LCD Projector, Computer Lab
References cited	Database Management Systems by Raghu Ramakrishnan, McGrawhill
Student Activity planned after teaching	Exercise on Normalization
Activity planned outside the Class room, if any	
Any other activity	
Topic Synopsis	Introduction, CODD Rules, relational data model, concept of key, relational integrity, relational algebra, relational algebra operations, advantages of relational algebra, limitations of relational algebra, relational calculus, tuple relational calculus, domain relational Calculus (DRC), Functional dependencies and normal forms upto 3rd normal form.



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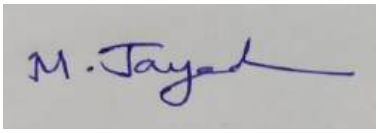
Teaching Plan No.-4

Name of the topic	**Structured Query Language**
Hours required	12
Learning Objectives	Understand SQL commands Use SQL commands for creating and manipulating data stored in databases.
Previous Knowledge to be reminded	Data & information, spread sheets
Eaxmples/Illustrations	Creation of database table, insert,update,delete and view data using SQL commands
Additional Inputs	
Teaching Aids used	PPT, LCD Projector, Computer Lab
References cited	Database Management Systems by Raghu Ramakrishnan, McGrawhill
Student Activity planned after teaching	Competition on SQL Query Writing
Activity planned outside the Class room, if any	
Any other activity	
Topic Synopsis	Introduction, Commands in SQL, Data Types in SQL, Data Definition Language, Selection Operation, Projection Operation, Aggregate functions, Data Manipulation Language, Table Modification Commands, Join Operation, Set Operations, View, Sub Query.



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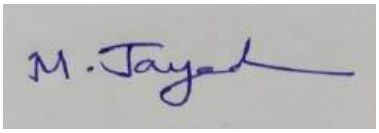
Teaching Plan No.-5

Name of the topic	**PL/SQL**
Hours required	12
Learning Objectives	Understand PL/SQL Language Elements Write PL/SQL programs to work with databases.
Previous Knowledge to be reminded	Data & information, spread sheets,SQL commands
Eaxmples/Illustrations	PL/SQL Programs using control structures
Additional Inputs	
Teaching Aids used	PPT, LCD Projector, Computer Lab
References cited	Database Management Systems by Raghu Ramakrishnan, McGrawhill
Student Activity planned after teaching	Peer Review of PL/SQL code
Activity planned outside the Class room, if any	
Any other activity	
Topic Synopsis	Introduction, Shortcomings of SQL, Structure of PL/SQL, PL/SQL Language Elements, Data Types, Operators Precedence, Control Structure, Steps to Create a PL/SQL Program, Iterative Control, Procedure, Function, Database Triggers, Types of Triggers.



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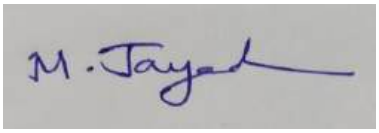
Teaching Notes

For

Problem Solving Using C

Teaching Plan No.-1

Name of the topic	**Introduction to computer and programming**
Hours required	7
Learning Objectives	Understand the working of a digital computer To explore basic knowledge on computers Learn to write algorithms and design flowchart
Previous Knowledge to be reminded	Basic computer knowledge
Eaxmples/Illustrations	Making tea, process of college admission
Additional Inputs	
Teaching Aids used	PPT, LCD Projector, Computer Lab
References cited	Computer fundamentals and programming in C, REEMA THAREJA, OXFORD UNIVERSITY PRESS
Student Activity planned after teaching	Online Quiz
Activity planned outside the Class room, if any	Identify the different types of computers,printers,networking devices and their configurations in the college premises.
Any other activity	
Topic Synopsis	Introduction, Basic block diagram, functions of various components of computer, Concepts of Hardware and software, Types of software, Compiler and interpreter, Concepts of Machine level, Assembly level and high-level programming, Flowcharts and Algorithms



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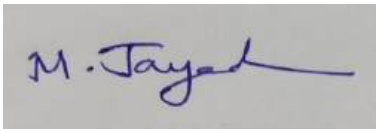
Teaching Plan No.-2

Name of the topic	**Fundamentals of C**
Hours required	8
Learning Objectives	Understand basic concepts of C programming Learn how to solve common types of computing problems.
Previous Knowledge to be reminded	Algoriths and flowcharts
Eaxmples/Illustrations	Adding two numbers, calculate simple interest etc.
Additional Inputs	
Teaching Aids used	PPT, LCD Projector, Computer Lab
References cited	E. Balagurusamy, "Programming in ANSI C", Tata McGraw Hill, 6th Edn, ISBN-13: 978- 1- 25- 90046-2
Student Activity planned after teaching	Online Quiz, Programming practice in computer lab.
Activity planned outside the Class room, if any	
Any other activity	
Topic Synopsis	History of C, Features of C, C Tokens-variables and keywords and identifiers, constants Data types, Rules for constructing variable names, Operators, Structure of C program, Input /output statements in C Formatted and Unformatted I/O



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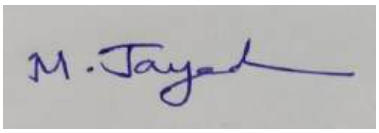
Teaching Plan No.-3

Name of the topic	**Control statements in C**
Hours required	10
Learning Objectives	Understand and apply the if, if-else, and else if ladder statements Master the use of while, for, and do-while loops Analyze and develop a solution to a given problem with suitable control structures
Previous Knowledge to be reminded	Algorithms and flowcharts, structure of C
Eaxmples/Illustrations	Find the sum of individual digits of a positive integer Generate Fibonacci sequence Check whether a number is Armstrong or not. Generate all the prime numbers between 1 and n
Additional Inputs	
Teaching Aids used	PPT, LCD Projector, Computer Lab
References cited	E. Balagurusamy, "Programming in ANSI C", Tata McGraw Hill, 6th Edn, ISBN-13: 978- 1- 25- 90046-2
Student Activity planned after teaching	Online Quiz, Structured Programming Assignment.
Activity planned outside the Class room, if any	
Any other activity	
Topic Synopsis	**Decision making statements:** if, if else, else if ladder, switch statements. **Loop control statements**: while loop, for loop do-while loop. **Jump Control statements:** break, continue and goto.



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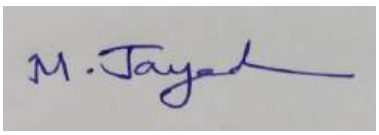
Teaching Plan No.-4

Name of the topic	**Arrays & Strings in C**
Hours required	10
Learning Objectives	Apply the derived data types in program solutions Learn how to declare, initialize, and access elements of an array using indexing. Learn how to declare, initialize, and access characters in a string using indexing.
Previous Knowledge to be reminded	Algorithms and flowcharts, structure of C
Eaxmples/Illustrations	Addition and Multiplication of two matrices
Additional Inputs	
Teaching Aids used	PPT, LCD Projector, Computer Lab
References cited	E. Balagurusamy, "Programming in ANSI C", Tata McGraw Hill, 6th Edn, ISBN-13: 978- 1- 25- 90046-2
Student Activity planned after teaching	Online Quiz, Array and String Program Debugging.
Activity planned outside the Class room, if any	
Any other activity	
Topic Synopsis	**Arrays:** One Dimensional arrays - Declaration, Initialization and Memory representation; Two Dimensional arrays - Declaration, Initialization and Memory representation. **Strings**: Declaring & Initializing string variables; String handling functions, Character handling functions



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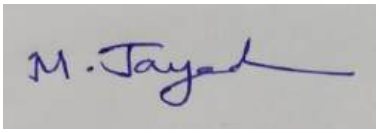
Teaching Plan No.-5

Name of the topic	**Functions in C**
Hours required	6
Learning Objectives	Understand the syntax and components of a C function Understand how to invoke a function Learn different ways to pass arguments to functions, including call by value and call by reference. Understand the concept of variable scope
Previous Knowledge to be reminded	Algorithms and flowcharts, structure of C
Eaxmples/Illustrations	Demonstrate Call by Value and Call by Reference mechanism Find GCD of Two numbers using Recursion
Additional Inputs	
Teaching Aids used	PPT, LCD Projector, Computer Lab
References cited	E. Balagurusamy, "Programming in ANSI C", Tata McGraw Hill, 6th Edn, ISBN-13: 978- 1- 25- 90046-2
Student Activity planned after teaching	Online Quiz,Pair Programming Exercise on Functions
Activity planned outside the Class room, if any	
Any other activity	
Topic Synopsis	Function Prototype, definition and calling. Return statement. Nesting of functions. Categories of functions. Recursion, Parameter Passing by address & by value. Local and Global variables. **Storage classes**: automatic, external, static and register.



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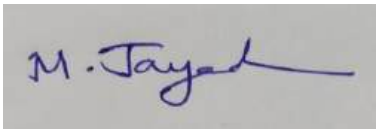
Teaching Plan No.-6

Name of the topic	**Pointers in C**
Hours required	6
Learning Objectives	Apply the derived data types in program solutions Learn how to declare, initialize, and access elements of an array using indexing. Learn how to declare, initialize, and access characters in a string using indexing.
Previous Knowledge to be reminded	Algorithms and flowcharts, structure of C
Eaxmples/Illustrations	Perform various operations using pointers
Additional Inputs	
Teaching Aids used	PPT, LCD Projector, Computer Lab
References cited	E. Balagurusamy, "Programming in ANSI C", Tata McGraw Hill, 6th Edn, ISBN-13: 978- 1- 25- 90046-2
Student Activity planned after teaching	Online Quiz, Programming practice in computer lab.
Activity planned outside the Class room, if any	
Any other activity	
Topic Synopsis	**Pointers:** Pointer data type, Pointer declaration, initialization, accessing values using pointers. Pointer arithmetic. Pointers and arrays, pointers and functions.



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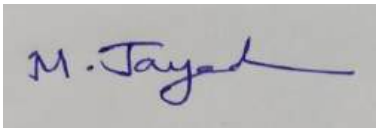
Teaching Plan No.-7

Name of the topic	**Dynamic Memory Management in C**
Hours required	6
Learning Objectives	Understand the concept of dynamic memory allocation and its advantages over static memory allocation. Learn malloc, calloc, realloc, and free functions and their usage.
Previous Knowledge to be reminded	Arrays,functions and pointers in C
Eaxmples/Illustrations	Usage of dynamic memory management functins.
Additional Inputs	
Teaching Aids used	PPT, LCD Projector, Computer Lab
References cited	E. Balagurusamy, "Programming in ANSI C", Tata McGraw Hill, 6th Edn, ISBN-13: 978- 1- 25- 90046-2
Student Activity planned after teaching	Online Quiz, Programming practice in computer lab.
Activity planned outside the Class room, if any	
Any other activity	
Topic Synopsis	**Dynamic Memory Management:** Introduction, Functions- malloc, calloc, realloc, free



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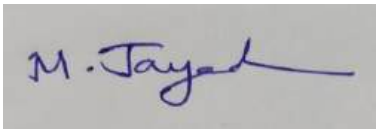
Teaching Plan No.-8

Name of the topic	**Structures and Unions in C**
Hours required	6
Learning Objectives	Define structures and unions in C programming Differentiate between structures and unions Access and modify members of structures & unions
Previous Knowledge to be reminded	Arrays,functions and pointers in C
Eaxmples/Illustrations	Read data of 10 employees with a structure
Additional Inputs	
Teaching Aids used	PPT, LCD Projector, Computer Lab
References cited	E. Balagurusamy, "Programming in ANSI C", Tata McGraw Hill, 6th Edn, ISBN-13: 978- 1- 25- 90046-2
Student Activity planned after teaching	Online Quiz, Appropriate use of structures and nested structures.
Activity planned outside the Class room, if any	
Any other activity	
Topic Synopsis	**Structures:** Basics of structure, structure members, accessing structure members, nested structures, array of structures, structure and functions, structures and pointers. **Unions:** Union definition; difference between Structures and Unions.



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COMMISSONERATE OF COLLEGIATE EDUCATION,

GOVT. DEGREE COLLEGE

RAJAMPET, KADAPA. Dt.

(Affiliated to Yogi Vemana University, Kadapa.)

TEACHING PLAN

ACADEMIC YEAR 2024-2025

Name of the Department : Economics

NAME OF THE LECTURER : V. Malathi

Course / Group : B.A

Subject / Page : Economics - All

Sl.No.	Subject	Paper	Page No.
1			
2			
3			
4			

Teaching Plan / Lesson No. Banking Finance service

Name of the Topic	Principles of Banking and Indian Banking
Hours required	12 - III BA.
Learning Objectives	Explain the concept and essentials banking and financial services.
Previous knowledge to be reminded	How to banks work.
Examples / Illustrations	RBI, Financial literacy.
Additional inputs	Anti-money laundering
Teaching Aids used	Black board & Chalk
References cited	Academic texet books.
Student Activity Planned after the teaching	Prepar the questions
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* → Meaning of Banking - Principles → Functions of banking → Stroutiure of Indian Banking System → Regulations of Banking in India → Role of RBI in Banking → Antimoney Laundering

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Teaching Plan / Lesson No. 2 Banking Financial Literservice

Name of the Topic	Deposits, Loans and Digital Banking
Hours required	12
Learning Objectives	Identify and analyse the employment opportunities related to banks and other Financial institutions.
Previous knowledge to be reminded	Discuss the Banks types.
Examples / Illustrations	cheque, Bill of Exchange
Additional inputs	Debit card, credit card. netBanking
Teaching Aids used	Black board & chailk.
References cited	Academic text books.
Student Activity Planned after the teaching	Assignments
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* → Bank Deposit Account types. → Banking customer types → KYC Norms - Negotiable Instrument → E-banking facilities. → core banking solutions.

V. Mahalakshmi

Signature of the Lecturer

Teaching Plan / Lesson No: Banking financial service.

Name of the Topic	Banking correspondents and common service.
Hours required	15 III BA
Learning Objectives	Apply the concepts to banking and financial opportunities and formulate ideas related to them.
Previous knowledge to be reminded	Discuss the negotiable Instrument
Examples / Illustrations	other Banking services.
Additional inputs	Common service centre.
Teaching Aids used	Black board & chalk.
References cited	Academic text books.
Student Activity Planned after the teaching	seminars.
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* → Activities of of Banking Correspondent → Common services centre. → case study of Banking Correspondents with any Bank.

V. Mahita

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Teaching Plan / Lesson No. 4.

Name of the Topic	Financial services of NBFIs
Hours required	15 III BA
Learning Objectives	Demonstrate practical skills to enable them to get employment in banks and other Financial institutions.
Previous knowledge to be reminded	Discuss about the Non Banking Financial Institution.
Examples / Illustrations	Concept of EMI
Additional inputs	Chit Funds.
Teaching Aids used	Black board and chalk.
References cited	Academic text books.
Student Activity Planned after the teaching	Group discussion.
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* → Non banking Financial Institutions → Concept of EMI → Micro Finance → Chit funds → Problems and challenges of NBFIs in India.

V. Mehta

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Teaching Plan / Lesson No. 5

Name of the Topic	Work with Finance service company
Hours required	1.5 - III BA
Learning Objectives	Business correspondents of Common service centers or marketing Agents.
Previous knowledge to be reminded	Discuss the FSC.
Examples / Illustrations	Customer of FSC
Additional inputs	FSC services in local Area.
Teaching Aids used	Black board & Chalk.
References cited	Academic text books.
Student Activity Planned after the teaching	Quiz.
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* → Types of loans by Finance service company → Customer of FSC → Case study of a FSC's services in local Area.

V. Mahesh

Signature of the Lecturer

Teaching Plan / Lesson No. 1 Insurance Service

Name of the Topic	Insurance concept and Principles
Hours required	15. - III BA
Learning Objectives	Explain the concept and. Principles of insurance service and functioning of insurance Agencies.
Previous knowledge to be reminded	. Discuss the insurance
Examples / Illustrations	Risk and uncertainity
Additional inputs	IRDA
Teaching Aids used	Black board & chalk.
References cited	Academic text books.
Student Activity Planned after the teaching	Seminar
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* → Risk management → concept - Importance and. Types of insurance. → Role of IRDA → scope for Insurance Business in India.

V. mehta

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Teaching Plan / Lesson No. 2 Insurance service

Name of the topic	Life Insurance and Products
Hours required	15 - III BA
Learning Objectives	Identify and analyse the opportunities related Insurance
Previous knowledge to be reminded	Risk classification.
Examples / Illustrations	medical Examiner.
Additional inputs	Group Policies.
Teaching Aids used	Black board & chalk.
References cited	Academic text books.
Student Activity Planned after the teaching	Assignment
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* → Life Insurance Nature & Features → Health Insurance → major General Insurance companies. → Features.

V. Mulati

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Teaching Plan / Lesson No. 3 Insurance servic

Name of the Topic	General and Health Insurance and Products
Hours required	12 - III BA
Learning Objectives	Apply the concepts and Principles of Insurance to build a career in Insurance service.
Previous knowledge to be reminded	Discuss the life Insurance.
Examples / Illustrations	Major Health Insurance.
Additional inputs	surveyor
Teaching Aids used	Black board & chalk.
References cited	Academic text books.
Student Activity Planned after the teaching	Group Discussion.
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* → General Insurance → Importance - types. - Features → surveyor. → Health Insurance → Policies and their features

V. Malathi

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Teaching Plan / Lesson No. 4. Insurance service

Name of the Topic	Practicing as an Insurance Agent
Hours required	15 III BA
Learning Objectives	Demonstrate practical skills to enable them to start insurance.
Previous knowledge to be reminded	Discuss the Health Insurance
Examples / Illustrations	Premium Payment. Assignment
Additional inputs	surrender of Policy.
Teaching Aids used	Black board & chalk.
References cited	Academic text book.
Student Activity Planned after the teaching	Debat.
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* → Insurance contract and Terms of Insurance policy → Procedure to issue a policy → Policy lapse and Revival. → Policy claim

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Signature of the Lecturer

Teaching Plan / Lesson No. 5 Insurance services

Name of the Topic	Understanding the customer and case
Hours required	15 - III BA
Learning Objectives	earn wage employment in it.
Previous knowledge to be reminded	Practicing as an Insurance Agent
Examples / Illustrations	Grievance of the customer
Additional inputs	Ethical Behaviour in Insurance
Teaching Aids used	Black board & chalk
References cited	Academic text books.
Student Activity Planned after the teaching	
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* → Insurance customer and categories → understanding customer mindset and satisfaction → moral Hazard → Discuss two different case studies.

V. Mahesh

Signature of the Lecturer

Teaching Plan / Lesson No. 1 Macro Economics

Name of the Topic	Introduction to macro Economics
Hours required	15 - II BA
Learning Objectives	Explain the functioning a macro economy with inter-linkages
Previous knowledge to be reminded	Introduce the macro Economics
Examples / Illustrations	Stock and Flow.
Additional inputs	National Income.
Teaching Aids used	Black board & Chalk.
References cited	Academic text books.
Student Activity Planned after the teaching	Assignment
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* → Macroeconomics - variables → Circular Flow of Income → National income → Measurements and Difficulties.

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Teaching Plan / Lesson No. 2. Macro Economics

Name of the Topic	Theories of Employment
Hours required	12 - II BA
Learning Objectives	Analyse the classical and Keynes theories of employment
Previous knowledge to be reminded	macro economics Introduction
Examples / Illustrations	Wage - Price Flexibility
Additional inputs	Multiplier and Accelerator.
Teaching Aids used	Black board & Chalk.
References cited	Academin text books
Student Activity Planned after the teaching	· Seminars
Activity planned outside the class room, if any	
Any other activity	-
Topic Synopsis	*(Continue on the reverse side if needed)* → classical theory of Employment → Consuption → Investrent. → Keynesian theory of Employment

V. multi

Signature of the Lecturer

Teaching Plan / Lesson No. 3 MACRO ECONOMICS

Name of the Topic	Money and Banking
Hours required	12 - IV BA
Learning Objectives	Explain the importance of money and banking along with their functions.
Previous knowledge to be reminded	Consumption and Investment
Examples / Illustrations	RBI & NBFCs
Additional inputs	monetary Policy
Teaching Aids used	Black board & chailk.
References cited	Academic text books
Student Activity Planned after the teaching	Group Discussion.
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* → money - RBI classification → Theories of money → Banking → Central Bank. → monetary Policy

V. malathi

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Teaching Plan / Lesson No. 4 Macro Economics

Name of the Topic	Inflation and Trade cycles.
Hours required	12 - II BA
Learning Objectives	Analyse causes and evaluate the measures to control inflation and Trade cycles. in the economy
Previous knowledge to be reminded	money and banking
Examples / Illustrations	Inflation and Unemployment
Additional inputs	Trade cycles.
Teaching Aids used	Black board & chalk
References cited	Academic Text books.
Student Activity Planned after the teaching	Debat
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* → Inflation .- Importance → Inflation vs Unemployment → Trade cycles. → causes and conseavences and controlling of Inflation

V. Mahesh

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Teaching Plan / Lesson No. 5. Macro Economics

Name of the Topic	Financial market
Hours required	12 II BA
Learning Objectives	Evaluate the macro economic Policy targets.
Previous knowledge to be reminded	Inflation and Trade cycles.
Examples / Illustrations	Stock market
Additional inputs	IS-LM model.
Teaching Aids used	Black board & Chalk
References cited	Academic Text books.
Student Activity Planned after the teaching	
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* ⇒ Financial Markets ⇒ Stock market ⇒ Macro Economic Policy ⇒ neo-classical and Keynesian synthesis.

V. Malathi

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Economic Thought &

Teaching Plan / Lesson No.1 · Political Economy

Name of the Topic	Classical and socialist schools.
Hours required	12 II BA
Learning Objectives	Explain the economic thought of pre-classical, classical and socialist
Previous knowledge to be reminded	Introduction to Economic thought
Examples / Illustrations	classical school.
Additional inputs	socialist shools
Teaching Aids used	Black board & Chalk
References cited	Academic Text books
Student Activity Planned after the teaching	Assignments
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* → pre-classical school. → classical school-1- Adam smith → classical schol-2- Jeremy benthem → socialist school - Karl marxs → mercantilism, Physiocracy

V. malathi

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Teaching Plan / Lesson No. 2

Name of the Topic	neo - classical and keynesian schools
Hours required	10
Learning Objectives	Explain neo-classical keynes and Post-keynesian economic thoughts
Previous knowledge to be reminded	Classical and socialist shools
Examples / Illustrations	Marginal Revolution
Additional inputs	Keynesian school.
Teaching Aids used	Academic text books
References cited	Black board & chailk.
Student Activity Planned after the teaching	seminars
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* → neo classical and marginal revolution school - Alfred marshall → Keynesian schod. - John maynard keynes → new classical school. → new keynesian school.

V. muthu

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Teaching Plan / Lesson No. 3

Name of the Topic	Institutional and behaviourist schools
Hours required	10
Learning Objectives	Analyse the essence of institutional and behaviourists economic thought
Previous knowledge to be reminded	neo - classical schools
Examples / Illustrations	
Additional inputs	behaviourist shools
Teaching Aids used	Black board & chalk
References cited	Academic Text books
Student Activity Planned after the teaching	Group Discussion
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* → classical theory & development → marxian theory of Development → Rostow's stages of Economic Growth → neo - classical models of Economic Growth Harrod - Domar model solow model.

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Teaching Plan / Lesson No. 4 & 5

Name of the Topic	strategies of Economic development
Hours required	12
Learning Objectives	Examine and suggest various developmental strategies suitable to developing countries.
Previous knowledge to be reminded	Theories of Growth and development
Examples / Illustrations	strategyies
Additional inputs	Balanced and unbalanced Growth
Teaching Aids used	Black board and chialk
References cited	Academic texet books
Student Activity Planned after the teaching	Debate.
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* → Capitalist, Socialist and mixed economy → Mahalanobis Strategy. → Endogenous Growth strategy. → Institutions for Economic Development → Role of institutions in Economic → International institutions in Development

V. Malathi

Signature of the Lecturer

Teaching Plan / Lesson No. 1 Public Economics

Name of the Topic	~~Instit~~ Public Finance and market Failure
Hours required	20
Learning Objectives	Basic concepts and principle of Public finance - tax systems.
Previous knowledge to be reminded	Introduction to Public Economics
Examples / Illustrations	Public vs Private Finance
Additional inputs	Club Goods
Teaching Aids used	Black board & chalk.
References cited	Academic Text books.
Student Activity Planned after the teaching	Assignment
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* → Introduction to Public Finance and market Failure → Public Revenue → Public Expenditure → Public Debt and Budget → Fiscal Policy and Fiscal federalism

V. malathi

Signature of the Lecturer

Teaching Plan / Lesson No. Fundamentals of Social Science.

Name of the Topic	what is social science
Hours required	20
Learning Objectives	learn about the nature and importance of social science.
Previous knowledge to be reminded	Introduction to social science
Examples / Illustrations	Natural Science
Additional inputs	Political Economy
Teaching Aids used	Academic text books
References cited	Black board & chalk.
Student Activity Planned after the teaching	
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* → what is Social science. → Political Economy → micro and Macro concepts → Economic Growth and Development

V. Malathi

Signature of the Lecturer

Teaching Plan / Lesson No. Prospectives on Indian society

Name of the Topic	Man in society
Hours required	20
Learning Objectives	Learn about the signification of human behavior and social dynamics
Previous knowledge to be reminded	Introduction Indian society
Examples / Illustrations	Ethical concerns
Additional inputs	Social Groups
Teaching Aids used	Black board & chalk
References cited	Academic text books
Student Activity Planned after the teaching	Seminar
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* → man in society → Indian Economy → RBI - commercial Banks → Economic Reforms → liberalization.

V. Mutti

Signature of the Lecturer

Sem - II

Teaching Plan / Lesson No. 1 Mathematical methods For Economics

Name of the Topic	Sets and Functions
Hours required	20
Learning Objectives	Explain the basics of sets, Functions and their graphical representation
Previous knowledge to be reminded	Introduction to mathematical Economics
Examples / Illustrations	Graphical Presentation.
Additional inputs	sets
Teaching Aids used	Black board & chalk
References cited	Academic Text books
Student Activity Planned after the teaching	Assignments
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* → Role of mathematical methods in Economics → sets Types operations. → Functions - meaning Types Graphical Representation, Applications in Economics

V. mukti

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Teaching Plan / Lesson No. 2.

Name of the Topic	Differential Calculus
Hours required	20
Learning Objectives	Learn the rules of differentiation and apply the same to economic problems.
Previous knowledge to be reminded	Explain the sets.
Examples / Illustrations	Limits of Functions
Additional inputs	Derivative of a Functions
Teaching Aids used	Black board & Chalk.
References cited	Academic text books.
Student Activity Planned after the teaching	Seminar.
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* → Limits of Functions. → Derivative of Functions → First and second Derivatives and their Interpretations. → Applications of Derivatives in Economics.

V. mulu

Signature of the Lecturer

Teaching Plan / Lesson No. 3

Name of the Topic	optimization problems and their Application
Hours required	2.0
Learning Objectives	learn and use maxima and minima to optimization problems in Economics
Previous knowledge to be reminded	Discuss the calculus
Examples / Illustrations	maxima and minima
Additional inputs	Optimization in mathematics
Teaching Aids used	Black board & chalk
References cited	Academic text books.
Student Activity Planned after the teaching	Practice problems.
Activity planned outside the class room, if any	Group Discussion.
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* ⇒ Concept of optimization in mathematics ⇒ unconstrained & constrained optimization. ⇒ The method of lagrange multipliers ⇒ some applications of Optimization in Economics

V. mukta

Signature of the Lecturer

Teaching Plan / Lesson No. 4.

Name of the Topic	Integrations and Linear Programming
Hours required	20
Learning Objectives	Apply rules of integration to estimate the size of 'consumers and producer's surplus
Previous knowledge to be reminded	Discuss the optimization Problems.
Examples / Illustrations	simple Rules of Integration
Additional inputs	Linear Programming
Teaching Aids used	Black board & Chalk.
References cited	Academic text books.
Student Activity Planned after the teaching	Group Discussion.
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* ⇒ Concept of integration. ⇒ Application of Integration in Economics ⇒ Linear Programming ⇒ Applications of linear Programming in Economics

V. rubis

Signature of the Lecturer

Teaching Plan / Lesson No. 5

Name of the Topic	Matries and peterminants
Hours required	25
Learning Objectives	solve the econamic problems Through the application of the Matrix Theory.
Previous knowledge to be reminded	Discus Integrations.
Examples / Illustrations	Addition, multiplication.
Additional inputs	matrix Theory
Teaching Aids used	Black board & chalk.
References cited	Academic Text books
Student Activity Planned after the teaching	study Project
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* ⇒ matrix ⇒ determinants Inverse of a matrix ⇒ solution to the system of simultaneous Equations ⇒ sore applications of matrix Theory.

V. ruhtis

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Sem - II

Teaching Plan / Lesson No. 1. Micro Economics

Name of the Topic	Introduction to Economics.
Hours required	20
Learning Objectives	Explain what is an economy economics and differentiate between micro and macro Economics
Previous knowledge to be reminded	Introduction to Economics
Examples / Illustrations	Positive and Normative
Additional inputs	Scarcity and choice
Teaching Aids used	Black board & chalk.
References cited	Academic text books
Student Activity Planned after the teaching	Assignments
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* ⇒ Economic activities and Economic system. ⇒ Fundamental Problems of Economics ⇒ meaning and scope of micro economics ⇒ principles of microeconomics

V. ruluts

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Teaching Plan / Lesson No. 2

Name of the Topic	Demand and Consumption.
Hours required	20
Learning Objectives	Analyses the demand of a Product and estimate elasticity
Previous knowledge to be reminded	Introduction to micro Economics
Examples / Illustrations	Price, Income, cross
Additional inputs	Utility, Budget
Teaching Aids used	Black board and Chalk.
References cited	· Academic · Text books
Student Activity Planned after the teaching	Seminars
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* → Demand - meaning - Factors → Elasticity of Demand → utility, MRS → Indifference curves.

M Mahesh

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Teaching Plan / Lesson No. 3

Name of the Topic	Production and supply
Hours required	20
Learning Objectives	Estimate production function and understand its application
Previous knowledge to be reminded	Discuss the demand
Examples / Illustrations	cost and Revenue
Additional inputs	supply
Teaching Aids used	Black board & chalk.
References cited	Academic text books
Student Activity Planned after the teaching	Group Discussion.
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* Firm - Production. → Production. - Revenue → Production - Functions - Types → Law of variable Proportion. → Supply - Elasticity

V. Mahalakshmi

Signature of the Lecturer

Teaching Plan / Lesson No. 14.

Name of the Topic	Markets
Hours required	20
Learning Objectives	Analyze Functioning of different Markets and their differentiations.
Previous knowledge to be reminded	~~Dis~~ Production and supply
Examples / Illustrations	monopoly, oligopoly
Additional inputs	Kinked Demand.
Teaching Aids used	Black board & chalk.
References cited	Academic Text books.
Student Activity Planned after the teaching	Debat
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* → market - Perfect market → monopoly - Equilibrium. → oligopoly - Types. → Kinked demand.

V. Ramulu

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Teaching Plan / Lesson No. 5

Name of the Topic	Distribution
Hours required	20
Learning Objectives	Examine the determination of rent, wage, interest and Profit
Previous knowledge to be reminded	Discuss the markets
Examples / Illustrations	Rent, wages
Additional inputs	Risk and uncertainty
Teaching Aids used	Academic text books.
References cited	black board & chalk.
Student Activity Planned after the teaching	
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* → Matix - concept, Types, operations → determinants, Inverse of a matix → solution to the system of simultaneous Equations → some applications of matrix

V. mhte

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Teaching Plan / Lesson No. 1. International Economi

Name of the Topic	Introduction to Theory International Trade
Hours required	20
Learning Objectives	Explain the importance and concept of International Trade
Previous knowledge to be reminded	Introduce the International Economics
Examples / Illustrations	Free Trade, Restricted Trade
Additional inputs	Costs, multiplier
Teaching Aids used	Black board & chalk.
References cited	Academic text books
Student Activity Planned after the teaching	Assignments
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* → International Trade → offer curves → Terms of Trade → opportunity costs. in International Trade

V. muluti

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Teaching Plan / Lesson No. 2

Name of the Topic	Theories of International Trade
Hours required	20
Learning Objectives	Make a critical analysis of the Theories of International trade
Previous knowledge to be reminded	Discuss the introduction to Theory of International trade
Examples / Illustrations	classical Trade.
Additional inputs	other trade Theories.
Teaching Aids used	Black board & chalk.
References cited	Academic Text books
Student Activity Planned after the teaching	seminars
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* → classical Trade theories → modern Trade Theories → other

V. ruluto

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Teaching Plan / Lesson No. 3

Name of the Topic	Exchange Rates and BOP mechanism
Hours required	15
Learning Objectives	Explain changes in the methods of determining Exchange rates
Previous knowledge to be reminded	Discuss the International Trade theories.
Examples / Illustrations	Exchange Rates.
Additional inputs	Purchasing Power Parity
Teaching Aids used	Black board & Chalk
References cited	Academic text books
Student Activity Planned after the teaching	Group discussions
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* → Exchange Rates - Types, Changes → Factors and ~~determination~~ determination of Exchange Rate. → Balance of payments → BOP Adjustment mechanism.

V. Malathi

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Teaching Plan / Lesson No. 4.

Name of the Topic	Trade Barriers and International.
Hours required	15
Learning Objectives	Analyse the effects of Trade Barriers and Protectionism in International Trade.
Previous knowledge to be reminded	Discuss the Exchange Rates.
Examples / Illustrations	Tariffs, quotas
Additional inputs	Anti Dumping
Teaching Aids used	Black board & chalk
References cited	Academic text books.
Student Activity Planned after the teaching	Quiz
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* → Trade Barriers → optimum Tariff → Role of international Finace in trade

V. malathi

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Teaching Plan / Lesson No. 5

Name of the Topic	multilateralism, Regionalism
Hours required	15
Learning Objectives	Analyse the effects of Trade Barriers and protectionism in International Trade.
Previous knowledge to be reminded	Discuss about the Trade Barriers. and International Finance
Examples / Illustrations	Customs union, common market
Additional inputs	Trade volume Foreign Trade policy
Teaching Aids used	Black board & Chalk.
References cited	Academic text books
Student Activity Planned after the teaching	Field Trip.
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* → multilateralism → Forms of Economic cooperation → India's International Trade → India's important Trade Agreements.

V. mehta

Signature of the Lecturer

Teaching Plan / Lesson No. 1. statistical methods

Name of the Topic	Introduction to statistics
Hours required	20
Learning Objectives	Understand the nature of statistics and able to collect data using questionnaire.
Previous knowledge to be reminded	Introduction to statistics
Examples / Illustrations	Primary data. secondary data
Additional inputs	collection of data.
Teaching Aids used	Black board & chalk.
References cited	Academic text books.
Student Activity Planned after the teaching	Assignments
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* → nature and definition of statistics → primary and secondary data. → census and sampling techniques → schedule and questionnaire → Applications in economics.

V. Malathi

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Teaching Plan / Lesson No. 2

Name of the Topic	Diagrammatic Analysis
Hours required	20
Learning Objectives	Draws critical diagrams and graphs for presentation of data
Previous knowledge to be reminded	Introduction to Diagrammatic Analysis.
Examples / Illustrations	Graphical Presentation.
Additional inputs	Line bar, Pie Diagrams.
Teaching Aids used	Black board & chalk.
References cited	Academic text books.
Student Activity Planned after the teaching	Seminars.
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* ⇒ Data meaning & Types. ⇒ Tabulation, Graphical Presentation of data. ⇒ Diagrammatic Presentation of data. ⇒ MS Excel for diagrammatic Analysis.

V. Malatha

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Teaching Plan / Lesson No. 3

Name of the Topic	measures of central Tendency
Hours required	1S
Learning Objectives	Calculates and Analyses averages and dispersions using given data and information.
Previous knowledge to be reminded	Discuss the Diagrammatic Analysis.
Examples / Illustrations	Averages
Additional inputs	Dispersions.
Teaching Aids used	Black board & chailk
References cited	Academic text books
Student Activity Planned after the teaching	Group Discussions.
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* → Averages - Arithmetic, Media, Mode → Dispersion - Range, Deviations → MS EXCEL for measures of central Tendency and Dispersion.

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Teaching Plan / Lesson No. 4.

Name of the Topic	correlation and Regression.
Hours required	15.
Learning Objectives	Explains the uses of correlation and regression Analysis, time series and index numbers.
Previous knowledge to be reminded	Discuss the central Tendency
Examples / Illustrations	correlation
Additional inputs	Regression.
Teaching Aids used	Black board & chalk.
References cited	Academic text books
Student Activity Planned after the teaching	Quiz
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* → correlation - Types - Use → Regression - Uses, - Equations. → MS Excel for correlation. and Regression

V. mehta

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Teaching Plan / Lesson No. 5

Name of the Topic	Time Series and Index numbers
Hours required	15
Learning Objectives	Calculate Index numbers.
Previous knowledge to be reminded	Discuss the correlation and Regression.
Examples / Illustrations	moveing Averages.
Additional inputs	Fisher's Ideal Index Numbers
Teaching Aids used	Black board & chalk
References cited	Academic text books
Student Activity Planned after the teaching	Field Trip.
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* → Time series - components - measurement → Index Numbers - → laspeyer's Paasche's and Fisher's Ideal Index → Uses and Limitations of Index numbers

V. muthu

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Teaching Plan / Lesson No. 1. India and AP Economy

Name of the Topic	Basic Features. Human Development
Hours required	20
Learning Objectives	Explain the basic characteristics structural changes, planning and human development in Indian economy
Previous knowledge to be reminded	Introduction to the India and AP economy
Examples / Illustrations	Planning commission.
Additional inputs	Human development Index.
Teaching Aids used	Black board & chalk
References cited	Academic teset books
Student Activity Planned after the teaching	Assignments
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* → Basic characteristics of Indian economy → Economic development since Independence → Planning commission → Trends in Human development Index in India

V. muluti

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Teaching Plan / Lesson No. 2

Name of the Topic	National Income, Demography
Hours required	15
Learning Objectives	Analyse the changes in incomes, demography and the developmental issues.
Previous knowledge to be reminded	Discuss the Planning and Human development in India.
Examples / Illustrations	₹ National Income
Additional inputs	Poverty
Teaching Aids used	Black board & chalk
References cited	Academic text books.
Student Activity Planned after the teaching	Group Discussions.
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* → Trends in National Income → Poverty and Inequalities → Various schemes of employment generation and eradication of Poverty → Issues in Rural and urban Development

V. [signature]

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Teaching Plan / Lesson No. 3

Name of the Topic	Agricultural and Industrial development
Hours required	15
Learning Objectives	Examine the components of agricultural and Industrial sectors and their performance
Previous knowledge to be reminded	Discuss the national Income Demography
Examples / Illustrations	Indian Agriculture
Additional inputs	start-up, stand-up
Teaching Aids used	Black board & Chalk
References cited	Academic text books
Student Activity Planned after the teaching	quiz
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* → Indian Agriculture → Agricultural credit → Indian Industry → Industrial development Programmes.

V. mubeen

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Teaching Plan / Lesson No. 4.

Name of the Topic	Indian Public Finance
Hours required	15
Learning Objectives	Examine the issues in public finance in terms of taxes revenue deficits and finance commission.
Previous knowledge to be reminded	Discuss about Agricultural and Industrial development
Examples / Illustrations	Indian tax system
Additional inputs	Public Expenditure.
Teaching Aids used	Black board & chalk
References cited	Academic text books.
Student Activity Planned after the teaching	seminars
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* → Indian tax system and Recent changes. → centre, state Financial relations → Fiscal policy → state and Issues in Public debt and Budget deficit

V. mabutha

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Teaching Plan / Lesson No. 5

Name of the Topic	Andhra Pradesh Economy
Hours required	15
Learning Objectives	Analyse the issues in Andhra Pradesh economy related to Agriculture, Industry and welfare Prog
Previous knowledge to be reminded	Discuss about Indian Public Finance
Examples / Illustrations	AP economy bifurcations
Additional inputs	Skill Development Initiatives
Teaching Aids used	Black board & Chalk
References cited	Academic text books.
Student Activity Planned after the teaching	Field Trips
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* → Basic characteristics of AP economy after bifurcations in 2014 → challenges in Industrial development → " in Agriculture and Rural development → social welfare Programmes

V. Malleswari

Signature of the Lecturer

Government Degree College
Rajampet Annamayya Dist.
(Affiliated to Yogi Vemana University, Kadapa)

TEACHING PLAN
Academic Year: 2024-2025

Department of Computer Science

Name of the Lecturer: P. Naresh Behera

Subject: Computer Science

Sl. No.	Paper	Semester
1	Object Oriented Programming Using Java	III
2	Computer Organization	III
3	Web Interface Designing Technologies	V
4	Web Applications Development using PHP& MYSQL	V
5	Digital Logic Design	II
6	Object Oriented Software Engineering	IV
7	Data Communications and Computer Networks	IV

Teaching Notes

For

Object Oriented Programming Using Java

Teaching Plan No.-1

Name of the topic	**OOPs Concepts and Java Programming**
Hours required	12
Learning Objectives	● Understand basic OOPs concepts ● Familiarize with Java environment and program structure ● Learn data types, variables, and control structures
Previous Knowledge to be reminded	Programming logic, Variables, Loops in C or Python
Eaxmples/Illustrations	Comparison table: C vs Java; Hello World program
Additional Inputs	Importance of platform independence in Java
Teaching Aids used	PPT, Java IDE, Code examples
References cited	Java The Complete Reference by Herbert Schildt
Student Activity planned after teaching	Quiz on Object-Oriented Programming Concepts and Java Constructs
Activity planned outside the Class room, if any	Install JDK & write a basic program at home
Any other activity	Peer explanation of procedural vs OOP
Topic Synopsis	● Introduction to Object-Oriented concepts, ● proceduraland object-oriented programming paradigm ● Java programming: An Overview of Java, ● Java Environment, ● Data types, ● Variables, constants, scope and life time of variables, ● operators, ● type conversion and casting, ● Accepting Input from the Keyboard, ● Reading Input with Java.util.Scanner Class,Displaying Output with System.out.printf(), Displaying Formatted Output with String.format(), ● Control Statements .

P.N. Behera

Signature of the Lecturer

Teaching Plan No.-2

Name of the topic	Arrays, Command Line Args, String methods, Class design, Constructors
Hours required	5 hours
Learning Objectives	Use arrays/strings, create classes/objects, overload constructors
Previous Knowledge	Array handling in C, structure creation
Examples/Illustrations	Array reversal, palindrome check, Rectangle class
Additional Inputs	Use of this keyword in chaining constructors
Teaching Aids used	JDK, PPT, LCD Projector
References cited	Balagurusamy – Programming in Java
Student Activity planned	Assignments: Create class with constructors, print student info
Outside Class Activity	Group task: explain object lifecycle in Java
Any other activity	Code comparison: overloaded vs normal method
Topic Synopsis	Arrays, Command Line Arguments, Strings-String Class Methods Creating Classes, Declaring Objects, Methods, Parameter Passing, Static Fields And Methods, Constructors, And 'This' Keyword, Overloading Methods And Access

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Teaching Plan No.-3

Name of the topic	**Inheritance Hierarchies and Polymorphism**
Hours required	5 hours
Learning Objectives	Implement inheritance, use super, override methods, create abstract classes
Previous Knowledge	Basics of classes and functions
Examples/Illustrations	Animal → Dog hierarchy, abstract Shape class
Additional Inputs	Object slicing and method resolution
Teaching Aids used	BlueJ Software, PPT, LCD Projector
References cited	Java The Complete Reference by Herbert Schildt
Student Activity planned	Lab work on creating class hierarchy with inheritance
Outside Class Activity	Peer-to-peer explanation of overriding
Any other activity	Debug inheritance code with intentional errors
Topic Synopsis	Inheritance hierarchies, super and subclasses, member access rules, ‘ super’ keyword, preventing inheritance: final classes and methods, the object class and its methods; Polymorphism: Dynamic binding, method overriding, abstract classes and methods;

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Teaching Plan No.-4

Name of the topic	**Interfaces vs Abstract Classes, Packages, Exception Handling**
Hours required	12 hours
Learning Objectives	Implement interfaces, create packages, handle exceptions robustly
Previous Knowledge	Inheritance, method overriding
Examples/Illustrations	Interface Animal with Dog and Cat; Custom Exception: InsufficientFunds
Additional Inputs	Real-world interface analogy (like USB)
Teaching Aids used	Java IDE, Flowcharts of try-catch execution
References cited	Java The Complete Reference by Herbert Schildt
Student Activity planned	Create a package & custom exception
Outside Class Activity	Debug exception-throwing code
Any other activity	Create "Exception Tree" chart
Topic Synopsis	Interfaces Vs Abstract Classes, Defining An Interface, Implement Interfaces, Accessing Implementations Through Interface References, Extending Interface; Packages: Defining, Creating And Accessing a Package, Understanding Classpath, Importing Packages. Exception Handling: Benefits Of Exception Handling, The Classification Of Exceptions, Exception Hierarchy, Checked Exceptions And Unchecked Exceptions, Usage Of Try, Catch, Throw, Throws And Finally, Rethrowing Exceptions, Exception Specification, Built In Exceptions, Creating Own Exceptionsub Classes

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Teaching Plan No.-5

Name of the topic	**Multithreading**
Hours required	6
Learning Objectives	● Understand Thread and Multithreading ● Apply interthread communication
Previous Knowledge to be reminded	- Concept of methods and constructors - Exception handling basics
Eaxmples/Illustrations	Creating threads by extending Thread class and implementing Runnable interface
Additional Inputs	Discuss real-world applications: web servers, game loops, background tasks in GUIs
Teaching Aids used	Java IDE, PPT, LCD Projector, Computer Lab
References cited	Java The Complete Reference by Herbert Schild
Student Activity planned after teaching	Create a thread using both methods
Activity planned outside the Class room, if any	Discussion forum or group chat to share threading use cases
Any other activity	
Topic Synopsis	Differences between multiple processes and multiple threads, thread states, thread life cycle, creating threads, interrupting threads, thread priorities, synchronizing threads, inter thread communication

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Teaching Plan No.-6

Name of the topic	**Stream based I/O (java.io)**
Hours required	6
Learning Objectives	● Understand Streams ● Reading and Writing Files
Previous Knowledge to be reminded	Exception handling (especially try-catch)
Eaxmples/Illustrations	Reading from a file using FileInputStream, BufferedReader - Writing to a file using FileOutputStream, PrintWriter
Additional Inputs	- Discuss differences between byte and character streams
Teaching Aids used	Java IDE, PPT, LCD Projector, Computer Lab
References cited	Java The Complete Reference by Herbert Schild
Student Activity planned after teaching	Lab programs on Reading and Writing Files
Activity planned outside the Class room, if any	Quiz on stream types, classes, and file handling methods
Any other activity	Build a simple file copy utility using Java I/O
Topic Synopsis	The Stream classes-Byte streams and Character streams, Reading console Input and Writing Console Output, File class, Reading and writing Files, The Console class, Serialization

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Teaching Plan No.-7

Name of the topic	**GUI Programming with Swing**
Hours required	6
Learning Objectives	● Understand GUI components and Layout Managers ● Create GUI screens
Previous Knowledge to be reminded	Awareness of Java AWT
Eaxmples/Illustrations	Simple login form using JLabel, JTextField, JPasswordField, and JButton
Additional Inputs	Emphasize the Swing MVC architecture
Teaching Aids used	Java IDE, PPT, LCD Projector, Computer Lab
References cited	Java The Complete Reference by Herbert Schild
Student Activity planned after teaching	Create GUI applications: Student registration form
Activity planned outside the Class room, if any	Quiz on Swing components, event handling, and layout managers
Any other activity	
Topic Synopsis	GUI Programming with Swing- Introduction, MVC architecture, components, containers. Understanding Layout Managers - Flow Layout, Border Layout, Grid Layout, Card Layout, GridBag Layout.

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Teaching Plan No.-8

Name of the topic	**Event Handling**
Hours required	6
Learning Objectives	● Understand Mouse and Keyboard events ● Apply Event handling mechanisms
Previous Knowledge to be reminded	Java GUI basics (Swing components) Introduction to interfaces
Eaxmples/Illustrations	- MouseListener and MouseMotionListener for mouse events - KeyListener for keyboard events
Additional Inputs	Emphasize how events are propagated in GUI frameworks
Teaching Aids used	Java IDE, PPT, LCD Projector, Computer Lab
References cited	Java The Complete Reference by Herbert Schild
Student Activity planned after teaching	Java programs on event handling
Activity planned outside the Class room, if any	Simple projects on swing components and event handling
Any other activity	Create a basic GUI calculator using events and layout managers
Topic Synopsis	The Delegation event model- Events, Event sources, Event Listeners, Event classes, Handling mouse and keyboard events, Adapter classes, Inner classes, Anonymous Inner classes.

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Teaching Notes

For

Computer Organization

Teaching Plan – Unit I

Field	Details
Name of the Unit	Register Transfer Language and Micro Operations; Basic Computer Organization and Design
Hours Required	10 hours
Learning Objectives	- Understand the role of functional units and registers - Perform arithmetic, logic, and shift micro-operations - Understand instruction cycle and instruction types
Previous Knowledge to be Reminded	Basics of binary numbers, Boolean operations
Examples / Illustrations	- Bus transfer diagrams - Register Transfer Notation examples
Teaching Aids Used	PPT, LCD Projector, Whiteboard, Computer-based simulations
References	M. Morris Mano, William Stallings
Student Activity After Teaching	Quiz competition on micro-operations
Activity Outside Class (if any)	Group discussion on instruction cycle
Evaluation Method	Based on quiz speed and accuracy
Topic Synopsis	- Functional units - Register transfer & memory transfers - Micro-operations: arithmetic, logic, shift - Basic computer instruction set, instruction cycle - Register-reference, memory-reference, I/O instructions

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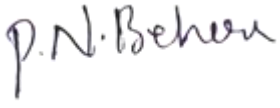
Teaching Plan – Unit II

Field	Details
Name of the Unit	CPU and Micro Programmed Control
Hours Required	7 hours
Learning Objectives	- Describe CPU structure and operations - Learn instruction formats and addressing modes - Design control units using hardwired and microprogramming
Previous Knowledge to be Reminded	Instruction types and execution sequence
Examples / Illustrations	- Flowcharts for address sequencing - Control signal generation examples
Teaching Aids Used	PPT, Simulation tools, Whiteboard
References	M. Morris Mano, Carl Hamacher
Student Activity After Teaching	Instruction Format Puzzle
Activity Outside Class (if any)	Peer-to-peer explanation of addressing modes
Evaluation Method	Based on accuracy and speed in solving the puzzle
Topic Synopsis	- Instruction formats and addressing modes - Control memory and address sequencing - Hardwired control design - Microprogrammed control unit design



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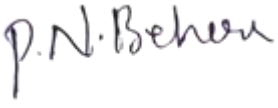
Teaching Plan – Unit III

Field	Details
Name of the Unit	Memory Organization
Hours Required	7 hours
Learning Objectives	- Understand types and hierarchy of memory - Learn concepts of cache memory and associative memory - Discuss various memory mapping techniques
Previous Knowledge to be Reminded	Binary representation of addresses
Examples / Illustrations	- Diagrams of memory hierarchy - Examples of mapping techniques (direct, associative)
Teaching Aids Used	PPT, Charts, Whiteboard
References	William Stallings, Carl Hamacher
Student Activity After Teaching	Design informative memory hierarchy poster
Activity Outside Class (if any)	Present poster to peers
Evaluation Method	Creativity, clarity, and presentation quality
Topic Synopsis	- Memory hierarchy: main, cache, auxiliary, associative memory - Memory mapping techniques and performance comparisons



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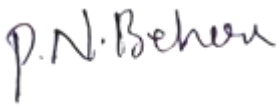
Teaching Plan – Unit IV

Field	Details
Name of the Unit	Input-Output Organization
Hours Required	6 hours
Learning Objectives	- Understand I/O interfaces and modes of data transfer - Learn concepts of interrupts, DMA, and IOP
Previous Knowledge to be Reminded	Basic hardware components and peripherals
Examples / Illustrations	- DMA cycle diagrams - Priority interrupt handling flowchart
Teaching Aids Used	PPT, Animations, Simulators
References	M. Morris Mano, William Stallings
Student Activity After Teaching	I/O Troubleshooting Challenge
Activity Outside Class (if any)	Hands-on session with virtual device I/O
Evaluation Method	Based on problem identification and clarity of solution
Topic Synopsis	- I/O interface, modes of transfer (programmed, interrupt, DMA) - I/O Processor - Peripheral devices and asynchronous data transfer



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Teaching Plan – Unit V

Field	Details
Name of the Unit	Computer Arithmetic and Parallel Processing
Hours Required	6 hours
Learning Objectives	- Understand representation of data and arithmetic operations - Analyze fixed-point and floating-point arithmetic - Explore pipelining and parallel processing concepts
Previous Knowledge to be Reminded	Binary arithmetic, logic gates
Examples / Illustrations	- Booth's multiplication example - Pipeline stages for instruction execution
Teaching Aids Used	PPT, Simulators, Hardware demos
References	Carl Hamacher, William Stallings
Student Activity After Teaching	Case study on parallel processing architectures
Activity Outside Class (if any)	Poster presentation on instruction pipelines
Evaluation Method	Understanding, architecture explanation clarity
Topic Synopsis	- Fixed-point and floating-point operations - Arithmetic algorithms: add, subtract, multiply, divide - Introduction to parallel processing and pipelining - Arithmetic and instruction pipeline stages

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Teaching Notes

For

Paper 6A-Web Interface Designing Technologies

Teaching Plan No.-1

Name of the topic	**HTML Basics**
Hours required	10
Learning Objectives	● Understand the basic structure of an HTML document. ● Learn about common HTML elements and their attributes. ● Create a simple HTML page.
Previous Knowledge to be reminded	File navigation,Text editors, Web browsers
Eaxmples/Illustrations	Web pages and websites
Additional Inputs	
Teaching Aids used	PPT, LCD Projector, Computer Lab
References cited	https://www.w3schools.com/,
Student Activity planned after teaching	Online Quiz
Activity planned outside the Class room, if any	Seminar though PPT on various Look and Feel components
Any other activity	
Topic Synopsis	Introduction to web designing, difference between web applications and desktop applications, introduction to HTML, HTML structure, elements, attributes, headings,paragraphs, styles, colours, HTML formatting, Quotations, Comments, images, tables, lists, blocks and classes, HTML CSS, HTML frames, file paths, layout, symbols, HTML responsive.

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Teaching Plan No.-2

Name of the topic	**HTML forms**
Hours required	3
Learning Objectives	● Understand the basic structure and purpose of HTML forms. ● Identify and use common form elements ● Create simple forms with basic elements. ● Understand the role of the <form> element and its attributes.
Previous Knowledge to be reminded	Text editors, Web browsers
Eaxmples/Illustrations	Registration and login forms
Additional Inputs	
Teaching Aids used	PPT, LCD Projector, Computer Lab
References cited	https://www.w3schools.com/,
Student Activity planned after teaching	Designing a Login form
Activity planned outside the Class room, if any	Code snippets Challenge.
Any other activity	
Topic Synopsis	HTML form elements, input types, input attributes, HTML5, HTMLgraphics, HTML media – video, audio, plug INS, you tube.

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Teaching Plan No.-3

Name of the topic	**HTML API's**
Hours required	2
Learning Objectives	What HTML APIs are, their purpose, and how they allow JavaScript to interact with HTML elements and content dynamically.
Previous Knowledge to be reminded	Text editors, Web browsers
Eaxmples/Illustrations	GPS , MAP
Additional Inputs	
Teaching Aids used	PPT, LCD Projector, Computer Lab
References cited	https://www.w3schools.com/,
Student Activity planned after teaching	Online Quiz
Activity planned outside the Class room, if any	Group discussion on different kinds of web forms
Any other activity	
Topic Synopsis	Geo location, Drag/drop, local storage, HTML SSE.

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Teaching Plan No.-4

Name of the topic	**Cascading Style Sheets(CSS)**
Hours required	5
Learning Objectives	Understand the syntax and structure of CSS Learn Selectors,properties and values Understanding CSS layouts
Previous Knowledge to be reminded	HTML tags and attributes
Eaxmples/Illustrations	Applying color, margin, padding etc..
Additional Inputs	
Teaching Aids used	PPT, LCD Projector, Computer Lab
References cited	https://www.w3schools.com/,
Student Activity planned after teaching	Applying CSS to HTML elements
Activity planned outside the Class room, if any	
Any other activity	
Topic Synopsis	CSS home, introduction, syntax, colours, back ground, borders, margins, padding,height/width, text, fonts, icons, tables, lists, CSS forms, CSS counters, CSS responsive.

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Teaching Plan No.-5

Name of the topic	**Client side Validation using Javascript**
Hours required	10
Learning Objectives	Understand syntax and and data types of Javascript. Learn variables, control statements and functions. Understand DOM manipulation and events Learn Javascript arrays and objects
Previous Knowledge to be reminded	HTML Basics
Eaxmples/Illustrations	Login form validation
Additional Inputs	
Teaching Aids used	PPT, LCD Projector, Computer Lab
References cited	https://www.w3schools.com/,
Student Activity planned after teaching	Online Quiz
Activity planned outside the Class room, if any	demonstration of different web forms and JavaScript validations
Any other activity	
Topic Synopsis	Introduction to JavaScript - What is DHTML, JavaScript, basics, variables, string manipulations, mathematical functions, statements, operators, arrays, functions. Objects in JavaScript - Data and objects in JavaScript, regular expressions, exception handling.

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Teaching Plan No.-6

Name of the topic	**Word press**
Hours required	20
Learning Objectives	Identify key components of a WordPress dashboard (posts, pages, media library, settings, etc.) Navigate through the WordPress admin interface to access different sections and features. Create new blog posts and pages, including adding text, images, and formatting.
Previous Knowledge to be reminded	Web pages and websites
Eaxmples/Illustrations	
Additional Inputs	
Teaching Aids used	PPT, LCD Projector, Computer Lab,XAMPP server
References cited	https://www.w3schools.com/,
Student Activity planned after teaching	Online Quiz , Installing XAMPP,
Activity planned outside the Class room, if any	Creation of Personal website using wordpress
Any other activity	Designing a website using wordpress
Topic Synopsis	Introduction to word press, servers like wamp, bitnami e.tc, installing and configuring word press, understanding admin panel, working with posts and pages, using editor, text formatting with shortcuts, working with media-Adding, editing, deleting media elements, working with widgets, menus. Working with themes-parent and child themes, using featured images, configuring settings, user and user roles and profiles, adding external links, protecting word press website from hackers.

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Teaching Notes

For

Paper 7A-Web Applications Development using PHP & MYSQL

Teaching Plan No.-1

Name of the topic	The Building blocks of PHP
Hours required	10
Learning Objectives	● Understand the basic structure of PHP ● Learn how to declare and use variables ● Understand data types, operators, loops, ● Understand function definition and calling
Previous Knowledge to be reminded	HTML Basics
Eaxmples/Illustrations	Web pages and websites
Additional Inputs	
Teaching Aids used	PPT, LCD Projector, Computer Lab
References cited	https://www.w3schools.com/,
Student Activity planned after teaching	Presentation on various open-source frameworks available in XAMPP model
Activity planned outside the Class room, if any	Online Quiz
Any other activity	
Topic Synopsis	Variables, Data Types, Operators and Expressions, Constants. Switching Flow, Loops, Code Blocks and Browser Output. What is function?, Calling functions, Defining Functions, User-Defined Functions, Variable Scope, Saving state between Function calls with the static statement, more about arguments.

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Teaching Plan No.-2

Name of the topic	**Arrays, Strings & Objects in PHP**
Hours required	10
Learning Objectives	● Learn to create different types of arrays ● Understand different ways to declare strings ● Learn to search for substrings, compare strings, and format strings. ● Understand the concept of a class as a blueprint for creating objects. ● Understand the relationship between classes and objects (instances of classes).
Previous Knowledge to be reminded	Building blocks of PHP
Eaxmples/Illustrations	Array function and string functions
Additional Inputs	
Teaching Aids used	PPT, LCD Projector, Computer Lab
References cited	https://www.w3schools.com/,
Student Activity planned after teaching	Online Quiz, Seminars
Activity planned outside the Class room, if any	PHP program to prepare the student marks list.
Any other activity	
Topic Synopsis	Working with Arrays: What are Arrays? Creating Arrays, Some Array-Related Functions. Working with Objects: Creating Objects, Object Instance Working with Strings, Formatting strings with PHP, Investigating Strings with PHP, Manipulating Strings with PHP, Using Date and Time Functions in PHP.

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Teaching Plan No.-3

Name of the topic	**Working with PHP Forms**
Hours required	10
Learning Objectives	● Learn about different form elements and how to use attributes ● Learn how to handle form submissions in PHP using the $_POST and $_GET superglobals. ● Learn how to handle file uploads using PHP.
Previous Knowledge to be reminded	HTML forms
Eaxmples/Illustrations	Login forms
Additional Inputs	
Teaching Aids used	PPT, LCD Projector, Computer Lab
References cited	https://www.w3schools.com/,
Student Activity planned after teaching	Online Quiz, Assignments
Activity planned outside the Class room, if any	Create Website Registration Form
Any other activity	Validating Login forms
Topic Synopsis	Creating Forms, Accessing Form Input with User defined Arrays, Combining HTML and PHP code on a single Page, Using Hidden Fields to save state, Redirecting the user, Sending Mail on Form Submission, and Working with File Uploads.

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Teaching Plan No.-4

Name of the topic	**Working with Files and Directories**
Hours required	10
Learning Objectives	● Learn to open, read, write, and close files using functions ● Learn to create, delete, and list directories using functions ● Understand how to change directory paths using functions
Previous Knowledge to be reminded	File Navigation and file paths
Eaxmples/Illustrations	
Additional Inputs	Absolute and relative paths
Teaching Aids used	PPT, LCD Projector, Computer Lab
References cited	https://www.w3schools.com/,
Student Activity planned after teaching	Creating, reading, writing and closing of files
Activity planned outside the Class room, if any	Group discussion on Session Management in PHP
Any other activity	
Topic Synopsis	Including Files with inclue(), Validating Files, Creating and Deleting Files, Opening a File for Writing, Reading or Appending, Reading from Files, Writing or Appending to a File, Working with Directories, Open Pipes to and from Process Using popen(), Running Commands with exec(), Running Commands with system() or passthru().

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Teaching Plan No.-5

Name of the topic	**Interacting with MySQL using PHP**
Hours required	10
Learning Objectives	● Understand the concept of a database, tables, rows, and columns. ● Learn how to create, modify, and delete databases and tables using SQL. ● Learn basic SQL syntax for selecting, inserting, updating, and deleting data. ● Understand how to execute SQL queries and handle the results.
Previous Knowledge to be reminded	Structured Query Language
Eaxmples/Illustrations	
Additional Inputs	Database
Teaching Aids used	PPT, LCD Projector, Computer Lab
References cited	https://www.w3schools.com/,
Student Activity planned after teaching	Creating database, tables, insert data, delete data in MySQL and using PHP
Activity planned outside the Class room, if any	Hands-on Lab Session on MYSQL Queries
Any other activity	
Topic Synopsis	MySQL Versus MySQLi Functions, Connecting to MySQL with PHP, Working with MySQL Data. Creating an Online Address Book: Planning and Creating Database Tables, Creating Menu, Creating Record Addition Mechanism, Viewing Records, Creating the Record Deletion Mechanism,

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Teaching Notes

For

Digital Logic Design

Teaching Plan No.-1

Name of the topic	**Number Systems**
Hours required	12
Learning Objectives	• Understand binary, octal, decimal, and hexadecimal systems • Convert numbers between different bases • Perform arithmetic with signed and unsigned binary numbers • Understand weighted and unweighted codes
Previous Knowledge to be reminded	Place value system in decimal, Basic arithmetic operations
Eaxmples/Illustrations	Conversion examples (e.g., Decimal to Binary: 13 → 1101) Addition of signed binary numbers using 2's complement
Additional Inputs	
Teaching Aids used	PPT, Whiteboard, Number System Simulator
References cited	M. Morris Mano, Michael D Ciletti, "Digital Design", 5th edition, PEA.
Student Activity planned after teaching	radix conversion, Worksheets on binary arithmetic
Activity planned outside the Class room, if any	Number System Quiz
Any other activity	
Topic Synopsis	● Number Systems: Binary, octal, decimal, hexadecimal number systems, ● conversion of numbers from one radix to another radix, ● r's, (r-1)'s complements, ● signed binary numbers, ● addition and subtraction of unsigned and signed numbers, ● weighted and unweighted codes.

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Teaching Plan No.-2

Name of the topic	**Logic Gates and Boolean Algebra**
Hours required	12
Learning Objectives	- Understand basic and universal gates - Apply Boolean laws and theorems - Simplify expressions using Boolean algebra and K-maps
Previous Knowledge to be reminded	Truth tables, Basic logical operations (AND, OR, NOT)
Eaxmples/Illustrations	implification of expressions using Boolean laws, K-map minimization with don't care conditions
Additional Inputs	
Teaching Aids used	Logic Gate Simulation Tool- Circuit Verse
References cited	M. Morris Mano, Michael D Ciletti, "Digital Design", 5th edition, PEA.
Student Activity planned after teaching	Case Study on ER model and EER model
Activity planned outside the Class room, if any	Boolean expression assignment, Group activity: Circuit simplification
Any other activity	K-map Solving Sessions
Topic Synopsis	● Logic Gates and Boolean Algebra: ● NOT, AND, OR, universal gates, ● X-OR and X-NOR gates, ● Boolean laws and theorems, ● complement and dual of a logic function, canonical and standard forms, ● two level realization of logic functions using universal gates, ● minimizations of logic functions (POS and SOP) using Boolean theorems, ● K-map (up to four variables), don't care conditions.

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Teaching Plan No.-3

Name of the topic	**Combinational Logic Circuits – 1**
Hours required	12
Learning Objectives	- Design and implement adders/subtractors - Understand ripple adders/subtractors
Previous Knowledge to be reminded	Binary addition and subtraction
Eaxmples/Illustrations	Half Adder and Full Adder truth tables and circuit diagrams
Additional Inputs	
Teaching Aids used	Circuit Simulators
References cited	M. Morris Mano, Michael D Ciletti, "Digital Design", 5th edition, PEA.
Student Activity planned after teaching	Hands-on lab activity: Construct adders/subtractors
Activity planned outside the Class room, if any	
Any other activity	
Topic Synopsis	Design of half adder, full adder, half subtractor, fullsubtractor, ripple adders and subtractors, ripple adder / subtractor.

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Teaching Plan No.-4

Name of the topic	**Combinational Logic Circuits – 2**
Hours required	12
Learning Objectives	- Design decoders, encoders, multiplexers, and demultiplexers - Implement logic functions using multiplexers/decoders
Previous Knowledge to be reminded	Truth tables, SOP/POS expressions
Eaxmples/Illustrations	3x8 decoder, 4x1 multiplexer design
Additional Inputs	
Teaching Aids used	LCD Projector, Digital Simulators (e.g., CircuitVerse)
References cited	M. Morris Mano, Michael D Ciletti, "Digital Design", 5th edition, PEA.
Student Activity planned after teaching	Group discussion on real-world applications of combinational logic
Activity planned outside the Class room, if any	
Any other activity	
Topic Synopsis	Design Of Decoders, Encoders, Priority Encoder, Multiplexers, Demultiplexers, Higher Order Decoders, Demultiplexers And Multiplexers, Realization Of Boolean Functions Using Decoders, Multiplexers.

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Teaching Plan No.-5

Name of the topic	**Sequential Logic Circuits**
Hours required	12
Learning Objectives	● Understand flip-flop types and their operations ● Design registers and counters
Previous Knowledge to be reminded	Timing diagrams, clock signal behavior
Eaxmples/Illustrations	Truth tables for SR, JK, D, and T flip-flops; Counter state diagrams
Additional Inputs	
Teaching Aids used	PPT, LCD Projector, Computer Lab
References cited	M. Morris Mano, Michael D Ciletti, "Digital Design", 5th edition, PEA.
Student Activity planned after teaching	LCD Projector, Digital Simulators (e.g., CircuitVerse)
Activity planned outside the Class room, if any	Quiz on flip-flops and counters, Lab implementation of counters and shift registers
Any other activity	
Topic Synopsis	Classification Of Sequential Circuits, Latch And Flip-Flop, Rs- Latch Using Nand And Nor Gates, Truth Tables, Rs, Jk, t And d Flip-Flops, Truth And Excitation Tables, Conversion Of Flip- Flops, Flip-Flops With Asynchronous Inputs (Preset And Clear). Design Of Registers, Shift Registers, Bidirectional Shift Registers, Universal Shift Register, Design Of Ripple Counters, Synchronous Counters And Variable Modulus Counters.

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Teaching Notes

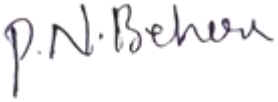
For

Object-Oriented Software Engineering

Teaching Plan – Unit I:

Introduction to Object-Oriented Programming

Field	Details
Name of the Topic	Introduction to Object-Oriented Programming
Hours Required	10 hours
Learning Objectives	- Understand software engineering fundamentals - Learn core OOP concepts: classes, objects, inheritance, polymorphism - Grasp UML basics and SDLC models
Previous Knowledge to be Reminded	- Basic programming constructs - Need for software processes
Examples / Illustrations	- Real-world OOP examples (Student, Bank classes) - Class and object representation with UML
Additional Inputs	- Compare procedural vs OOP approaches - Brief intro to Agile SDLC
Teaching Aids Used	PPTs, UML modeling tools, Java IDE, LCD Projector
References	Craig Larman, Sachin Malhotra, UML Reference Manual
Student Activity	Group Activity: Design and implement a small OOP project
Outside Activity	Project presentation
Evaluation Method	Project & presentation evaluation rubric
Topic Synopsis	Overview of software engineering, OOP concepts, SDLC models, UML basics



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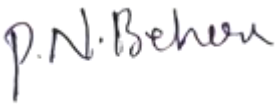
Teaching Plan – Unit II: Requirements Analysis and Design

Field	Details
Name of the Topic	Requirements Analysis and Design
Hours Required	8 hours
Learning Objectives	- Learn how to capture and analyze requirements - Understand use cases and scenarios - Apply OOAD techniques with UML modeling
Previous Knowledge to be Reminded	- Introduction to systems analysis - Object-oriented basics
Examples / Illustrations	- Use Case for ATM or Library System - Class diagram of E-commerce platform
Additional Inputs	- Overview of GRASP principles and Design Patterns
Teaching Aids Used	UML software (e.g., StarUML), PPTs, case studies
References	Larman, UML Reference Manual, Design Patterns book
Student Activity	Use Case Scenario Presentation & Peer Review
Outside Activity	Feedback on peer diagrams
Evaluation Method	Presentation and peer feedback assessment
Topic Synopsis	Requirements specification, OOAD, UML diagrams: use case, class, sequence, activity, state machine



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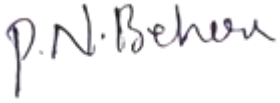
Teaching Plan – Unit III: Software Construction and Testing

Field	Details
Name of the Topic	Software Construction and Testing
Hours Required	8 hours
Learning Objectives	- Understand object-oriented construction and programming principles - Learn TDD and software testing methods
Previous Knowledge to be Reminded	- Object-oriented programming basics
Examples / Illustrations	- Unit tests using JUnit - TDD flow: Write test → Write code → Refactor
Additional Inputs	- Compare JUnit with PyTest or other test frameworks
Teaching Aids Used	IDE with testing framework (Eclipse, IntelliJ), PPTs
References	Java Programming by Sachin Malhotra, Larman
Student Activity	Poster Presentation: Illustrate TDD principles and benefits
Outside Activity	Build a test suite for a small application
Evaluation Method	Poster presentation evaluation
Topic Synopsis	Software construction, OOP languages, testing types, TDD methodology



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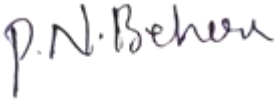
Teaching Plan – Unit IV: Software Maintenance and Evolution

Field	Details
Name of the Topic	Software Maintenance and Evolution
Hours Required	6 hours
Learning Objectives	- Understand software maintenance techniques and refactoring - Learn version control, code reviews, reengineering
Previous Knowledge to be Reminded	- Basic understanding of code structure and software lifecycle
Examples / Illustrations	- Git version control demo - Code refactoring with examples
Additional Inputs	- Intro to tools like GitHub, GitLab, SonarQube
Teaching Aids Used	GitHub classroom, LCD projector, IDEs
References	Sommerville, Git docs, Refactoring books
Student Activity	Peer Discussion: Analyze and discuss maintenance strategies
Outside Activity	Collaborate on a simple repo and perform code review
Evaluation Method	Peer discussion and participation rubric
Topic Synopsis	Maintenance, refactoring, version control, reviews, evolution strategies



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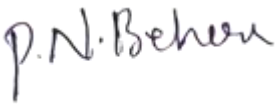
Teaching Plan – Unit V: Advanced Topics in OOSE

Field	Details
Name of the Topic	Advanced Topics in Object-Oriented Software Engineering
Hours Required	6 hours
Learning Objectives	- Explore emerging OOSE practices and tools - Learn MDE, AOP, CBSE, SOA, Agile and Scrum
Previous Knowledge to be Reminded	- General understanding of software architecture and OOAD
Examples / Illustrations	- Simple aspect using AspectJ - Scrum board example for project planning
Additional Inputs	- Discuss roles in Agile (Scrum Master, Product Owner)
Teaching Aids Used	Agile simulation tools (e.g., Trello), PPTs, videos
References	Larman, Design Patterns, Agile Manifesto, Scrum Guide
Student Activity	Seminar on Design Patterns
Outside Activity	Research-based seminar preparation and delivery
Evaluation Method	Seminar rubric: research depth, clarity, Q&A handling
Topic Synopsis	MDE, AOP, CBSE, SOA, Agile practices, Scrum methodology



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Teaching Notes
For
Data Communication
and
Computer Networks

Teaching Plan – Unit I: Introduction & Physical Layer

Name of the Topic	Introduction to Networks and The Physical Layer
Hours Required	10
Learning Objectives	- Understand basic concepts of network applications, hardware, software, and models - Explore physical media and transmission techniques
Previous Knowledge to be Reminded	Basics of computer systems and data representation
Examples / Illustrations	Diagrams of OSI and TCP/IP models, LAN/WAN topologies, coaxial/fiber optics
Additional Inputs	Discuss recent trends like 5G and IoT networks
Teaching Aids Used	PPT, LCD Projector, Network cables, Physical media samples, Lab
References Cited	Tanenbaum (2003), Forouzan (2006)
Student Activity Planned After Teaching	Hands-on exercises to configure basic network applications (e.g., browser settings, ping, traceroute)
Activity Planned Outside the Classroom	Quiz on OSI layers and network types
Any Other Activity	Short demo of mobile vs PSTN call routing
Topic Synopsis	- Network applications, hardware, software - OSI and TCP/IP models - X.25, Frame relay - Theoretical basis for communication - Guided & unguided media - PSTN and mobile systems

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Teaching Plan – Unit II:

Data Link Layer & Medium Access Sublayer

Name of the Topic	Data Link Layer & Medium Access Sublayer
Hours Required	10
Learning Objectives	- Understand data link protocols and error handling - Explore multiple access techniques and wireless LANs
Previous Knowledge to be Reminded	Digital data transmission concepts
Examples / Illustrations	CRC calculation, Sliding window protocol visualization, Ethernet frame format
Additional Inputs	Introduce NS3/Cisco Packet Tracer for simulation
Teaching Aids Used	Packet Tracer, PPT, Lab exercises
References Cited	Tanenbaum, Forouzan
Student Activity Planned After Teaching	Protocol Design & Simulation (e.g., CSMA/CD, Stop-and-Wait)
Activity Planned Outside the Classroom	Assign students a mini protocol to simulate or chart
Any Other Activity	Peer-review of simulation designs
Topic Synopsis	- Design issues, Error detection and correction - Protocols: HDLC, Sliding Window - Channel allocation, Ethernet - Data Link Layer Switching - Wireless LANs, Bluetooth

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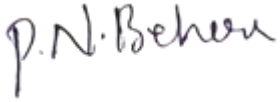
Teaching Plan – Unit III: Network Layer

Name of the Topic	Network Layer
Hours Required	10
Learning Objectives	- Design routing and congestion control algorithms - Understand internetworking, IPv4/IPv6, and QoS
Previous Knowledge to be Reminded	Binary addressing, subnetting basics
Examples / Illustrations	Dijkstra's routing example, IPv4 header fields
Additional Inputs	Explain importance of QoS in streaming and VoIP
Teaching Aids Used	Lab, Guest lectures, Workshop content
References Cited	Tanenbaum, Kurose & Ross
Student Activity Planned After Teaching	Workshop on routing and congestion control techniques
Activity Planned Outside the Classroom	Guest lecture and quiz participation
Any Other Activity	Practical: Observe routing table behavior in a network simulator
Topic Synopsis	- Routing algorithms (Link State, Distance Vector) - Congestion control (leaky bucket, choke packet) - IPv4/IPv6 - Internetworking & QoS



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Teaching Plan – Unit IV: Transport Layer

Name of the Topic	Transport Layer
Hours Required	**10**
Learning Objectives	- Understand elements of transport protocols - Analyze TCP and UDP functionalities
Previous Knowledge to be Reminded	Network layer functions and addressing
Examples / Illustrations	TCP 3-way handshake, UDP packet structure
Additional Inputs	Live demo with Wireshark for TCP/UDP
Teaching Aids Used	Wireshark, Lab, PPT
References Cited	Tanenbaum, Forouzan
Student Activity Planned After Teaching	Analyze captured traffic and distinguish between TCP and UDP
Activity Planned Outside the Classroom	Traffic analysis using Wireshark
Any Other Activity	Create sample UDP-based client-server program
Topic Synopsis	- Transport services, Simple Transport Protocol - UDP and TCP - Flow control, Error recovery, Congestion handling

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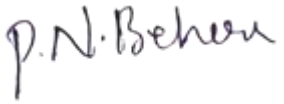
Teaching Plan – Unit V: Application Layer

Name of the Topic	Application Layer
Hours Required	10
Learning Objectives	- Explore DNS, email, WWW protocols - Evaluate common application layer protocols
Previous Knowledge to be Reminded	HTTP basics, URL components
Examples / Illustrations	DNS resolution steps, Email flow using SMTP, IMAP
Additional Inputs	Explain client-server architecture with examples
Teaching Aids Used	Web browser, Wireshark, Group collaboration tools
References Cited	Kurose & Ross, W3C tutorials
Student Activity Planned After Teaching	Group project on building a mini web app using application protocols
Activity Planned Outside the Classroom	Presentation of group project
Any Other Activity	Practical: DNS lookup tools, Telnet to mail servers
Topic Synopsis	- DNS, Email systems - WWW architecture, HTTP - SNMP, FTP, SMTP, Telnet



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Teaching Plan / Lesson No.

Name of the Topic	Introduction of political Science.
Hours required	4
Learning Objectives	what is Political Science. Definitions and its scope.
Previous knowledge to be reminded	political science definitions.
Examples/Illustrations	~~Politics~~ Politics treatise. City states.
Additional inputs	Nationality
Teaching Aids used	Black board and Chalk.
References cited	Sparta, Athens ~~ect~~. etc.
Student Activity planned after the teaching	Summary
Activity planned outside the Class room, if any	To prepare the notes on Politics-
Any other activity	-
Topic Synopsis	*(Continue on the reverse side if needed)* Nature of politics. Definitions scope.

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Teaching Plan / Lesson No. 1

Name of the Topic	Electoral Politics in India
Hours required	3
Learning Objectives	What is Electoral Politics in India.
Previous knowledge to be reminded	The Significance of Voters.
Examples/Illustrations	Election and Politics
Additional inputs	Nationality
Teaching Aids used	Black Board
References cited	Gpolole.
Student Activity planned after the teaching	Summary
Activity planned outside the Class room, if any	To prepare the notes on Electoral Politics.
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* Nature of Electoral politics and its its Significance of India.

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Teaching Plan / Lesson No. 3

Name of the Topic	Issues In Electoral politics
Hours required	3.
Learning Objectives	Communalism, Money power Rigging & booth Capturing, Politics of Political defection
Previous knowledge to be reminded	What is Issues of Electoral Politics
Examples/Illustrations	Election Commission In India
Additional inputs	Nationality.
Teaching Aids used	Black Board and chalks.
References cited	Text Books
Student Activity planned after the teaching	Summary of the TOPIC
Activity planned outside the Class room, if any	To prepare the TOPIC In the Notes.
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* Issues In Electoral Politics

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Teaching Plan / Lesson No. 4

Name of the Topic	Public opinion on the Election
Hours required	3
Learning Objectives	Election System
Previous knowledge to be reminded	Electoral Politics
Examples/Illustrations	Election Commission
Additional inputs	Union and State
Teaching Aids used	Black Board and Chalk
References cited	Text books
Student Activity planned after the teaching	To gather the note on the relative topic
Activity planned outside the Class room, if any	To prepare Notes on the topic
Any other activity	Group discussion
Topic Synopsis	*(Continue on the reverse side if needed)* public opinion on the during election in India,

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Teaching Plan / Lesson No. 5

Name of the Topic	Management of Election Commission
Hours required	3
Learning Objectives	Mode of Conduct; Filling Election Nominations and affidavits, Election Campaigns; Booth management
Previous knowledge to be reminded	How management of Election Commission during the general Elections
Examples/Illustrations	Electoral System in India.
Additional inputs	Union and ~~Nat~~ States
Teaching Aids used	Black Board and Chalks
References cited	Text books
Student Activity planned after the teaching	Summary
Activity planned outside the Class room, if any	To prepare note on the The TOPIC
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* Significance of election Commission In India

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Teaching Plan / Lesson No. 1

Name of the Topic	Brief Introduction on Legislative bodies.
Hours required	2
Learning Objectives	Roles and Responsibilities - Constitutional Provisions of legislative procedures.
Previous knowledge to be reminded	What is the responsible of legislative procedures.
Examples/Illustrations	Parliament.
Additional inputs	State legislatives
Teaching Aids used	Black Board and chalks
References cited	Text Book.
Student Activity planned after the teaching	Summery.
Activity planned outside the Class room, if any	To prepare note Books in the class Room.
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* Parliament, State, Assembly Union.

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Indian Political Process

Teaching Plan / Lesson No. 8.1

Name of the Topic	Federal Process
Hours required	3
Learning Objectives	1. features of Indian federal System. 2. Center State Relations 3. Legislative, Administrative and financial
Previous knowledge to be reminded	know about federal process of India
Examples/Illustrations	Center - State Relations
Additional inputs	Parliament
Teaching Aids used	Black Boards
References cited	Google
Student Activity planned after the teaching	Search for Internet to Related Subject
Activity planned outside the Class room, if any	To prepare notes Related to the lesson
Any other activity	Group discussion
Topic Synopsis	*(Continue on the reverse side if needed)* (1) Indian federal System (2) Center - State Relations (3) Legislative; Administrative and financial

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Teaching Plan / Lesson No. 8.1

Name of the Topic	Federal Process
Hours required	3.
Learning Objectives	(1) Emerging trends in Centre-State Relations (2) Restructuring Centre-State Relations (3) Recommendations of [illegible]
Previous knowledge to be reminded	Restructuring Centre-State Relations
Examples/Illustrations	Parliament and State Assembly
Additional inputs	Administration of Centre-State
Teaching Aids used	Black board
References cited	Google and Text books
Student Activity planned after the teaching	To prepare Notes for Related lessons in the Internet or Library
Activity planned outside the Class room, if any	To prepare notes Related to the lessons
Any other activity	Seminars
Topic Synopsis	*(Continue on the reverse side if needed)* Centre-State Relations Restructuring Centre-State Relations Kashmir Commission Punchi Commission.

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Teaching Plan / Lesson No. 2.

Name of the Topic	Electoral Processes
Hours required	3
Learning Objectives	The Election Commission of India
Previous knowledge to be reminded	Center election Commission
Examples/Illustrations	Recent Election
Additional Inputs	Election System
Teaching Aids used	Black Board
References cited	Text Books
Student Activity planned after the teaching	To prepare project work for Relates to the lesson
Activity planned outside the Class room, if any	To prepare notes Related to the lesson
Any other activity	Seminars.
Topic Synopsis	*(Continue on the reverse side if needed)* Cont ① Centre Elections. ② State elections

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Teaching Plan / Lesson No. 2

Name of the Topic	Electoral Processes
Hours required	3
Learning Objectives	Powers and Power and function of the Election Commission of India
Previous knowledge to be reminded	Parliament Election
Examples/Illustrations	Recent Elections
Additional Inputs	Election System in India
Teaching Aids used	Black Board and Good class Room
References cited	Text book and Internet
Student Activity planned after the teaching	Students prepare for talks with an example for Recent Elections
Activity planned outside the Class room, if any	Prepare notes
Any other activity	Group discussions
Topic Synopsis	*(Continue on the reverse side if needed)* Powers and functions of Election Commission

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Teaching Plan / Lesson No (1)

Name of the Topic	Electoral processes
Hours required	3
Learning Objectives	Issues of Electoral Reforms, Voting Behaviour - Determinants and Problems
Previous knowledge to be reminded	Election Commission
Examples/Illustrations	State Election Commission and Recent Elections
Additional Inputs	Parliamentary Elections
Teaching Aids used	Black Board
References cited	Text Book and Internet
Student Activity planned after the teaching	Student prepare for notes related Subjects and Contents
Activity planned outside the Class room, if any	Prepare study project for related Reforms
Any other activity	Group discussion
Topic Synopsis	*(Continue on the reverse side if needed)* (1) Issues of Election Reforms (2) Voting Behaviour (3) Determinants and Problems

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Teaching Plan / Lesson No. (3)

Name of the Topic	Grass Root Democracy - Decentralisation
Hours required	3
Learning Objectives	① Panchayathi Raj System - local and urban Government Structure, Powers and functions
Previous knowledge to be reminded	Panchayaths and municipalities
Examples/Illustrations	Rural Areas
Additional inputs	Panchayathi Raj System
Teaching Aids used	Black Board
References cited	Text Book
Student Activity planned after the teaching	Student search In Internet and youtube for relevent Subject.
Activity planned outside the Class room, if any	Prepare notes
Any other activity	Seminar.
Topic Synopsis	*(Continue on the reverse side if needed)* ① Local and urban government ② Panchayathi Raj System ③ Powers and functions

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Teaching Plan / Lesson No. 3

Name of the Topic	73rd and 74th CAA :
Hours required	3.
Learning Objectives	① Decentralisation ② 73rd & 74th CAA ③ Challenges and Prospects.
Previous knowledge to be reminded	Rural Area and urban, Panchayath Raj System
Examples/Illustrations	Villages, Municipalities
Additional inputs	Rural and urban Governments
Teaching Aids used	Black Board
References cited	Text books
Student Activity planned after the teaching	Student search In Internet other Text book In Library
Activity planned outside the Class room, if any	prepare Notes :
Any other activity	Seminars
Topic Synopsis	*(Continue on the reverse side if needed)* 73rd Amendment Act 74th Constitution Amendment Act

Teaching Plan / Lesson No (9)

Name of the Topic	Role of caste, Religion, language and Regionalism
Hours required	3
Learning Objectives	Role of caste, Religion, language, Regionalism
Previous knowledge to be reminded	We should [illegible] [illegible] Rural areas.
Examples/Illustrations	Indian political System
Additional inputs	Rural politics In India
Teaching Aids used	Black board
References cited	Internet and library
Student Activity planned after the teaching	Students search In internet Relevant to the lesson
Activity planned outside the Class room, if any	prepare notes
Any other activity	Group discussion
Topic Synopsis	*(Continue on the reverse side if needed)* Caste, Religion language Regionalism In politics

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Teaching Plan / Lesson No. 9

Name of the Topic	Social Dynamics and Emerging Challenges to IPS
Hours required	3
Learning Objectives	① Politics of Reservations ② Communalisation ③ Internal threats to Security
Previous knowledge to be reminded	Terrorism, Naxalism, Reforms Police Units
Examples/Illustrations	Recent activities to take an Example
Additional inputs	State and Centre Policies
Teaching Aids used	Black Board
References cited	Text book, Internet
Student Activity planned after the teaching	Search Internet
Activity planned outside the Class room, if any	Prepare Notes
Any other activity	Seminar and Quizes
Topic Synopsis	*(Continue on the reverse side if needed)* Reservations Communalisation Internal threats to Security

Signature of the Lecturer

Teaching Plan / Lesson No. (5)

Name of the Topic	Regulatory and Government Institutions
Hours required	1
Learning Objectives	NITI Ayog. finance Commissions Comptroller and Audit General
Previous knowledge to be reminded	Five years Planning System
Examples/Illustrations	State and center finance Commission
Additional inputs	Parliament
Teaching Aids used	Black Board
References cited	Internet and Text book
Student Activity planned after the teaching	To prepare Answers Relevant Subject
Activity planned outside the Class room, if any	To prepar notes
Any other activity	Quizes Google forms
Topic Synopsis	*(Continue on the reverse side if needed)* NITI Ayog. finance commissions Comptroller and Audit General

Signature of the Lecturer

Teaching Plan / Lesson No. 8

Name of the Topic	Regulatory and Governance Institutions
Hours required	3
Learning Objectives	① Central Vigilance Commission ② Central Information Commission ③ Lokpal, ~~Lok~~ and Lokayukta
Previous knowledge to be reminded	Government Institutions
Examples/Illustrations	Parliament System
Additional inputs	Constitutional Systems
Teaching Aids used	. Black Board
References cited	Internet and Text book
Student Activity planned after the teaching	Prepare Answers to Relevant Subjects
Activity planned outside the Class room, if any	Prepare notes
Any other activity	Seminars
Topic Synopsis	*(Continue on the reverse side if needed)* ① Central Vigilance Commissions ② Central Information Commission ③ Lokpal, Lokayukta.

Signature of the Lecturer

Western Political Thought

Teaching Plan / Lesson No. I

Name of the Topic	Ancient Greek political Thought
Hours required	3.
Learning Objectives	Plato - Rule of philosopher king, Theory of Justice.
Previous knowledge to be reminded	Theory of Plato
Examples/Illustrations	State and Education
Additional inputs	Theory of Plato - State of Nature
Teaching Aids used	Black Board
References cited	Internet, Text Book
Student Activity planned after the teaching	Students Search In Internet to Relevent
Activity planned outside the Class room, if any	Prepare to notes
Any other activity	Seminar.
Topic Synopsis	*(Continue on the reverse side if needed)* State notes Theory of Justice

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Western political Thought

Teaching Plan / Lesson No. (1)

Name of the Topic	Ancient Greek political Thought
Hours required	3
Learning Objectives	Aristotle Theory of State of classification of Governments
Previous knowledge to be reminded	Philosophy of Aristotle
Examples/Illustrations	State classification
Additional inputs	Slavery and Theory of Revolution
Teaching Aids used	Black Board
References cited	Internet and Text Books
Student Activity planned after the teaching	Students Refers to the Library To relevant Topics
Activity planned outside the Class room, if any	To prepare notes
Any other activity	Group Discuss.
Topic Synopsis	*(Continue on the reverse side if needed)* (1) State of classification (2) slavery and theory of Revolution

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Western Political Thought

Teaching Plan / Lesson No. (2)

Name of the Topic	Medival and modern Political Thought
Hours required	3,
Learning Objectives	(1) Brief Explanation about Saint Augustine.
Previous knowledge to be reminded	Physosophy of St. Augustine
Examples/Illustrations	Theory of State of nature
Additional inputs	Theory of State of Nature
Teaching Aids used	Black Board
References cited	Internet and Text Book
Student Activity planned after the teaching	Student Research In Internet to Relevent lesson
Activity planned outside the Class room, if any	To prepare Notes
Any other activity	Assignments
Topic Synopsis	*(Continue on the reverse side if needed)* (1) Physosophy of St. Augustine (2) Theory of Two Cities.

Signature of the Lecturer

Teaching Plan / Lesson No. (2)

Name of the Topic	Medieval and modern political Thought
Hours required	3.
Learning Objectives	① philosophy of Nicolos machiavelli ② State and statecraft
Previous knowledge to be reminded	philosophy of Niccolos machiavelli
Examples/Illustrations	Nature of State and State craft
Additional inputs	western political thought
Teaching Aids used	Black Board
References cited	Internet and youtube
Student Activity planned after the teaching	The Student prepair and Search Copies In text book and Internet of related -
Activity planned outside the Class room, if any	To prepair notes
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* ① philosophy of Niccolos machiavelli ② Theory of State and statecraft

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COMMISSONERATE OF COLLEGIATE EDUCATION,

GOVT. DEGREE COLLEGE

RAJAMPET, KADAPA. Dt.

(Affiliated to Yogi Vemana University, Kadapa.)

TEACHING PLAN

ACADEMIC YEAR 2024-2025

Name of the Department : Commerce

NAME OF THE LECTURER : K. Subhashini

Course / Group : B.Com. (CA)

Subject / Page :

Sl.No.	Subject	Paper	Page No.
1	Business organisation & Management		
2	Digital Marketing		
3	Advertising & Media planning		
4.	Derivative & Risk Management		

Teaching Plan / Lesson No. 1

Name of the Topic	Introduction & Definition of Business
Hours required	4
Learning Objectives	forms of organisations Advantages of sole trade & partnership
Previous knowledge to be reminded	what is business, live business shops, like market.
Examples / Illustrations	Text tiles, & vegetables business
Additional inputs	News papers
Teaching Aids used	chalk peace, & Black board
References cited	K.K. Muni Raja Reddy
Student Activity Planned after the teaching	Assignment
Activity planned outside the class room, if any	Library
Any other activity	Home work has to given.
Topic Synopsis	*(Continue on the reverse side if needed)* Business definition:- Business is a human activity directed producing (or) acquiring wealth. Business characteristics:- 1. Dealing & services. 2. profit motive.

Signature of the Lecturer

3. Risk un certainity
4. creation of utilities
5. Economics activity
6. Financing and capital.

Advertising & Media planning

Teaching Plan / Lesson No.

Name of the Topic	Nature & Scope of Advertising.
Hours required	5 hours
Learning Objectives	1. what is mean by advertising. Nature of advertising. 2. what is the impact of social media in society
Previous knowledge to be reminded	Do you know the social media & Digital media platforms.
Examples / Illustrations	TV, Radio, face book, Instagram. Mesho, Banners, flexies.
Additional inputs	News paper, online methods.
Teaching Aids used	chalk peace, & Block Board, Mobiles.
References cited	—
Student Activity Planned after the teaching	Assignment
Activity planned outside the class room, if any	Library
Any other activity	—
Topic Synopsis	*(Continue on the reverse side if needed)* 1. Nature & scope of advertising. → objectives, advantages & disadvantages → functions of advertising. → strategies of advertising agency. → Advertising standards council of → india (ASCI) →

Signature of the Lecturer

Teaching Plan / Lesson No. 4

Name of the Topic	Forms of Business organisation
Hours required	4
Learning Objectives	→ partnership business → Soleproprietorship & HUF.
Previous knowledge to be reminded	Trading, Imports & Exports.
Examples / Illustrations	Sole proprietorship, partnerships. like (Barbers shop) Hotels.
Additional inputs	-
Teaching Aids used	Black board, chalk peace.
References cited	Himalaya publications.
Student Activity Planned after the teaching	Assignment.
Activity planned outside the class room, if any	work has to given.
Any other activity	Library
Topic Synopsis	*(Continue on the reverse side if needed)* Sole proprietorship :- Sole proprietorship is a form of business where the individual proprietor is the supreme judge to his business. features :- 1. Single ownership

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2. Management and Control
3. No seperate entity
4. No sharing of profit & lass

Advertising & Media planning

Teaching Plan / Lesson No.

Name of the Topic	Nature & Scope of Advertising.
Hours required	5 hours
Learning Objectives	1. what is mean by advertising & use of advertising. 2. what is the impact of social media in society
Previous knowledge to be reminded	Do you know the social media & Digital media plat-forms.
Examples / Illustrations	Tv, Radio, face book, Instagram. Mesho, Banners, flexies.
Additional inputs	News paper, online methods.
Teaching Aids used	chalk peace, & Block Board, Mobiles.
References cited	—
Student Activity Planned after the teaching	Assignment
Activity planned outside the class room, if any	Library
Any other activity	—
Topic Synopsis	*(Continue on the reverse side if needed)* 1. Nature & scope of advertising. → objectives, advantages & disadvantages → functions of advertising. → strategies of advertising agency. → Advertising standards council of → india (ASCI) →

Signature of the Lecturer

Teaching Plan / Lesson No.

Name of the Topic	process of advertisement.
Hours required	5 hours
Learning Objectives	→ steps in advertising process → advertising creativity.
Previous knowledge to be reminded	Do you know the advertising flat forms.
Examples / Illustrations	printing, Press, Tv channels
Additional inputs	
Teaching Aids used	Chalk pencil, Blackboard,
References cited	
Student Activity Planned after the teaching	Assignment
Activity planned outside the class room, if any	Library
Any other activity	—
Topic Synopsis	*(Continue on the reverse side if needed)* → Role of the advertising council of India → ~~DIGITAR~~ APPROACH. → creating advertising process → Copy writing of advertising.

Signature of the Lecturer

Advertising and

Teaching Plan / Lesson No. Media Planning

Name of the Topic	Analysis of market media.
Hours required	5 hrs.
Learning Objectives	→ Factors in deciding media strategy → Advertising frequency.
Previous knowledge to be reminded	—
Examples / Illustrations	—
Additional inputs	—
Teaching Aids used	Block board, chalkpeace.
References cited	—
Student Activity Planned after the teaching	Assignment
Activity planned outside the class room, if any	Library
Any other activity	←
Topic Synopsis	*(Continue on the reverse side if needed)* → Elements of ad design → Importance of media strategy. → factors affecting media choices → Types of media scheduling → Effective frequency advertising.

Signature of the Lecturer

Digital Marketing

Teaching Plan / Lesson No.

Name of the Topic	Introduction.
Hours required	5 hours
Learning Objectives	what is mean digital marketing & online marketing, Social media.
Previous knowledge to be reminded	Do you Know the online, Purchasing methods..
Examples / Illustrations	Meesho, flipcart. mantra.
Additional inputs	
Teaching Aids used	Chalk Peas, Block board.
References cited	
Student Activity Planned after the teaching	Assignment, seminars
Activity planned outside the class room, if any	Group Discussion.
Any other activity	—
Topic Synopsis	*(Continue on the reverse side if needed)* → Traditional marketing. → Digital marketing → features & functions of marketing → Types of digital marketing → use & Role of digital marketing.

Signature of the Lecturer

Teaching Plan / Lesson No.

Name of the Topic	Search Engine optimization.
Hours required	5 hours
Learning Objectives	→ Goals of SEO. → on page optimization elements.
Previous knowledge to be reminded	online & social media marketing
Examples / Illustrations	
Additional inputs	
Teaching Aids used	chalk peace, Block board.
References cited	
Student Activity Planned after the teaching	Assignment
Activity planned outside the class room, if any	—
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* → Features of on page optimization. → Types of on page SEO Techniques. → elements of off page optimization → Types of off page SEO Techniques → Types of SEO Tools.

Signature of the Lecturer

Teaching Plan / Lesson No.

Name of the Topic	Social media marketing
Hours required	5 hours
Learning Objectives	→ Features of social media marketing → Importance of social media marketing → Seven myths of SMM
Previous knowledge to be reminded	Social media plat-forms.
Examples / Illustrations	—
Additional inputs	—
Teaching Aids used	Block board, Chalk peace
References cited	
Student Activity Planned after the teaching	Assigment.
Activity planned outside the class room, if any	—
Any other activity	—
Topic Synopsis	*(Continue on the reverse side if needed)* → Features of social media → competitor's market reasearch → Importance of SMM. → Audience understaning. → Creativity.

Signature of the Lecturer

Teaching Plan / Lesson No. Derivative & Risk Management.

Name of the Topic	
Hours required	4hrs
Learning Objectives	→ Features of over-the counter. (OTC) → SEBI guidelines for derivatives trading in India.
Previous knowledge to be reminded	What is trading, what is derivatives.
Examples / Illustrations	—
Additional inputs	—
Teaching Aids used	chalk peace, Block board.
References cited	—
Student Activity Planned after the teaching	Assignment
Activity planned outside the class room, if any	Library.
Any other activity	Liabrary.
Topic Synopsis	*(Continue on the reverse side if needed)* → options in financial markets → Types of options. → Index derivatives. → features of European & American calls → options structured and used in trading.

Signature of the Lecturer

Teaching Plan / Lesson No.

Name of the Topic	
Hours required	4 hours
Learning Objectives	→ Credit risk affect swap agreements → mitigate Credit risk in swap transactions
Previous knowledge to be reminded	→ What is derivatives. → Greeks in hedging options.
Examples / Illustrations	
Additional inputs	
Teaching Aids used	Block board, chalk peace.
References cited	—
Student Activity Planned after the teaching	Assignment, Seminar.
Activity planned outside the class room, if any	Library
Any other activity	—
Topic Synopsis	*(Continue on the reverse side if needed)* → Impact on pricing → Margin Requirements → Collateral aggreements → Third-party Guarantees → Credit Risk Assessment.

Signature of the Lecturer

Teaching Plan / Lesson No.

Name of the Topic	
Hours required	4 hours
Learning Objectives	→ Future contracts to hedge Against markets → Common strategies employed in hedging.
Previous knowledge to be reminded	—
Examples / Illustrations	—
Additional inputs	—
Teaching Aids used	chalk peace, & Block board.
References cited	—
Student Activity Planned after the teaching	Assignment, Seminor.
Activity planned outside the class room, if any	Seminors, Group discussion.
Any other activity	Library
Topic Synopsis	*(Continue on the reverse side if needed)* → Difference b/w speculation & arbitrage. → Index options & futures → use of value at risk in financial risk. →

Signature of the Lecturer

Teaching Plan / Lesson No.

Name of the Topic	process of advertisement.
Hours required	5 hours
Learning Objectives	→ steps in advertising process → advertising creativity.
Previous knowledge to be reminded	Do you know the advertising flat forms.
Examples / Illustrations	printing, Prees, Tv channels
Additional inputs	
Teaching Aids used	Chalk peace, Blackboard,
References cited	
Student Activity Planned after the teaching	Assignment
Activity planned outside the class room, if any	Liabrary
Any other activity	—
Topic Synopsis	*(Continue on the reverse side if needed)* → Role of the advertising council of India → DIGITAR APPROACH. → creating advertising process → Copy writing of advertising.

Signature of the Lecturer

Teaching Plan / Lesson No. 1

Name of the Topic	Live stock census
Hours required	12
Learning Objectives	Knowledge Understanding
Previous knowledge to be reminded	Jr. Inter
Examples / Illustrations	Cow, Buffaloes
Additional inputs	visit local Dairy form
Teaching Aids used	BBT, PPT, Chart
References cited	text book
Student Activity Planned after the teaching	Dairy cattles pictures collected
Activity planned outside the class room, if any	Exotic dairy cattles examples
Any other activity	Indigenous dairy cattles collected
Topic Synopsis	*(Continue on the reverse side if needed)* Live stock census. Breeds of dairy cattle, Buffaloes and goats. Indigenous, Exotic and Crossbred cattle breeds.

B. Sup
Signature of the Lecturer

Teaching Plan / Lesson No. 2

Name of the Topic	Anatomy of udder
Hours required	1 2
Learning Objectives	Knowledge Understanding
Previous knowledge to be reminded	3r. Inter
Examples / Illustrations	cow, buffaloes
Additional inputs	Uses of Lactogenesis
Teaching Aids used	BBT, PPT
References cited	Text book
Student Activity Planned after the teaching	Draw the development of udder
Activity planned outside the class room, if any	process letdown of Milk
Any other activity	Functions of Galactopoieses
Topic Synopsis	*(Continue on the reverse side if needed)* Anatomy of udder Development of udder Lactogenesis and Galactopoises letdown of Milk.

B. Sig

Signature of the Lecturer

Teaching Plan / Lesson No. 3

Name of the Topic	Artificial Insemination
Hours required	12
Learning Objectives	Knowledge Application
Previous knowledge to be reminded	Sr. Inter
Examples / Illustrations	Cow, Buffaloes
Additional inputs	Visit a dairy form
Teaching Aids used	BBT, PPT, chart
References cited	Text book
Student Activity Planned after the teaching	Draw the cloning
Activity planned outside the class room, if any	Symptoms of Heat in cows form
Any other activity	Embryo Transfer process
Topic Synopsis	*(Continue on the reverse side if needed)* Artificial insemination, Oestrous cycle, Symptoms of Heat in cows and buffaloes conception, Pregancy diagnosis in cattle Multi ovulation and Embryo transfer technique, cloning.

B. Rao

Signature of the Lecturer

Teaching Plan / Lesson No. 6

Name of the Topic	Economic traits of Dairy cattle
Hours required	12
Learning Objectives	Application Understanding
Previous knowledge to be reminded	Sr. Inter
Examples / Illustrations	cow, buffaloes
Additional inputs	Methods of selection of cows
Teaching Aids used	BBT, PPT, chart
References cited	Text book
Student Activity Planned after the teaching	Economic Importance of dairy cattle
Activity planned outside the class room, if any	selection proces of dairy cow
Any other activity	Development of Economic traits
Topic Synopsis	*(Continue on the reverse side if needed)* Economic traits of Dairy cattle Methods of selection of dairy Animals.

B. Sd

Signature of the Lecturer

Teaching Plan / Lesson No. 5

Name of the Topic	Dairy cattle breeding
Hours required	12
Learning Objectives	Knowledge, Understanding
Previous knowledge to be reminded	Sr. Inter
Examples / Illustrations	cow, buffaloes
Additional inputs	Cross breeding proces in dairy farm
Teaching Aids used	BBT, PPT, chart
References cited	Text book
Student Activity Planned after the teaching	proces of Grading up of cattles
Activity planned outside the class room, if any	Inbreeding methods
Any other activity	Breeding system.
Topic Synopsis	*(Continue on the reverse side if needed)* Systems of dairy cattle breeding, Inbreeding, Out breeding, Cross breeding, Grading up, Breeding systems

B. Sep

Signature of the Lecturer

Teaching Plan / Lesson No. 6

Name of the Topic	Enzymes and vectors
Hours required	12
Learning Objectives	1Knowledge Applications
Previous knowledge to be reminded	9r. Inter
Examples / Illustrations	E.coli
Additional inputs	Visit a local biotechnology laboratory
Teaching Aids used	BBT, PPT,
References cited	Text book
Student Activity Planned after the teaching	Draw the cloning vectors
Activity planned outside the class room, if any	Uses RE TypeII
Any other activity	Functions of DNA polymerases.
Topic Synopsis	*(Continue on the reverse side if needed)* Enzymes and vectors Restriction modification systems Types I, II and III. Mode of action, nomenclature, Applications. DNA polymerases, Terminal deoxynucleotidyl transferase

B. Sing
Signature of the Lecturer

Teaching Plan / Lesson No. 7

Name of the Topic	Gene delivery, PCR
Hours required	12
Learning Objectives	Knowledge, Understanding
Previous knowledge to be reminded	Sr. Inter
Examples / Illustrations	cow, fish
Additional inputs	Process of PCR, blotting techniques
Teaching Aids used	PPT, BBT
References cited	Text book
Student Activity Planned after the teaching	Electroporation procss
Activity planned outside the class room, if any	PCR Equipment
Any other activity	Hybridoma techniques Experiment
Topic Synopsis	*(Continue on the reverse side if needed)* Gene delivery – Microinjection, electroporation, biolistic method (gene gun) liposome and viral mediated delivery PCR, Basics of PCR

B.

Signature of the Lecturer

Teaching Plan / Lesson No. 8

Name of the Topic	Organ culture
Hours required	12
Learning Objectives	Application Creation
Previous knowledge to be reminded	Sr. Inter
Examples / Illustrations	Human, Rat
Additional inputs	process of stem cells
Teaching Aids used	BBT, PPT
References cited	Text book
Student Activity Planned after the teaching	Monoclonal Antibodies experiment
Activity planned outside the class room, if any	Stem cells types
Any other activity	serum importance
Topic Synopsis	*(Continue on the reverse side if needed)* Natural and synthetic cell cultures Primary culture, Secondary culture, continues cell lines Organ culture, Cryopreservation of cultures.

B. Sujatha
Signature of the Lecturer

Teaching Plan / Lesson No. 9

Name of the Topic	Transgenic Animals
Hours required	12
Learning Objectives	Knowledge Understanding
Previous knowledge to be reminded	Sr. Inter
Examples / Illustrations	Human. cow
Additional inputs	Super ovulation praes
Teaching Aids used	BBT. PPT
References cited	Text book
Student Activity Planned after the teaching	Transgenic - sheep uses
Activity planned outside the class room, if any	Invitro fertilization proces
Any other activity	Fish uses
Topic Synopsis	*(Continue on the reverse side if needed)* Manipulation of reproduction in Animals - Artificial Insemination, Invitro fertilization Super ovulation, Embryo transfer Embryo cloning.

B. Sy
Signature of the Lecturer

Teaching Plan / Lesson No. 10

Name of the Topic	DNA fingerprinting
Hours required	12
Learning Objectives	Application Creation
Previous knowledge to be reminded	Sr - Inter
Examples / Illustrations	Human, Rat
Additional inputs	Process of gene therapy in biotechnology lab
Teaching Aids used	PPT, BBT
References cited	Text book
Student Activity Planned after the teaching	Bioinformatics types and uses
Activity planned outside the class room, if any	DNA fingerprinting Application
Any other activity	Monoculture in fish pond culture.
Topic Synopsis	*(Continue on the reverse side if needed)* DNA fingerprinting Application of biotechnology in fisheries - Monoculture in fishes, polyploidy in fishes.

B. Sujatha

Signature of the Lecturer

Teaching Plan / Lesson No. 11

Name of the Topic	Origin of life
Hours required	12
Learning Objectives	Knowledge Understanding
Previous knowledge to be reminded	Gr - Inter
Examples / Illustrations	Human
Additional inputs	Big bang theory Experiment
Teaching Aids used	BBT, PPT
References cited	Text books
Student Activity Planned after the teaching	Primitive atmosphere
Activity planned outside the class room, if any	Miller & Urey Experiment
Any other activity	Oxygen revolution
Topic Synopsis	*(Continue on the reverse side if needed)* Origin of Earth and Solar system Coacervate, Microspheres, Nucleic acids Nutrition, Oxygen revolution Eukaryotes revolution Biochemical orgin of life

B.

Signature of the Lecturer

Teaching Plan / Lesson No. 12

Name of the Topic	Evidences of Evolution
Hours required	12
Learning Objectives	Knowledge Understanding
Previous knowledge to be reminded	9r. Inter
Examples / Illustrations	Human. tissues
Additional inputs	~~A~~atimeria use
Teaching Aids used	BBT, PPT
References cited	Text book
Student Activity Planned after the teaching	connecting links Examples
Activity planned outside the class room, if any	Homologous organs Example
Any other activity	Missing links Example
Topic Synopsis	*(Continue on the reverse side if needed)* palaeontological & Taxonomical Evolution Morphological & Anatomical Evolution Embryological & physiological Evolution Evidences from connecting links, Missing links and biogeographical Distribution.

B. Sc

Signature of the Lecturer

Teaching Plan / Lesson No. 13

Name of the Topic	Lamarckism
Hours required	12
Learning Objectives	Knowledge Understanding
Previous knowledge to be reminded	Gr. 6 ter
Examples / Illustrations	Zirafes
Additional inputs	Germplasm theory use
Teaching Aids used	BBT PDT
References cited	Text book
Student Activity Planned after the teaching	Darwinism Examples
Activity planned outside the class room, if any	Examples of lamarckism
Any other activity	Natural selection flowchart
Topic Synopsis	(Continue on the reverse side if needed) Lamarckism and Neo-Lamarckism Germplasm theory - August Weismann Darwinism - Theory of natural selection modern synthetic theory of Evolution - Neo Darwinism

13. Sep
Signature of the Lecturer

Teaching Plan / Lesson No. 14

Name of the Topic	Variations and Isolations
Hours required	12
Learning Objectives	Knowledge Understanding
Previous knowledge to be reminded	Gr. Inter
Examples / Illustrations	population, birds
Additional inputs	Examples of Isolation
Teaching Aids used	BBT, PPT
References cited	Text book
Student Activity Planned after the teaching	Variations Uses
Activity planned outside the class room, if any	Examples of Mutation
Any other activity	Principle of Hardy weinberg law
Topic Synopsis	*(Continue on the reverse side if needed)* variations - Types - importance Mutation - classification - causes Isolation - role in Evolution Sewall wright Effect Hardy weinberg principle

B.

Signature of the Lecturer

Teaching Plan / Lesson No. 15

Name of the Topic	Zoogeographical regions
Hours required	12
Learning Objectives	Knowledge Understanding
Previous knowledge to be reminded	Gr. 9 Inter
Examples / Illustrations	Human, birds
Additional inputs	Barriers of distribution
Teaching Aids used	BBT, PPT, chart
References cited	Text book
Student Activity Planned after the teaching	Functions of Australian Region
Activity planned outside the class room, if any	Oriental uses
Any other activity	Example of Ethiopian region.
Topic Synopsis	*(Continue on the reverse side if needed)* Animal distribution and barriers of distribution palearctic Nearctic Neotropical Ethiopian regions Oriental regions Australial regions

B. Sup
Signature of the Lecturer

Teaching Plan / Lesson No. 16

Name of the Topic	Essentials of Microbiology & Immunology
Hours required	12
Learning Objectives	Knowledge Understanding
Previous knowledge to be reminded	Jr. Inter
Examples / Illustrations	Humans, cows, plant
Additional inputs	Visit a agriculture farm
Teaching Aids used	BBT, PPT
References cited	Text book
Student Activity Planned after the teaching	collect scientist photos
Activity planned outside the class room, if any	Applicatcations of Environment
Any other activity	Immunity types and uses
Topic Synopsis	*(Continue on the reverse side if needed)* History and major Milestones of Microbiology, contributions of Edward Jenner, louis pasteur, Robert koch and Joseph lister

B. Sai

Signature of the Lecturer

Teaching Plan / Lesson No. 17

Name of the Topic	Essentials of biochemistry
Hours required	12
Learning Objectives	Knowledge understanding
Previous knowledge to be reminded	Jr - Inter
Examples / Illustrations	Human, Sugars
Additional inputs	lipids uses
Teaching Aids used	BBT, PPT
References cited	Text book
Student Activity Planned after the teaching	classification of Amino Acids
Activity planned outside the class room, if any	structure of DNA & RNA
Any other activity	Functions of proteins
Topic Synopsis	*(Continue on the reverse side if needed)* carbohydrates, lipids Amino Acids & protein Nucleic Acids - DNA & RNA Anabolism and catabolism

B. Suj
Signature of the Lecturer

Teaching Plan / Lesson No. 13

Name of the Topic	Essential of Biotechnology
Hours required	12
Learning Objectives	Knowledge Understanding Applications
Previous knowledge to be reminded	9r. Inter
Examples / Illustrations	Human, E.coli
Additional inputs	Visit a local Horticulture centre
Teaching Aids used	BBT, PPT
References cited	Text book
Student Activity Planned after the teaching	Environmental biotechnology uses
Activity planned outside the class room, if any	Biotic stress and Abiotic stress
Any other activity	Transgenic Animals uses.
Topic Synopsis	*(Continue on the reverse side if needed)* History, scope & significance biotechnology Environmental Biotechnology Genetic Engineering Transgenic plants and Animals stress tolerant plants, BT cotton

B. Suresh
Signature of the Lecturer

Teaching Plan / Lesson No. 19

Name of the Topic	Analytical Tools and Techniques in biology
Hours required	12
Learning Objectives	Knowledge Application
Previous knowledge to be reminded	Sr. Tiller
Examples / Illustrations	Human, Monkey, Rat
Additional inputs	To visit a local laboratory ELISA TEST
Teaching Aids used	BBT, PPT, chart
References cited	Text book
Student Activity Planned after the teaching	Demonstrate Elisa Test
Activity planned outside the class room, if any	Monoclonal Antibodies uses
Any other activity	PCR uses
Topic Synopsis	*(Continue on the reverse side if needed)* PCR and DNA finger printing Immunoblotting and ELISA MAb – Applications in diagnosis therapy Eugenics Gene therapy

B.

Signature of the Lecturer

Teaching Plan / Lesson No. 20

Name of the Topic	Biostatistics and Bioinformatics
Hours required	12
Learning Objectives	Knowledge Understanding
Previous knowledge to be reminded	Gr. 4 inter
Examples / Illustrations	Human
Additional inputs	Genebank uses, protein 3D structure
Teaching Aids used	BBT, PPT
References cited	Text book
Student Activity Planned after the teaching	Measures of central Tendency
Activity planned outside the class room, if any	NCBI, EBI use
Any other activity	protein databases functions
Topic Synopsis	*(Continue on the reverse side if needed)* Data collection and Sampling, Mean, Median & Mode Range, standard deviation & variance Probability and tests of significance. Genomics, proteomics, NCBI, EBI Genebank protein 3D structure. NCBI Genome workbench.

B. Suj

Signature of the Lecturer

Teaching Plan / Lesson No. 21

Name of the Topic	physiology of Digestion
Hours required	12
Learning Objectives	Knowledge Understanding
Previous knowledge to be reminded	Sr. Inter
Examples / Illustrations	Human, Monkey
Additional inputs	Visit a local doctor clinic
Teaching Aids used	BBT, PPT
References cited	Text book
Student Activity Planned after the teaching	Awareness of vitamins & Minerals
Activity planned outside the class room, if any	Gastro intestinal tract Model prepared
Any other activity	Functions of hormones
Topic Synopsis	*(Continue on the reverse side if needed)* Structural organization and function of gastrointestinal tract and associated glands. Vitamins & Mineral composition of food & Mechanical and chemical

B. Sup
Signature of the Lecturer

Teaching Plan / Lesson No. 22

Name of the Topic	Physiology of Respiration
Hours required	12
Learning Objectives	Knowledge Understanding
Previous knowledge to be reminded	3r. Inter
Examples / Illustrations	Human, Rat, Fish
Additional inputs	Test for Hb-/. count in students
Teaching Aids used	PPT, BBT.
References cited	Text book
Student Activity Planned after the teaching	Draw the chart respiratory system lungs
Activity planned outside the class room, if any	O_2 and Hb uses prepared chart
Any other activity	chloride shift factors
Topic Synopsis	*(Continue on the reverse side if needed)* structural organization of Respiratory system, Mechanism of respiration, control of respiration. pulmonary ventilation, Respiratory volumes and capacities

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Teaching Plan / Lesson No. 23

Name of the Topic	Renal physiology
Hours required	12
Learning Objectives	Knowledge Understanding
Previous knowledge to be reminded	Gr. Inter
Examples / Illustrations	Human
Additional inputs	Mechanism of Kidney
Teaching Aids used	PPT, BBT
References cited	text book
Student Activity Planned after the teaching	Nephron diagram
Activity planned outside the class room, if any	Kidney diagram
Any other activity	Water balance regulation by Kidney
Topic Synopsis	*(Continue on the reverse side if needed)* Structure of Kidney and its functional Unit Mechanism of Urine formation Regulation of water balance Regulation of Acid - base balance

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Teaching Plan / Lesson No. 24

Name of the Topic	Physiology of Breeding Tissues
Hours required	12
Learning Objectives	Knowledge Application
Previous knowledge to be reminded	Sr Tute
Examples / Illustrations	Human
Additional inputs	Neuron wes
Teaching Aids used	BBT, PPT
References cited	Text book
Student Activity Planned after the teaching	Draw the Neuron Structure
Activity planned outside the class room, if any	Sarcomere diagram
Any other activity	Chemical basis of Muscle contraction
Topic Synopsis	*(Continue on the reverse side if needed)* Neuron Structure and types Nerve impulse transmission, Synapse Ultra structure of Muscle Molecular and chemical basis of Muscle contraction.

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Teaching Plan / Lesson No. 25

Name of the Topic	Physiology of Heart
Hours required	12
Learning Objectives	Knowledge Application
Previous knowledge to be reminded	Gr. 8th
Examples / Illustrations	Human,
Additional inputs	ECG function is seen the local Laboratory
Teaching Aids used	BBT, PPT
References cited	Text book
Student Activity Planned after the teaching	Draw the Mammalian heart
Activity planned outside the class room, if any	cardiac cycle use
Any other activity	Blood pressure working in BP Mission
Topic Synopsis	*(Continue on the reverse side if needed)* Structure of Mammalian heart, coronary circulation structure and working of conducting myocardial fibres, Origin and conduction of cardiac impulse.

B. [illegible]
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Teaching Plan / Lesson No. 26

Name of the Topic	Cell biology - I
Hours required	12
Learning Objectives	Knowledge Understanding
Previous knowledge to be reminded	9r. Inter
Examples / Illustrations	Human, fish
Additional inputs	Models of Mosaic model
Teaching Aids used	PPT, BBT
References cited	Text book
Student Activity Planned after the teaching	Virus diagram
Activity planned outside the class room, if any	Animal cell diagram
Any other activity	Functions of plasma Membrane
Topic Synopsis	*(Continue on the reverse side if needed)* Definition, history, prokaryotic and Eukaryotic cells, Virus, viroids, Mycoplasma. Electron Microscopic structure of Animal cell.

B. [signature]
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Teaching Plan / Lesson No. 27

Name of the Topic	cell biology - II
Hours required	12
Learning Objectives	Knowledge Understanding
Previous knowledge to be reminded	Sr. Inter
Examples / Illustrations	Human
Additional inputs	uses of chromosomes
Teaching Aids used	PPT, BBT
References cited	Text book
Student Activity Planned after the teaching	Draw the Lysosomes
Activity planned outside the class room, if any	Mitochondria diagram
Any other activity	Function of Ribosomes
Topic Synopsis	*(Continue on the reverse side if needed)* structure & Functions of Golgi complex & ER structure & Functions of Lysosomes and Ribosomes, Mitochondria, centriole, [illegible] and chromosomes

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Teaching Plan / Lesson No. 28

Name of the Topic	cell biology - III
Hours required	12
Learning Objectives	Knowledge Understanding
Previous knowledge to be reminded	Sr. Inter.
Examples / Illustrations	Human
Additional inputs	Mitosis & Meiosis stages in Onion
Teaching Aids used	PPT, BBT
References cited	Text book
Student Activity Planned after the teaching	Krebs cycle chart
Activity planned outside the class room, if any	check points regulation
Any other activity	cancer symptoms
Topic Synopsis	*(Continue on the reverse side if needed)* cell division - Mitosis & Meiosis cell cycle - stages - check points regulation Abnormal cell growth, Cancer - Apoptosis Bio energetics - Glycolysis, Krebs cycle, ETC

B. [illegible]
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Teaching Plan / Lesson No. 29

Name of the Topic	Molecular biology - I
Hours required	12
Learning Objectives	Knowledge Application
Previous knowledge to be reminded	Sr. Inter
Examples / Illustrations	Human, fish
Additional inputs	Structure of DNA
Teaching Aids used	PPT, BBT
References cited	Text book
Student Activity Planned after the teaching	Chart DNA replication
Activity planned outside the class room, if any	Transcription Function
Any other activity	Translation
Topic Synopsis	*(Continue on the reverse side if needed)* central dogma of Molecular biology DNA replication, Basic concepts Transcription in prokaryote Translation

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Teaching Plan / Lesson No. 30

Name of the Topic	Molecular biology - II
Hours required	12
Learning Objectives	Knowledge, Understanding
Previous knowledge to be reminded	Sr. Inter
Examples / Illustrations	Human, Rat
Additional inputs	Lac operon concept
Teaching Aids used	PPT, BBT
References cited	Text book
Student Activity Planned after the teaching	structure of carbohydrates
Activity planned outside the class room, if any	Amino acids types - chart
Any other activity	lipids importance
Topic Synopsis	*(Continue on the reverse side if needed)* Gene Expression in prokaryotes and Eukaryotes Carbohydrates, Proteins, Lipids } structure - properties × biological importance

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Teaching Plan / Lesson No. ①

Name of the Topic	Renewable Energy Sources
Hours required	1 hour
Learning Objectives	To make the students learn about renewable energy sources.
Previous knowledge to be reminded	previous knowledge about solar energy was reminded.
Examples / Illustrations	Illustrated with examples.
Additional inputs	Notes given, ppt
Teaching Aids used	explained with ppts
References cited	A Text book of environmental chemistry by
Student Activity Planned after the teaching	Learn about Renewable energy sources
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* Renewable energy sources Renewable energy sources are the energy sources which are not exhausted after continuous usage. Ex: Solar energy Biomass energy

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Teaching Plan / Lesson No. (2)

Name of the Topic	Non-Renewable energy Sources
Hours required	1 hour
Learning Objectives	To make the students learn about non-Renewable energy Sources.
Previous knowledge to be reminded	Previous energy with regard to thermal energy was remarked.
Examples / Illustrations	Illustrated with examples.
Additional inputs	Notes given
Teaching Aids used	Black board, ppts.
References cited	Environmental Chemistry by SS Dara.
Student Activity Planned after the teaching	Learn about non-renewable energy Sources.
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* Non-renewable Energy Sources Energy sources which are exhausted after continuous usage are called non-renewable energy sources. for eg: thermal energy nuclear energy coal, fossil fuels.

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Teaching Plan / Lesson No.(3)

Name of the Topic	Air pollution
Hours required	2 hours
Learning Objectives	to make the students learn about air pollution
Previous knowledge to be reminded	Previous knowledge about air pollution was remainded.
Examples / Illustrations	Illustrated with examples.
Additional inputs	ppts presentation
Teaching Aids used	Black. board, digital Board
References cited	Environmental chemistry by SS Dara
Student Activity Planned after the teaching	Learn about air pollution
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	(Continue on the reverse side if needed) Air pollution Emission air pollutants in the atmosphere by anthropogenic activities affect man and environment Primary pollutants [illegible] NO_2 [illegible] Secondary pollutants [illegible]

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Teaching Plan / Lesson No. 14

Name of the Topic	Climate change - Global warming, acid rains,
Hours required	3hrs
Learning Objectives	To make the students learn about impact of climatic changes on environment
Previous knowledge to be reminded	Previous knowledge of students about climatic changes was remainded.
Examples / Illustrations	Illustrated with examples.
Additional inputs	Notes given
Teaching Aids used	power point presentation, digital board
References cited	Environmental chemistry by ISDavis
Student Activity Planned after the teaching	learn about climatic changes
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* Climatic changes Climatic changes results global warming, acid rains, greenhouse effect, ozone depletion, smog, formation and depletion of ozone layer, their impacts on environment and human life.

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Teaching Plan / Lesson No (5)

Name of the Topic	Water Pollution
Hours required	2 hours
Learning Objectives	To make the students learn about properties of water and Pollution.
Previous knowledge to be reminded	Previous knowledge about water properties and pollution was reminded.
Examples / Illustrations	Illustrated with examples.
Additional inputs	
Teaching Aids used	Power point presentation, Digital board
References cited	Environmental Chemistry by S S Dara
Student Activity Planned after the teaching	Learn about water properties and water pollution.
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* Properties of water and pollution Water has some unique physical and chemical properties. Water quality depends upon the parameters like pH of water, COD, BOD, dissolved oxygen, suspended solids etc.

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Teaching Plan / Lesson No.

Name of the Topic	water Quality Standards
Hours required	2 hours
Learning Objectives	To make the students learn about various water quality standards
Previous knowledge to be reminded	Previous knowledge of water quality standards was reminded.
Examples / Illustrations	Illustrated with examples.
Additional inputs	Notes given
Teaching Aids used	Digital board, [illegible]
References cited	Environmental chemistry by [illegible]
Student Activity Planned after the teaching	Learn about water quality standards
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* Water Quality Standards Quality of water can be determined by some standards like pH of water, chemical oxygen demand, biological oxygen demand, dissolved oxygen, [illegible] hardness of water

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Teaching Plan / Lesson No.

Name of the Topic	Hardness of water
Hours required	2 hours
Learning Objectives	To make the students learn about hardness of water.
Previous knowledge to be reminded	Previous knowledge about hardness of water was reminded.
Examples / Illustrations	Illustrated with examples
Additional inputs	powerpoint presentation
Teaching Aids used	Digital Board
References cited	Environmental chemistry by Sharma
Student Activity Planned after the teaching	Learn about hardness of water
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* Hardness of water Water which does not give foam with soap is called hard water. Hard water contains carbonates and bicarbonates of calcium and magnesium is called temporary hardness of water as chlorides and sulphates of calcium and magnesium is called permanent hardness of water

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Teaching Plan / Lesson No.

Name of the Topic	Effect of toxic chemicals
Hours required	2 hours
Learning Objectives	To make the students learn about effects of toxic chemicals.
Previous knowledge to be reminded	Previous knowledge about toxic chemicals has reminded.
Examples / Illustrations	Illustrated with examples.
Additional inputs	Model Given
Teaching Aids used	Black Board.
References cited	Environmental chemistry by Sharma
Student Activity Planned after the teaching	Learn about effect of toxic chemicals
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	(Continue on the reverse side if needed) Effects of toxic chemicals

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Teaching Plan / Lesson No.

Name of the Topic	Toxicity of heavy metals
Hours required	4 hours
Learning Objectives	To make the students learn about toxicity of heavy metals.
Previous knowledge to be reminded	Previous knowledge about toxic chemicals was reminded.
Examples / Illustrations	Illustrated with examples.
Additional inputs	Power point presentations
Teaching Aids used	Digital Board
References cited	Environmental Chemistry by S S Dara
Student Activity Planned after the teaching	Learn about toxicity of heavy metals
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* Toxicity of heavy metals Heavy metals like Pb, Arsenic (As), mercury(Hg) and cadmium(Cd) in environment and human life through food chain.

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Teaching Plan / Lesson No.

Name of the Topic	Ecosystems
Hours required	4 hours
Learning Objectives	To make the students learn about ecosystems.
Previous knowledge to be reminded	Previous knowledge about ecosystem was reminded.
Examples / Illustrations	Illustrated with examples
Additional inputs	Power point presentations.
Teaching Aids used	Black board & digital board
References cited	Environmental chemistry by S.S. Dara
Student Activity Planned after the teaching	Learn about ecosystems
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* Ecosystems Ecosystems are made up of biotic and abiotic components. various types of ecosystem - Grass land ecosystem, Pond ecosystem, Forest ecosystem, Aquatic ecosystem. Food chains, energy flow and ecological pyramids.

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Teaching Plan / Lesson No.

Name of the Topic	Biogeochemical cycles.
Hours required	2 hours
Learning Objectives	To make the students learn about Biogeochemical cycles.
Previous knowledge to be reminded	Previous knowledge about hydrological cycles was reminded
Examples / Illustrations	Illustrating with examples
Additional inputs	
Teaching Aids used	Black board, digital board, chalk
References cited	Environmental chemistry by SS. Dara
Student Activity Planned after the teaching	Learn about biogeochemical cycles
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* Biogeochemical cycles "Biogeochemical cycle mainly refers to the movement of nutrients and other elements between biotic and abiotic factors. Biogeochemical cycles important to living organisms include the water, carbon, nitrogen, Phosphorous and Sulphur cycles.

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Teaching Plan / Lesson No.

Name of the Topic	Alkenes
Hours required	4 hours.
Learning Objectives	To make the students learn about, Pr... physical and chemical properties of Alke...
Previous knowledge to be reminded	Previous knowledge about alkanes and alkenes was reminded.
Examples / Illustrations	Illustrated with examples.
Additional inputs	Notes given
Teaching Aids used	Black board, chalk
References cited	Deluxe academy text book.
Student Activity Planned after the teaching	Learn about preparation, physical and chemical properties of Alkenes.
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* Alkenes: The general formula of alkenes is C_nH_{2n}. These are unsaturated hydrocar... Alkenes undergo addition reactions. ① $C_2H_4 + H_2 \rightarrow C_2H_6$ ② $C_2H_4 + Cl_2 \rightarrow C_2H_4Cl_2$ ③ $C_2H_4 + O_2 \rightarrow CH_2(O)CH_2$ (O) ④ $C_2H_4 \rightarrow HCl \rightarrow C_2H_5$

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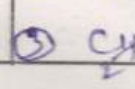
Teaching Plan / Lesson No.

Name of the Topic	Alkynes
Hours required	4 hours
Learning Objectives	To make the students learn about Alkynes.
Previous knowledge to be reminded	Revision knowledge about alkynes was reminded
Examples / Illustrations	Illustrated with examples.
Additional inputs	NCERT Solved
Teaching Aids used	Black board, chart, Chalk
References cited	Telugu Academy Text Book
Student Activity Planned after the teaching	Learn about the preparation, physical and chemical properties of alkynes.
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* Alkynes Alkynes are unsaturated hydrocarbons The General formula of this compounds is These compounds undergo addition reactions ① $C_2H_2 + H_2 \rightarrow C_2H_4 \rightarrow C_2H_6$ ② $C_2H_2 + Cl_2 \rightarrow$ ③ $C_2H_2 + O_2 \rightarrow$  ④

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Teaching Plan / Lesson No.

Name of the Topic	Structure and Preparation of Benzene
Hours required	2 hours.
Learning Objectives	To make the students learn about structure and preparation of Benzene
Previous knowledge to be reminded	Previous knowledge about structure of Benzene was reminded.
Examples / Illustrations	explained with examples.
Additional inputs	Notes given
Teaching Aids used	Black board and chalk
References cited	Telugu Academy text Book
Student Activity Planned after the teaching	Learn about Structure and preparation of Benzene
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* Structure of Benzene Benzene is aromatic hydrocarbon. Its formula is C_6H_6. It can prepared by the Polymerisation of acetylene. There are [illegible] in Benzene. So the alternate [illegible] are present

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Teaching Plan / Lesson No.

Name of the Topic	Electrophilic Substitution reactions
Hours required	4 hours
Learning Objectives	To make the students learn about the electrophilic substitution reactions of Benzene
Previous knowledge to be reminded	Previous knowledge about electrophilic substitution reactions of Benzene
Examples / Illustrations	Illustrating with examples.
Additional inputs	notes given
Teaching Aids used	Black board, Chalk
References cited	Morrison & Boyd Text Book
Student Activity Planned after the teaching	Learn about electrophilic substitution reactions of Benzene.
Activity planned outside the class room, if any	
Any other activity	
Topic Synopsis	*(Continue on the reverse side if needed)* Electrophilic substitution reactions of Benzene. Even though Benzene has double bonds, it prefers to undergo electrophilic substitution reactions. ① $C_6H_6 + Cl_2 \longrightarrow$ ② $C_6H_6 + CH_3Cl \longrightarrow$ ③ $C_6H_6 + HNO_3 \longrightarrow$ ④ $C_6H_6 + H_2SO_4 \longrightarrow$

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Teaching Plan / Lesson No.

Name of the Topic	రాజనీతి – నన్నయ
Hours required	10
Learning Objectives	నన్నయ మహాభారతం లోని రాజనీతిని గురించి విద్యార్థులకు తెలియ పరచుట
Previous knowledge to be reminded	నన్నయ కవితా రచనను పరిచయం చేయుట వ్యాస మహర్షి రచించిన మహాభారతమును గురించి తెలుపుట
Examples / Illustrations	మహాభారతం లోని పలు ఘట్టనల గురించి వివరించుట
Additional inputs	ఆంధ్ర మహాభారతం
Teaching Aids used	నల్లబల్ల, సుద్దముక్క
References cited	నన్నయ విరచిత ఆంధ్ర మహాభారతం
Student Activity Planned after the teaching	పలు పాత్రల గురించి విద్యార్థుల వలన అడిగి తెలుసు కొనుట
Activity planned outside the class room, if any	మహాభారత మునకు సంబంధించిన స్థలాలను చూపించుట
Any other activity	అసైన్ మెంట్ రాయించుట.
Topic Synopsis	*(Continue on the reverse side if needed)* 1. కవి పరిచయం 2. మహా

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Teaching Plan / Lesson No.

Name of the Topic	గబ్బిలం - గుఱ్ఱం జాషువా (ప్రథమ భాగం)
Hours required	10 (1-40 పద్యాలు)
Learning Objectives	జాషువా కాలం నాటి సామాజిక, మత పరిస్థితులను, గబ్బిలం కావ్య విశేషాలను తెలుపుట
Previous knowledge to be reminded	దళిత సాహిత్యంతో పరిచయం ఉన్న పలువురు కవులను, వారి రచనలను గూర్చి విద్యార్థులకు తెలుపుట
Examples / Illustrations	దళిత సాహిత్యానికి సంబంధించిన వివిధ ఉదాహరణలు తెలుపుట
Additional inputs	దళిత సాహిత్యం
Teaching Aids used	నల్లబల్ల- సుద్దముక్క
References cited	పలు దళిత సాహిత్య గ్రంథాలు.
Student Activity Planned after the teaching	దళిత సాహిత్యం గురించి విద్యార్థుల తెలుసు కానుకలు చేయుట
Activity planned outside the class room, if any	దళిత నేపథ్యం గల పలు ప్రదేశాలు సందర్శించుట
Any other activity	సంబంధిత విషయాలను తెలుపుట
Topic Synopsis	*(Continue on the reverse side if needed)* 1. గుఱ్ఱం జాషువా కవి పరిచయం 2. కవితా శైలి. 3. కావ్య రచనా నేపథ్యం 4. గబ్బిలం పాఠ్యాంశం ఇతివృత్తం 5. పాఠ్యాంశ సందేశం.

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Teaching Plan / Lesson No.

Name of the Topic	3. అలరాస పుట్టిల్లు - కళ్యాణ సుందరీ జగన్నాథ్
Hours required	10
Learning Objectives	సంపన్న, ఉన్నత కులాలలో డబ్బు, హోదా, ప్రతిష్ఠ, పరువు - అనే విషయాల మధ్య జరిగే సంఘర్షణ గురించి వివరించుట.
Previous knowledge to be reminded	కథానికను విద్యార్థులకు పరిచయం చేయుట
Examples / Illustrations	పలురకాల కథలను విద్యార్థులకు తెలుపుట
Additional inputs	కథానిక ప్రక్రియ నేపథ్యం గురించి తెలుపుట
Teaching Aids used	నల్లబల్ల - సుద్దముక్క
References cited	అలరాసపుట్టిల్లు - కళ్యాణ సుందరీ జగన్నాథ్
Student Activity Planned after the teaching	ఆనాటి నేపథ్యంలో కలిగిన కథలను విద్యార్థుల చేత చదివించుట
Activity planned outside the class room, if any	నిజ జీవితాలలోని విషయాలను కథానికలుగా ఎలా మలచాలో తెలుపుట
Any other activity	పలు కథలను చదివించుట
Topic Synopsis	*(Continue on the reverse side if needed)* 1. రచయిత్రి పరిచయం 2. కథానిక పరిచయం 3. అలరాసపుట్టిల్లు కథానేపథ్యం 4. కథలోని సందేశం 5. పాత్ర చిత్రణ గురించి వివరించుట

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Teaching Plan / Lesson No.

Name of the Topic	4. అసమర్థుని జీవయాత్ర - త్రి. గో. చ
Hours required	10
Learning Objectives	సమాజంలో యిమడ లేని వ్యక్తుల జీవితాలను అద్దం పట్టే నవల
Previous knowledge to be reminded	మనో విశ్లేషణాత్మక నవలను పరిచయం చేయుట
Examples / Illustrations	అసమర్థుని జీవయాత్ర, చివరకు మిగిలేది వంటి నవలల గురించి చెప్పుట
Additional inputs	ఇతర సాహితీ పరమైన రచనలు తెలుపుట
Teaching Aids used	నల్లబల్ల సుద్దముక్క
References cited	గోపీచంద్ అసమర్థుని జీవయాత్ర
Student Activity Planned after the teaching	విద్యార్థులకు మనోవైజ్ఞానిక నవలను గూర్చి వివరించుట
Activity planned outside the class room, if any	సమాజంలో ఇలాంటి వ్యక్తుల వున్నతీరును పరిశీలించుట
Any other activity	పలు నవలలగురించి వివరించుట
Topic Synopsis	*(Continue on the reverse side if needed)* 1. గోపీచంద్ పరిచయం 2. నవల నేపథ్యం తెలుపుట 3. నవల ఇతివృత్తం 4. నవలలో పాత్ర చిత్రణ 5. నవలలు గల సందేశం

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Teaching Plan / Lesson No.

Name of the Topic	5. పాఠం 5 సి.పి. బ్రౌన్
Hours required	10
Learning Objectives	తెలుగు భాషకు సేవ చేసిన మహా నిఘంటువుల గురించి విద్యార్థులకు తెలియ చెయ్యుట
Previous knowledge to be reminded	గత తరగతులను పునశ్చరణ గావించుట
Examples / Illustrations	తెలుగు భాషాభివృద్ధికి పాటు పడిన పలువురు మహానీయుల ఉదాహరణలు
Additional inputs	నల్లబల్ల, సుద్దముక్క
Teaching Aids used	నల్లబల్ల, సుద్దముక్క
References cited	సి.పి.బ్రౌన్ - చరిత్ర - జానుమద్ది
Student Activity Planned after the teaching	బ్రౌన్ భాషకు చేసిన సేవ గురించి విద్యార్థుల చేత చెప్పించుట
Activity planned outside the class room, if any	—
Any other activity	బ్రౌన్ లెక్చరర్ పర్యటన
Topic Synopsis	*(Continue on the reverse side if needed)* 1. జానుమద్ది పాఠ్యాంశ పరిచయం 2. బ్రౌన్ బాల్యం, నేపథ్యం 3. బ్రౌన్ ఉద్యోగ జీవితం 4. బ్రౌన్‌కు తెలుగు భాషపట్ల ఆసక్తి కలుగుట 5. బ్రౌన్ తెలుగు భాషకు చేసిన సేవ

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Teaching Plan / Lesson No.

Name of the Topic	వ్యాకరణాంశాలు
Hours required	10
Learning Objectives	వ్యాకరణాంశాలపైన విద్యార్థులకు అవగాహన కల్పించుట
Previous knowledge to be reminded	గతంలో నేర్చుకున్న వ్యాకరణాంశాలను పునశ్చరణ గావించుట
Examples / Illustrations	ఉదాహరణల ద్వారా వ్యాకరణాన్ని వివరించుట
Additional inputs	వ్యాకరణ గ్రంథాలు
Teaching Aids used	నల్లబల్ల, సుద్దముక్క
References cited	వ్యాకరణ గ్రంథాలు
Student Activity Planned after the teaching	వ్యాకరణాంశాలపై పలు అనువర్తనాత్మక ప్రశ్నల రూపంలో అడిగి నివృత్తి చేయుట
Activity planned outside the class room, if any	—
Any other activity	—
Topic Synopsis	*(Continue on the reverse side if needed)* 1. సంధులు 2. సమాసాలు 3. అలంకారాలు 4. ఛందస్సు

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1/Sem-II **Teaching Plan / Lesson No.** Semester-II

Name of the Topic	1. వ్యక్తీకరణ నైపుణ్యాలు
Hours required	12
Learning Objectives	భాష - ఉత్పత్తి వాదాలు గురించి విద్యార్థులకు వివరించుట
Previous knowledge to be reminded	గత తరగతులను పునశ్చరణ గావించుట
Examples / Illustrations	భాషా వాదాలకు ఉదాహరణలచ్చారా వివరించుట
Additional inputs	భాషావాదాలకి పలువురి అభిప్రాయం
Teaching Aids used	చాల్కబల్ల - సుద్దముక్క
References cited	పేలవల సిమ్మన్న - భాషాశాస్త్రం
Student Activity Planned after the teaching	భాషా శాస్త్రానికి సంబంధించిన పలు ఉదాహరణలతో వివరించుట
Activity planned outside the class room, if any	విద్యార్థులను ప్రశ్నలు అడుగుట
Any other activity	—
Topic Synopsis	*(Continue on the reverse side if needed)* 1. భాష నిర్వచనాలు - లక్షణాలు 2. భాష అవశ్యకత, ప్రయోజనాలు 3. భాషోత్పత్తి వాదాలు 4. వర్గం - పదం - వాక్యం

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Teaching Plan / Lesson No. 2/IInd Sem

Name of the Topic	2. అనువాదరచన
Hours required	12
Learning Objectives	అనువాదంలోని ప్రత్యేకతలను గూర్చి విద్యార్థులు తెలుసుకుంటారు.
Previous knowledge to be reminded	గత తరగతిలలో జరిగిన విషయాలను పునశ్చరణ గావించుట
Examples / Illustrations	పలు ఉదాహరణల ద్వారా అనువాద రీతులను వివరించుట
Additional inputs	అనువాదానికి చెందిన పలుగ్రంథాలు
Teaching Aids used	నల్లబల్ల - సుద్దముక్క.
References cited	చేకూరి రామారావు - అనువాద పద్ధతులు - అనువాద సమస్యలు రాచమల్లు రామచంద్రారెడ్డి - అనువాద సమస్యలు
Student Activity Planned after the teaching	తరగతి పూర్తయిన తదనంతరం అనువాదానికి సంబంధించిన పలు ప్రశ్నలు అడుగుట
Activity planned outside the class room, if any	—
Any other activity	—
Topic Synopsis	*(Continue on the reverse side if needed)* 1. అనువాదం - నిర్వచనాలు - స్వరూపం 2. అనువాద పద్ధతులు 3. అనువాద సమస్యలు 4. పేరా అనువాదం

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Teaching Plan / Lesson No. 3/II nd Semester

Name of the Topic	3. మాధ్యమాలకు రచన
Hours required	12.
Learning Objectives	మాధ్యమాలకు ఏవిధంగా రాయాలో విద్యార్థులు తెలుసుకుంటారు.
Previous knowledge to be reminded	గత తరగతులలో జరిగిన విషయాలను పునశ్చరణ గావించుట
Examples / Illustrations	-ఉదాహరణలతో మాధ్యమాలకు రచన పాఠ్యాంశాన్ని వివరించుట.
Additional inputs	మాధ్యమాలలో రకాలు తెలుపుట
Teaching Aids used	నల్లబల్ల - సుద్దముక్క
References cited	పాఠ్యప్రణాళిక
Student Activity Planned after the teaching	వివిధ రకాల మాధ్యమాల్ని గుర్తించి విద్యార్థుల్ని అడిగి తెలుసుకొనుట
Activity planned outside the class room, if any	స్థానిక మాధ్యమాలగురించి విద్యార్థులు తెలియజేయుట
Any other activity	ఇతర వీడియో రకాలుకొంచె తెలుపుట
Topic Synopsis	*(Continue on the reverse side if needed)* 1. శ్రవణ మాధ్యమం 2. శ్రవణ మాధ్యమం ప్రయోజనాలు 3. దృశ్యశ్రవ్యమాధ్యమం లక్షణాలు తెలుసుకొనుట 4. ఇంటర్నెట్ మాధ్యమం యొక్క ఉపయోగాలు.

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Teaching Plan / Lesson No. 4 / Semester - II

Name of the Topic	వార్తా మాధ్యమాలు రచన - ముద్రణా మాధ్యమం
Hours required	10
Learning Objectives	ముద్రణా మాధ్యమం గురించి తెలుపుట ఆవిర్భావ వికాసాలను తెలుపుట
Previous knowledge to be reminded	ముద్రణా మాధ్యమ ప్రాథమిక విషయాలను పునశ్చరణ గావించుట
Examples / Illustrations	వివిధ రకాల ముద్రణా మాధ్యమాలకు చెందిన ఉదాహరణలు వివరించుట
Additional inputs	ముద్రణా పత్రికలగురించి వివరించుట
Teaching Aids used	నల్లబల్ల సుద్ద ఎరేజర్
References cited	పాఠ్యపుస్తకం.
Student Activity Planned after the teaching	ఉదాహరణల ద్వారా విద్యార్థులకు వివరించుట
Activity planned outside the class room, if any	ఇతర ఉదాహరణల ద్వారా వివరించుట
Any other activity	పలు పత్రికలు, సుతిలి తెలుపుట
Topic Synopsis	*(Continue on the reverse side if needed)* 1. అచ్చు మాధ్యమం పరిచయం 2. వివిధ రకాల పత్రికలు, వాటిలోని, శైలి, వైవిధ్యం 3. పత్రికా రచన, వార్తారచన, సంపాదకీయాలు, నమూనాలు అవగాహన

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Teaching Plan / Lesson No. 5/IInd Semester

Name of the Topic	సృజనాత్మక రచన
Hours required	12
Learning Objectives	సృజనాత్మక రచనలోని వివిధ అంశాలను గురించి తెలుసుకొనుట
Previous knowledge to be reminded	సృజనాత్మక రచనల గురించి విద్యార్థులకు వివరించుట
Examples / Illustrations	కవిత్వం, కథ, వ్యాసం వంటి అంశాల గురించి ఉదాహరణలతో వివరించుట
Additional inputs	సినారె, వట్టికోట రచనలు
Teaching Aids used	నల్లబల్ల, పుస్తకాలు
References cited	సినారె - ఆధునికాంధ్ర కవిత్వం - సంప్రదాయాలు
Student Activity Planned after the teaching	పలు సృజనాత్మక రచనలగురించి అవగాహనను వివరించుట
Activity planned outside the class room, if any	కవిత్వం, కథ, నవల, వ్యాసం వంటి ప్రక్రియల తీరులను వివరించుట
Any other activity	పలు రచనలను విద్యార్థుల చేత చదివించుట
Topic Synopsis	(Continue on the reverse side if needed) 1. కవితారచన - ఉత్తమ కవితా లక్షణాలు 2. కథారచన - ఉత్తమ కథా లక్షణాలు 3. వ్యాసరచన - ఉత్తమ వ్యాస లక్షణాలు

[signature]

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