A.S.D.GOVERNMENT DEGREE COLLEGE FOR WOMEN (A), KAKINADA.

COURSE OUTCOMES

2025-26

A.S.D.GOVERNMENT DEGREE COLLEGE FOR WOMEN (A), KAKINADA.

CIRCULAR

Dated: 09-09-2025.

All the Staff and Students are informed that the Course Outcomes, Programme Outcomes and Programme Specific Outcomes for All Programmes for the Academic Year 2025-26 displayed in our College Website (asdgdcw.ac.in).

Forward this Circular to all Student Groups.

PRINCIPAL

PRINCIPAL
A.S.D.GOVT.DEGREE COLLEGE (W)
AUTONOMOUS
KAKINADA

A.S.D. GOVERNMENT COLLEGE FOR WOMEN (AUTONOMOUS) KAKINADA

DEPARTMENT OF ENGLISH – 2025-2026

Course Outcomes
General English

SEMESTER- I
English Bridge-I: Life Skills

CO1: Interpret and appreciate literary texts with reference to social, emotional, and ecological concerns.

CO2: Apply foundational grammar elements accurately in spoken and written English.

CO3: Demonstrate improved reading comprehension and vocabulary acquisition.

CO4: Engage in meaningful communication using functional expressions and phonetic clarity.

CO4: Exhibit awareness of self, society, and the world through reflective and descriptive writing.

SEMESTER- II
English Bridge-II: Communicate and Connect

CO1: Demonstrate improved communication etiquette through readings on civility and motivation.

CO2: Employ skimming, scanning, and note-making strategies in academic and workplace writing.

CO3: Display awareness of societal values and professional conduct through literature.

CO4: Draft structured texts like reports, agendas, and notices with clarity.

CO5: Integrate vocabulary and grammar in writing and speaking activities effectively.

SEMESTER- III
English Bridge-III: GLOBAL FUTURE

CO1: Students will be able to interpret and respond to literary texts.

CO2: Students will demonstrate proficiency in writing formal and informal letters, CVs, and emails.

CO3: Students will be capable of participating in interviews and group discussions.

CO4: Students will reflect on personal and professional strengths through SWOC analysis and EI.

CO5: Promote critical thinking, emotional intelligence, and self-awareness through soft skills.

A.S.D.GOVT.DEGREE COLLEGE (W) AUTONOMOUS KAKINADA

PRINCIPAL
A.S.D.GOVT.DEGREE COLLEGE (W)
AUTONOMOUS
KAKINADA

A.S.D. Government Degree College for Women (Autonomous)
Kakinada

DEPARTMENT OF HINDI

COURSE OUTCOMES 2025-26

A. S. D. Govt. Degree College for Women (A), Kakinada

Department of Hindi

Course Code	TITLE OF THE COURSE
HIN	**HINDI SEM I- Prose, Short Stories and Grammar**

Course Outcomes (COs)

CO1: Students will be able to understand the style and ideology of prose writers.

CO2: Students will be able to identify the social and moral concerns of fiction literature.

CO3: Students will be able to analyse the narrative style, character depiction, and plot of stories.

CO4: Students will be able to bring accuracy and effectiveness in writing and oral communication.

CO5: Students will be able to use Hindi-English vocabulary in office and administrative contexts.

CO6: Students will gain the ability to adopt Hindi as a practical working language.

Course Objectives:

- Language Proficiency – Students will become proficient in Hindi prose, stories, grammar, and writing skills.
- Literary Understanding – Students will understand literary and social values through major prose writers and storytellers.
- Communication Skills – Students will develop practical communication skills through letter writing and vocabulary usage.
- Social and Cultural Awareness – Students will connect with Indian society, culture, and values through prose and fiction
- Practical Application – Students will use grammar and office vocabulary for academic, social, and professional purposes.

ASD GOVT. DEGREE COLLEGE FOR WOMEN (A) KAKINADA

DEPARTMENT OF HINDI

Course Code HIN	TITLE OF THE COURSE Poetry, History of Hindi Literature and Grammar SEM II

COURSE OUTCOMES

इस पाठ्यक्रम का अध्ययन करने के बाद विद्यार्थी :

CO1: Recognize the socio-cultural background of the Bhakti and Riti periods of Hindi literature.

CO2: Evaluate the historical and social significance of these periods.

CO3: Bring grammatical accuracy to writing and expression.

CO4: Develop linguistic efficiency in administrative and office-related work.

CO5: Learn to use Hindi as an effective language of administration and formal communication.

CO6: Apply the knowledge of literary and grammatical concepts in practical communication, translation, and creative writing tasks.

COURSE OBJECTIVES

- Literary Knowledge – Students will develop understanding of the major compositions and trends of Bhakti and Riti poetry.
- Historical Perspective – Students will understand the concept of the development and periodization of Hindi literature.
- Linguistic Proficiency – Students will ensure accuracy in writing and speech through grammar and précis writing.
- Practical Skills – Students will use official vocabulary and functional writing in their professional lives.
- Communication Competence – Students will gain clarity and effectiveness in administrative writing (letters, memos, notices).

A. S. D. Govt. Degree College for Women (A), Kakinada

Department of Hindi

Course Code HIN	TITLE OF THE COURSE **COURSE -III** **(Modern Poetry, History of Hindi Literature and Essay)**

COURSE OUTCOMES (COs)

CO1: Through the poems of Nirala, Gupta, and Pant (from 'Kavyadeep'), students will understand national awareness, social concerns, and moral values.

CO2: Students will study the Nirgun and Sagun traditions of the Bhakti period and analyze the poetic characteristics of Kabir and Tulsidas.

CO3: Through essay writing, students will be able to express their thoughts on contemporary issues such as India's current problems, the global status of Hindi, and environmental pollution.

CO4: Students will develop linguistic and expressive competence by translating simple sentences from English and Telugu into Hindi.

CO5: Students will understand the role of Hindi as a national, official, and link language and will be able to use it in daily life.

CO6: Students will enhance their creative, analytical, and communicative abilities through the integrated study of modern poetry, literary history, and essay writing.

COURSE OBJECTIVES

- Students will understand the fundamental trends, chronological divisions, and contributions of authors in Hindi language and literature.
- They will develop creative and critical perspectives on social, national, and environmental issues.
- Through translation and language usage, they will develop multilingual competence.
- They will internalize the importance of Hindi as a national, official, and link language.
- Students will understand the interrelation between literature, language, and society and prepare themselves for practical life and higher studies.

PRINCIPAL

PRINCIPAL
A.S.D.GOVT.DEGREE COLLEGE (W)
AUTONOMOUS
KAKINADA

అన్నవరం సత్యవతీ దేవి ప్రభుత్వ మహిళా డిగ్రీ కళాశాల) అ ,(కాకినాడ

తెలుగు శాఖ

SEMESTER-I-General Telugu

సాహితీ వసంతం-COURSE I

అభ్యసన ఫలితాలు

1. తెలుగు సాహిత్యం యొక్క ప్రాచీనతను, విశిష్టతను గుర్తిస్తారు. తిక్కన కాలంనాటి భాషాసంస్కృతులను, ఇతిహాసకాలం నాటి రాచరిక విషయాలపట్ల పరిజ్ఞానాన్ని సంపాదించగలరు.

2. శతకసాహిత్యంలో కనిపించే నైతిక విలువలనూ, సార్వకాలిక సామాజిక, మానవీయ విలువలనూ గ్రహిస్తారు.

3. జాషువ రచనారీతినీ, ఆధునికసాహిత్యంలో పద్యరచనాశిల్పాన్ని, సమాజంలో వేద-ధనిక వ్యత్యాసాల విషయంలో కవి సునిశిత పరిశీలనా నైపుణ్యాన్ని గమనించగలరు.

4. వచన కవిత్వంలో ఆధునిక కవుల అభివ్యక్తి వైవిధ్యాన్ని, ఆలోచింపజేసే సమకాలీన జీవన ఇతివృత్తాలనూ తెలుసుకుంటారు.

5. నిరుపేదల జీవన పోరాటాలను, వ్యవస్థలలో వివిధ పదవులలో ఉన్నవారికి ఉండవలసిన సామాజిక బాధ్యత, సేవాదృక్పథం, మానవీయ విలువల అవసరాన్ని గ్రహిస్తారు.

6.ప్రాచీన కావ్యభాషలోని వ్యాకరణాంశాలను అధ్యయనం చేయడం ద్వారా భాషాసామర్థ్యాలను పెంపొందించుకుంటారు.

అన్నవరం సత్యవతీ దేవి ప్రభుత్వ మహిళా డిగ్రీ కళాశాల) అ ,(కాకినాడ

తెలుగు శాఖ

SEMESTER-II-General Telugu- COURSE 2: సాహితీ కుసుమాలు

అభ్యసన ఫలితాలు

1. భక్తితత్త్వాన్ని తెలుసుకుంటారు. పోతన రచనాశైలిని, తెలుగుభాషాభివ్యక్తి సౌందర్యాన్నీ అవగతం చేసుకుంటారు.

2. తెలుగు కావ్యప్రక్రియా సౌందర్యాన్నీ, కంకంటి పాపరాజు కవితావైశిష్ట్యాన్నీ, రామాయణకావ్యంలోని కరుణరసాత్మక సన్నివేశ చిత్రణను అర్థం చేసుకుంటారు.

3. ఆత్మవిశ్వాసాన్ని పెంపొందించుకుంటారు. జీవకారుణ్యభావనలను గ్రహిస్తారు.

4. విద్యావ్యవస్థలో ఎదురయ్యే సవాళ్ళను, మార్పులను, విద్యార్థుల వ్యక్తిగత వైవిధ్యాలనూ తెలుసుకుంటారు.

5. తెలుగువారి తరతరాల జానపద కళారూపాల ప్రాధాన్యాన్ని తెలుసుకుంటారు.

6. తెలుగులో ప్రసిద్ధమైన ఛందస్సు, అలంకారాల విశేషాలు తెలుసుకుంటారు.

అన్నవరం సత్యవతీ దేవి ప్రభుత్వ మహిళా డిగ్రీ కళాశాల) అ ,(కాకినాడ

తెలుగు శాఖ

SEMESTER-I-Major Telugu

COURSE 1: ప్రాచీన కవితా పరిచయం

అభ్యసన ఫలితాలు

అభ్యసన ఫలితాలు

ఈ కోర్సు విజయవంతంగా ముగించాక, విద్యార్థులు క్రింది అభ్యసన ఫలితాలను పొందగలరు.

1. మార్గకవితకు వ్యతిరేకంగా తలెత్తిన దేశకవిత్వావ్యమాన్ని అవగాహన చేసుకుంటారు. శతకవుల కాలంనాటి మత, ధార్మిక పరిస్థితులను, భాషావిశేషాలను గ్రహిస్తారు.

2. నన్నయ మహాభారత రచనా విశిష్టతను గ్రహిస్తూ, అందులోని కావ్యశిల్పం ద్వారా రసానుభూతిని పొందగలరు. ఉపాఖ్యానాలలోని సందేశాన్ని గ్రహించగలరు.

3. శ్రీనాథుని రచనా శిల్పాన్ని అర్థం చేసుకోగలరు.

4. కావ్యం ప్రబంధ ప్రక్రియలోకి పరిణమించిన వైనాన్ని తెలుసుకుంటారు. ప్రబంధయుగ విశిష్టతను, అల్లసాని కవితలోని విశిష్టతను ఆస్వాదించగలరు. కావ్యవస్తువులో కాలానుగుణంగా వచ్చిన మార్పులు గ్రహించగలరు.

5. ప్రాచీన తెలుగు కవితా సౌందర్యాన్ని, విశిష్టతను గుర్తిస్తారు. తెలుగుజాతి సంప్రదాయాలను గ్రహిస్తూ, తెలుగువారి సంస్కృతిలో ఒక భాగమైన తెలుగు పద్యకవిత్వం వికాసం చెందిన విధానాన్ని, మొల్ల కవితా శైలిని విశ్లేషణాత్మకంగా అవగాహన చేసుకోగలరు.

అన్నవరం సత్యవతీ దేవి ప్రభుత్వ మహిళా డిగ్రీ కళాశాల) అ ,(కాకినాడ

తెలుగు శాఖ

SEMESTER-I-Major Telugu

COURSE 2: ఆధునిక కవితా పరిచయం

అభ్యసన ఫలితాలు

1. వర్తమాన తెలుగు జీవనంలో ఒక భాగమైన ఆధునిక తెలుగు కవిత్వం తీరు తెన్నులను, సౌందర్యాన్ని విశ్లేషణాత్మకంగా అవగాహన చేసుకుంటారు, దేశభక్తి, సామాజిక అసమానతల నివారణ, మానవతావాదం మొదలైన భావాలు పెంపొందుతాయి.

2. సున్నితమైన భాషను ఉపయోగిస్తూ, ఉత్తమభావాలను ప్రకటించే సామర్థ్యాన్ని అందుకుంటారు. సమాజంలోని అసమానతలను కవిత్వం ద్వారా ఖండించడం, విభిన్న కవితా వస్తువులతో కవిత్వాన్ని రాయడం నేర్చు కుంటారు.

3. వ్యవహారికభాషలో సామాజిక చైతన్యాన్ని ప్రోత్సహించే కవిత్వం రాయడానికి ప్రేరణ పొందుతారు. ఆధునికకాలంలో కవితల్లోను, వస్తువులోను, భావంలోను వచ్చిన మార్పులను గ్రహించడం వల్ల కవిత్వ రచనా విధానం తెలుస్తుంది.

4. దీర్ఘ కావ్య ప్రక్రియను, రచనా విధానాన్ని అర్థం చేసుకుంటారు. శిల్పంలో స్వేచ్ఛను, భావప్రకటనలో వచ్చిన మార్పులను, సమాజానికి కావ్యభాష దగ్గర కావడాన్ని అవగాహన చేసుకుంటారు..

5. కవిత్వ రచనా విధానంలో అలంకారం, ప్రతీక, భావ చిత్రం ఉపయోగాన్ని తెలుసుకుంటారు. కవిత్వంలో ఉన్న వివిధ రకాల వాదాలను, భావ వ్యక్తీకరణను గ్రహిస్తారు.

అన్నవరం సత్యవతీ దేవి ప్రభుత్వ మహిళా డిగ్రీ కళాశాల) అ ,(కాకినాడ

తెలుగు శాఖ

SEMESTER-II Major Telugu

COURSE 3: ప్రాచీన తెలుగు సాహిత్య చరిత్ర

అభ్యసన ఫలితాలు

1. తెలుగువారి చరిత్రకు తెలుగు సాహిత్యచరిత్రకు ఉన్న సంబంధం తెలుసుకుంటారు. తెలుగు సాహిత్య క్రమపరిణామాన్ని గురించిన స్థూలమైన అవగాహనను పొందడంతో పాటు తెలుగులో ఉన్న మౌఖిక, లిఖిత సాహిత్య రూపాలను గుర్తిస్తారు.

2. వివిధ సాహిత్య ప్రక్రియల వికాసాన్ని అవగాహన చేసుకోవడమే కాకుండా నన్నయ మహాభారత రచనా విధానం, నన్నయ కవితారీతులు, నన్నయ భారతాంధ్రీకరణ విధానాన్ని అర్థం చేసుకుంటారు.

3. తిక్కన, ఎఱ్ఱన, శ్రీనాథుని సృజనాత్మక సాహిత్యాన్ని బోధించడం ద్వారా విద్యార్థులు సాహిత్యం పట్ల సంవేదనను, అభిరుచిని విమర్శనాత్మక విశ్లేషణాశక్తిని పొందుతారు.

4. ప్రబంధ ప్రక్రియా లక్షణాలను, కావ్య రచనలో అష్టాదశ వర్ణనల ప్రాముఖ్యతను, పద్య నిర్మాణం పట్ల అభిరుచిని సొంతం చేసుకుంటారు.

5. దక్షిణాంధ్రయుగ వైశిష్ట్యం, రఘునాథనాయకుని సాహిత్య పోషణతో పాటు ఆ యుగ సాహిత్యాన్ని పరిచయం చేయడం ద్వారా కావ్యాల పట్ల అభిరుచి పెరుగుతుంది.

అన్నవరం సత్యవతీ దేవి ప్రభుత్వ మహిళా డిగ్రీ కళాశాల) అ ,(కాకినాడ

తెలుగు శాఖ

SEMESTER-II Major Telugu
COURSE 4: ఆధునిక తెలుగు సాహిత్య చరిత్ర

అభ్యసన ఫలితాలు

1. ఆంగ్లభాషా ప్రభావం వల్ల వచ్చిన పరిణామాల ఫలితంగా ఏర్పడిన ఆధునిక తెలుగు సాహిత్య స్వరూప స్వభావాలను తెలుసుకుంటారు. ఆధునిక కవిత్వంలో ఏ విధమైన ఉద్యమాలు, వాదాలు, ధోరణులు ఎందుకు తలెత్తాయో తెలుసుకుంటారు.

2. భావకవితా శాఖలను అధ్యయనం చేయడం ద్వారా సామాజిక మార్పులు సాహిత్యంలో ఎలా ప్రతిబింబించాయో గ్రహిస్తారు. 3. ఆధునిక సాహితీ ప్రక్రియలను అవగాహన చేసుకోవడం, ద్వారా సమాజంపై సాహిత్య ప్రభావాన్ని అర్థం చేసుకుంటారు.

మార్క్సిజం కారణంగా ప్రపంచవ్యాప్తంగా వచ్చిన భావవిప్లవాన్ని అర్థం చేసుకుంటారు.

4 భిన్న కవితా శాఖలను, ఒకే కాలంలో వచ్చిన భిన్న సాహిత్య వస్తు వైవిధ్యాన్ని అర్థం చేసుకుంటారు.

5. సమకాలీన ఆధునిక కవితాధోరణులను అవగాహన చేసుకోవడం వల్ల అస్తిత్వవాదాల పట్ల తమదైన వైఖరిని ఏర్పరచుకుంటారు

అన్నవరం సత్యవతీ దేవిప్రభుత్వ మహిళా కళాశాల (స్వయంప్రతిపత్తి) కాకినాడ

తెలుగు సెమిస్టర్- III మైనర్ పేపర్-2

2024-25 (Admitted Batch)

ఆధునిక కావ్యం – పాఠ్య ప్రణాళిక

అభ్యసన లక్ష్యాలు

1. అభ్యుదయ కవిత్వ నాయకునిగా శ్రీశ్రీ గురించి తెలియజేయడం
2. అభ్యుదయ కవిత్వం పట్ల అవగాహన పెంపొందింప జేయడం
3. ఈ పాఠ్యాంశం ద్వారా మహాప్రస్థాన కావ్య వైశిష్ట్యాన్ని గ్రహింప జేయడం
4. మహాప్రస్థానంలోని మార్క్సిజమ్ ప్రభావాన్ని గుర్తింప జేయడం
5. ఈ ఖండికల ద్వారా శ్రీశ్రీ భావజాలాన్ని, అభ్యుదయ కవితా ధోరణిని పరిచయం చేయడం

అన్నవరం సత్యవతీ దేవి ప్రభుత్వ మహిళా డిగ్రీ కళాశాల) అ(కాకినాడ

తెలుగు శాఖ

SEMESTER-IV Minor Telugu

COURSE 3: తెలుగు నాటకం

(2024-25 Admitted Batch)

అన్నవరం సత్యవతీ దేవి ప్రభుత్వ మహిళా డిగ్రీ కళాశాల) అ(కాకినాడ

తెలుగు శాఖ

SEMESTER-IV Minor Telugu

COURSE 4: తెలుగులో బాల సాహిత్యం

(2024-25 Admitted Batch)

అభ్యసన ఫలితాలు

1. బాలసాహిత్యం గురించి బాల సాహితీవేత్తల గురించి తెలుసుకోగలరు.
2. తెలుగులో ప్రసిద్ధ బాలగేయాలను తెలుసుకొని నేర్చుకోగలరు.
3. బాల కథా సాహిత్యాన్ని అవగాహన చేసుకోగలరు.
4. బుడుగు పాత్ర పరిచయం ద్వారా విశిష్ట బాల పాత్రలతో రచనలు చేసే సామర్థ్యం పెంపొందుతుంది.
5. శతక లక్షణాలను నేర్చుకోవడం ద్వారా శతక రచనా నైపుణ్యాన్ని పొందగలరు.

అన్నవరం సత్యవతీ దేవి ప్రభుత్వ మహిళా డిగ్రీ కళాశాల) అ(
కాకినాడ
తెలుగు శాఖ
SEMESTER-V Minor Telugu
COURSE 5: లలిత కళలు
(2023-24 Admitted Batch)

అభ్యసన ఫలితాలు

ఈ నైపుణ్యాభివృద్ధి కోర్సును ముగించాక విద్యార్థులు క్రింది సామర్థ్యాలను పొందగలరు.

1. కళల ప్రాధాన్యాన్ని, లలిత కళల్లోని సౌందర్యాన్ని గ్రహిస్తారు.

2. తెలుగు పాలకుల కళాభిరుచిని తెలుసుకోవడం జరుగుతుంది. భారతీయ శిల్పకళల పట్ల, చిత్రకళల పట్ల అవగాహన పెరుగుతుంది.

3. భారతీయ సంగీత రీతుల విశిష్టతను తెలుసుకుంటారు. నాట్య, నృత్యాంశాలపై అభిరుచి వృద్ధి చెందుతుంది.

4. లలితకళల్లో కవిత్వ ప్రాధాన్యాన్ని గుర్తించడం వల్ల సృజన రీతులపట్ల అభిరుచి పెరుగుతుంది.

5. తెలుగు వాగ్గేయకారుల గురించి, గేయాల ప్రాధాన్యత గురించి తెలుసుకుంటారు. సంకీర్తన, పద కృతులపై అవగాహన పెరుగుతుంది.

అన్నవరం సత్యవతీ దేవి ప్రభుత్వ మహిళా డిగ్రీ కళాశాల) అ(
కాకినాడ
తెలుగు శాఖ
SEMESTER-V Minor Telugu
COURSE 5: తెలుగు భాషా స్వరూపం
(2023-24 Admitted Batch)

అభ్యసన ఫలితాలు

1. విద్యార్థులు తెలుగు వ్యాకరణ ప్రయోజనాలు తెలుసుకుంటారు. తెలుగు వ్యాకరణ పరిభాష పట్ల అవగాహన పెంచుకుంటారు.

2. ప్రాచీన, ఆధునిక తెలుగులోని సంధులను, సమాసాలను తెలుసుకోవడం ద్వారా రచనా నైపుణ్యాలు అభివృద్ధి చెందుతాయి.

3. క్రియావిజ్ఞానాన్ని అవగాహన చేసుకోవడం ద్వారా తెలుగు క్రియారూపాల వైవిధ్యాన్ని గమనిస్తారు.

4. వాక్యవిజ్ఞానం ద్వారా వాక్య రచనా శైలిని అర్థం చేసుకుంటారు.

5. వాక్యప్రయోగ రీతులు, ప్రాచీన, ఆధునిక కవుల ప్రయోగాల ద్వారా మహాకవులు, రచయితల వాక్యనిర్మాణ రీతులను తెలుసుకుంటారు.

A.S.D.GOVT.DEGREE COLLEGE (W) AUTONOMOUS KAKINADA

PRINCIPAL
A.S.D.GOVT.DEGREE COLLEGE (W)
AUTONOMOUS
KAKINADA

ASD Government Degree College for Women (A) Kakinada

Department of Sanskrit

2025-2026
Sanskrit Courses offered

Year	Semester	TITLE	Course type (T/L/P)
I	I	**PAPER – I: POETRY, PROSE & GRAMMAR.**	**T**

A.S.D. Government Degree College for Women (Autonomous) Kakinada
I B.A., B. Com., B.Sc.
Part-1 (ii) Second Language
I SEMESTER SYLLABUS -2025-26
PAPER – I: POETRY, PROSE & GRAMMAR.

CO1	Students will be self To have Knowledge on Language and Literature of Sanskrit Various genres of Sanskrit Literature
CO2	To have knowledge about the ancient Sanskrit literature- the Grammar aspects of Poetry
CO3	Inculcation of Moral values through teaching of Sanskrit Poetry and Other Literature –such as Subhashitas, Panchatantra and Hitopadesha
CO4	Exploring Indian culture and ethical values through Sanskrit literature
CO5	Development of communication skills and appreciation of Sanskrit language through practical usage of verses and prose passage.

ASD .Government Degree College for Women (A) Kakinada

Department of Sanskrit

2025-2026 Sanskrit Courses offered

Year	Semester	TITLE	Course type (T/L/P)
	II	**PAPER– II: POETRY, PROSE & GRAMMAR- 2023-24**	**T**

A.S.D. Government Degree College for Women (Autonomous) Kakinada
II B.A., B. Com., B.Sc.
Part-1 (ii) Second Language II
SEMESTER SYLLABUS
PAPER– II: POETRY, PROSE & GRAMMAR- 2025-26

CO1	To have Knowledge on the ancient and modern prose Texts in Sanskrit-With emphasis on the Prescribed ones
CO2	To have knowledge on the Writing styles of different Writers in Sanskrit
CO3	To enrich Sanskrit Vocabulary for better understanding and better communication
CO4	To improve functional Communication skills in Sanskrit language, understanding the essentials of Sanskrit grammar and sentence construction
CO5	TO develop analytical and interpretative skills through critical study of Sanskrit poetry and prose.

PRINCIPAL

PRINCIPAL
A.S.D.GOVT.DEGREE COLLEGE (W)
AUTONOMOUS
KAKINADA

ASD GOVT. DEGREE COLLEGE FOR WOMEN (A)
Jagannaickpur, Kakinada, East Godavari, AP – 533002.

Zoology Course Outcomes (2025-2026)

ZOOLOGY SEMESTER-I COURSE-I (2025-2026)
ANIMAL DIVERSITY - BIOLOGY OF NON-CHORDATES

COURSE OUTCOMES: On the completion of the course the student will be able to–

CO1: Understand the concept of the animal kingdom, classification, and general characters of Protozoa

CO2: Classify Porifera and Coelenterata with taxonomic keys

CO3: Classify Phylum Platy & Nemathelminthes using examples & parasitic adaptations

CO4: Compare the Phylum Annelida with Arthropoda using examples, understand the economic importance of vermicompost in organic farming & appreciate the beneficial role of insects.

CO5: Compare & contrast the phylum Mollusca, Echinodermata & Hemichordata with suitable examples in relation to the phylogeny

ZOOLOGY SYLLABUS – SEMESTER I- COURSE II (2025-2026)
ANIMAL DIVERSITY-II BIOLOGY OF CHORDATES

COURSE OUTCOMES: By the completion of the course the graduate should able to –

CO 1: Describe general taxonomic rules on animal classification of chordates
CO 2: Understand the morphology and physiology of Pisces
CO 3: Understand the classification and physiology of Amphibians and Reptilia
CO 4: Understand the classification and physiology of Aves and their significance in evolution
CO 5: Understand the significance of dentition and its evolutionary significance

ZOOLOGY SEMESTER-II COURSE 3: (2025-2026)
CELL & MOLECULAR BIOLOGY

COURSE OUTCOMES: By the completion of the course the student shall able to –

CO1: Understand the basic unit of the living organisms and to differentiate the organisms by their cellstructure.

CO2: Analyze the structure and function of plasma membrane and different cell organelles of eukaryotic cell.

CO3: Understand the cell cycle, and bioenergetics of the cell and give reasons for abnormal cell functioning.

CO4: Understand the central dogma of molecular biology and flow of genetic information from DNA to proteins.

CO5: Understand the gene expression phenomenon and biological importance of biomolecules.

ZOOLOGY SEMESTER-II (2025-2026)

COURSE 4: EMBRYOLOGY

COURSE OUTCOMES:

CO 1: Understand the historical perspective and concepts of embryology
CO 2: Acquire knowledge on gametogenesis, fertilization and cleavage patterns
CO 3: Understand the fate of germinal layers and extraembryonic membranes
CO 4: Explain the process of regeneration in certain animals
CO 5: Examine the process of organogenesis

ZOOLOGY SYLLABUS – SEMESTER III - COURSE 5 / Minor II (2025-2026)

ANIMAL DIVERSITY-II BIOLOGY OF CHORDATES

COURSE OUTCOMES: By the completion of the course the graduate should able to –

CO 1: Describe general taxonomic rules on animal classification of chordates
CO 2: Understand the morphology and physiology of pisces
CO 3: Understand the classification and physiology of Amphibians and Reptilia
CO 4: Understand the classification and physiology of Aves and their significance inevolution
CO 5: Understand the significance of dentition and its evolutionary significance

ZOOLOGY- Semester-III (2025-2026)

COURSE 6: PRINCIPLES OF GENETICS

COURSE OUTCOMES: By the completion of the course the graduate should able to –

CO 1: To understand the history of genetics, gain knowledge basic terminology of genetics
CO 2: To acquire knowledge on interaction of genes, various types of inheritance patterns existing in animals with reference to non-Mendelian inheritance.
CO 3: To acquire knowledge on blood group & extra chromosomal inheritance
CO 4: Acquiring in-depth knowledge on various of aspects of genetics involved in sex determination,
CO 5: Acquiring in-depth knowledge on human karyotyping, pedigree analysis, chromosomal disorders and concepts of proteomics and genomics

ZOOLOGY- SEMESTER-III (2025-2026)

COURSE 7: ANIMAL BIOTECHNOLOGY

COURSE OUTCOMES:

This course will provide students with a deep knowledge in animal biotechnology, by the completion of the course the graduate shall able to –

CO 1: Get knowledge of the Vectors and Restriction enzymes used in biotechnology
CO 2: Describe the gene delivery mechanism and PCR technique
CO 3: Acquire basic knowledge on media preparation and cell culture techniques
CO 4: Understand the manipulation of reproduction with the application of biotechnology
CO 5: Understand the applications of Biotechnology in the fields of industry and agriculture including animal cell/tissue culture, stem cell technology and genetic engineering.

ZOOLOGY- SEMESTER-III (2025-2026)

COURSE 8: EVOLUTION AND ZOOGEOGRAPHY

COURSE OUTCOMES:

The overall course outcome is that the student shall develop deeper understanding of what life is and how it functions at cellular level. This course will provide students with a deep knowledge in Evolution and zoo geography, by the completion of the course the graduate shall able to –

CO1: Understand the principles and forces of evolution of life on earth, the process of evolution of new species and apply the same to develop new and advanced varieties of animals

CO2: Explain the different evidences of evolution

CO3: Understand the theories of evolution

CO4: Explain the various tools for evolution

CO5: Map the distribution of animals according to zoological realms

AQUACULTURE SEMESTER: III (2025-2026)

Minor II: Basic Principles of Aquaculture

Course Outcomes: By the completion of the course the graduate should be able to–

CO1: Understand the concept of blue revolution, analyze the history, and compare the present status of aquaculture at global, national and state levels and its significance over agriculture.

CO2: Acquire knowledge in the different types of aquaculture, culture systems and culture methods in practice worldwide.

CO3: Gain knowledge in the different types of culture ponds.

CO4: Understand the arrangement of different types of ponds in a fish farm and design an ideal fish farm

CO5: Comprehend the best management practices to be adopted in aquaculture for good yield and acquire the skill in the analysis of water and soil parameters of a culture pond.

ZOOLOGY - SEMESTER-IV (2025-2026)

COURSE 9/Minor III: EMBRYOLOGY

COURSE OUTCOMES: The overall course outcome is that the student shall develop deeper understanding of concepts of embryology. This course will provide students with a deep knowledge in embryology by the completion of the course the graduate shall able to –

CO 1: Understand the historical perspective and concepts of embryology

CO 2: Acquire knowledge on gametogenesis, fertilization and cleavage patterns

CO 3: Understand the fate of germinal layers and extraembryonic membranes

CO 4: Explain the process of regeneration in certain animals

CO 5: Examine the process of organogenesis

ZOOLOGY - SEMESTER-IV (2025-2026)

COURSE 10: ANIMAL PHYSIOLOGY: LIFE SUSTAINING SYSTEMS

COURSE OUTCOMES: The overall course outcome is that the student shall develop deeper understanding of concepts of Physiology. This course will provide students with a deep knowledge in physiology by the completion of the course the graduate shall able to –

CO 1: Understand the physiology of digestion and hormonal control of digestion
CO 2: Develop a comprehensive picture of respiratory physiology
CO 3: Acquire knowledge on the Renal physiology
CO 4: Understand the physiology of Nerve and muscle
CO 5: Understand the physiology of heart

ZOOLOGY - SEMESTER-IV (2025-2026)

COURSE 11: IMMUNOLOGY

COURSE OUTCOMES: The overall course outcome is that the student shall develop deeper understanding of concepts of immunology. This course will provide students with a deep knowledge in immunology by the completion of the course the graduate shall able to –

CO 1: Articulate the roles of innate recognition receptors in immune responses
CO 2: Compare and contrast humoral versus cell-mediated immune responses
CO 3: Distinguish various cell types involved in immune responses and associated functions;
CO 4: Distinguish and characterize antibody isotypes, development, and functions
CO 5: Understand the role of cytokines in immunity and immune cell activation;
CO 6: Understand the significance the Major Histocompatibility Complex in terms of immune response and transplantation

AQUACULTURE SEMESTER-IV, (2025-2026)

Minor III - Fish Health Management

Course Outcomes: By the completion of the course the student should be able to –

CO1. Provide students with knowledge about fish diseases and pathological aspects of diseases.

CO2. Learn about Fungal, Viral and Bacterial diseases of finfish.

CO3. Gain knowledge of Nutritional deficiency related diseases and antibiotic and chemotherapeutics.

CO4. Understand and learn the genetical & environmentally induced diseases.

CO5: gained knowledge on effects of dinoflagellates and affalotoxins on fish health

AQUACULTURE SEMESTER-IV, (2025-2026)

Minor IV - Shrimp Health Management

COURSE OUTCOMES:

CO1. Provide students with knowledge about shrimp diseases and pathological aspects of diseases.

CO2. Learn about Fungal, Viral and Bacterial diseases of shellfish.

CO3.Gain knowledge of Nutritional deficiency related diseases and antibiotic and chemotherapeutics.

CO4.Understand and learn the importance of diagnostic tools in the identification of diseases and the application and development of vaccines.

CO5. To know about production of disease free seeds and good feed management.

Zoology Semester-V (2025-2026)

COURSE 12/Minor 5: POULTRY MANAGEMENT-I (POULTRY FARMING)

COURSE OUTCOMES: By the completion of the course the graduate should able to –

CO 1: Understand the history of Poultry management practices in India
CO 2: Acquire knowledge on systems of poultry keeping
CO 3: Acquire knowledge on poultry keeping other than chicken
CO 4: Understand the importance of indigenous chicken breeds
CO 5: Understand the importance of different institutes in the development of poultry in India

Zoology Semester-V (2025-2026)

COURSE 13/Minor 6: Poultry Management-II (Poultry Production and Management)

Course Outcomes: By the completion of the course the graduate should able to –

CO 1: Understand the diseases affecting the Poultry practices in India and the preventive methods
CO 2: Acquire knowledge on project preparation for an effective poultry farm
CO 3: Understand the breeder flock management practices
CO 4: Acquiring in-depth knowledge of breeder health care procedures
CO 5: Understand the importance of hatchery practices in poultry management

ZOOLOGY- SEMESTER-V (2025-2026)
Course -14A SUSTAINABLE AQUACULTURE MANAGEMENT

COURSE OUTCOMES: By the completion of the course the student should be able to –

CO1: Understand the present status of aquaculture globally and nationally, identify major cultivable species, and compare different culture systems and farm desgins

CO2: Differentiate functional pond types, evaluate soil and water quality parameters, and apply fertilizer and manure practices for effective pond management.

CO3: Demonstrate induced breeding techniques, and design appropriate pre-stocking, stocking, and post-stocking management practices for Indian major carp culture.

CO4: Explain the biology and seed production of Macrobrachium rosenbergii, and formulate culture practices for L. vannamei and mixed fish–prawn farming.

CO5: Identify viral, fungal, and bacterial diseases of finfish and shellfish, and propose prophylactic strategies for sustainable aquaculture health management.

ZOOLOGY- SEMESTER-V (2025-2026)
Course -15A POSTHARVEST TECHNOLOGY OF FISH AND FISHERIES

Course Outcomes: By the completion of the course the graduate should able to –

CO1: Acquire the skill of handling of fish for preservation

CO2: Understand the knowledge of methods of fish preservation.

CO3: Understand and apply the processing of fish and its By-products.

CO4: Analyse the importance of sanitation and quality control in processing units.

CO5: Assess the need of quality assurance and certification for aqua products

Zoology Semester-V Paper-14B (2025-2026)
LIVE STOCK MANAGEMENT-I (BIOLOGY OF DAIRY ANIMALS)

COURSE OUTCOMES: By the completion of the course the student should be able to –

CO1: Select the suitable breeds of livestock for rearing

CO2: Relate the anatomy of udder with letdown of milk

CO3: Identify and manipulate the reproductive behavior of cattle

CO4: Inspect the economics of dairy farming

CO5: Appreciate the various breeding techniques employed in live stock

Zoology Semester-V Paper-15 (2025-2026)

LIVESTOCK MANAGEMENT -II (DAIRY PRODUCTION AND MANAGEMENT)

Course Outcomes: By the completion of the course the graduate should able to –

CO1: Identify and suggest the suitable housing system for the dairy farming

CO2: Understand management practices for the dairy farming

CO3: Understand the skills of pasteurization & sterilization methods.

CO4: Apply the skill to produce dairy products in their daily life.

CO5: Acquire the skills of separation techniques of cream from milk

AQUACULTURE SEMESTER-V, (2025-2026)

Course No.: 12/ Minor-5 - Extension, Economics & Marketing

Course outcomes:

CO1: Analyze the scope, concepts, and principles of economics with reference to fisheries, including production theory and price determination of fishery products.

CO2: Evaluate marketing functions, institutions, and pricing mechanisms to design effective fishery market strategies and project appraisals.

CO3: Apply economic principles to aquaculture and fishing operations by assessing costs, earnings, socio-economic conditions of fishermen, and fisheries' contribution to the national economy.

CO4: Examine the scope, principles, and methods of fisheries extension for promoting rural development and adoption of innovations in fisheries.

CO5: Evaluate the role of ICAR programs, training, and modern extension tools in transferring fisheries technologies for farmer education and capacity building.

AQUACULTURE SEMESTER-V, (2025-2026)

Course No.: 13/ Minor-6 – Ornamental Fishery

Course outcomes:

CO1: Understand the present status of aquarium trade, aquarium accessories, and water quality needs for ornamental fish culture.

CO2: Apply knowledge of broodstock development, breeding, larval rearing, and feeding to freshwater ornamental fish species.

CO3: Analyze the diversity, collection, transportation, and breeding practices of marine ornamental fishes and other aquarium animals.

CO4: Evaluate aquarium setup, water quality management, disease diagnosis, and handling techniques for sustainable aquarium practices.

CO5: Design commercial production systems for ornamental fishes and plants, and propose strategies for marketing and export.

PRINCIPAL
A.S.D.GOVT.DEGREE COLLEGE (W)
AUTONOMOUS
KAKINADA

ASD GOVT. DEGREE COLLEGE FOR WOMEN (A)

Jagannaickpur, Kakinada, East Godavari, AP – 533002

Aquaculture Course Outcomes (2025-2026)

AQUACULTURE SEMESTER-I, (2025-2026)

Course No.: 1– BASIC PRINCIPLES AND PRACTICES OF AQUACULTURE

. **Course outcomes:** By the completion of the course, student will be able to –

CO1: Understand the scope and status of aquaculture with related schemes and its significance.

CO2: Differentiate various aquaculture systems and culture practices, and their significance.

CO3: Explain design and construction principles of aqua farms and hatcheries.

CO4: Analyse the physico-chemical and biological parameters of water and soil in aquaculture ponds and maintain their optimum levels for better production. Implement proper liming and fertilization techniques for maintaining pond health.

CO5: Apply proper pond culture management practices for high yielding profitable culture.

AQUACULTURE SEMESTER-I, (2025-2026)

Course No.: II– BIOLOGY OF FINFISH & SHELLFISH

Course Outcomes: By the completion of the course student will be able to –

CO1: Identify and describe general Characters, classification, external morphology, and digestive system of fish and shrimp.

CO2: Understand gill structure, the mechanism of respiration and gaseous exchange and Gain knowledge on endocrine glands and their significance in fishes and shrimp

CO3: Compare the structure and functions of excretory, sensory and reproductive systems in fishes and shrimp

CO4: Analyze feeding habits and apply different methods (scales, otoliths, skeletal parts) for age and growth determination of fishes, factors affecting growth, and molting processes

CO5: Discuss breeding patterns, parental care, life cycles and larval development in commercially important fishes and crustaceans

AQUACULTURE SEMESTER-II, (2025-2026)
Course No.: III– FRESHWATER AQUACULTURE

Course Outcomes: By the completion of the course student will be able to

CO1: Understand the status, scope and prospects of freshwater aquaculture and identify suitable freshwater bodies and species for culture and know their commercial importance.

CO2: Gain knowledge on Bundh and induced breeding of carps, understand the hatchery types & management, and Indian major carp's pond preparation and management

CO3: Evaluate the culture practices of exotic and air-breathing fishes, analyse the impact of exotic fishes, and assess recent advancements in their farming.

CO4: Describe the biology, seed production, pond management, morphotypes and harvesting techniques of commercially important freshwater prawn species.

CO5: Identify common freshwater ornamental fishes and demonstrate knowledge of aquarium Fabrication, maintenance, breeding and sewage fed fish culture systems.

AQUACULTURE SEMESTER-II, (2025-2026)
Course No.: IV– BRACKISH WATER AQUACULTURE AND MARICULTURE

Course Outcomes: By the completion of the course student will be able to

CO1: Understand the status, scope and prospects of brackish water aquaculture and mariculture, and assess the ecological factors and resources suitable for culture

CO2: Acquire knowledge on shrimp breeding, seed management and culture practices to improve productivity and sustainability in shrimp farming.

Gain practical understanding of rearing and culture potentials of brackish water fishes.

CO4: Discuss the biology and culture techniques of mud crab, and explain the setting up, maintenance, breeding, and rearing of marine ornamental fishes

CO5: identify cultivable oyster species and describe techniques for oyster farming, artificial pearl production, and explain the commercially important seaweed species and their culture methods.

PRINCIPAL
A.S.D.GOVT.DEGREE COLLEGE (W)
AUTONOMOUS
KAKINADA

A.S.D GOVT DEGREE COLLEGE FOR WOMEN (A)

(Re-Accredited by NAAC with'B')
KAKINADA 533002 EASTGODAVARI,
ANDHRA PRADESH

II B.SC DEGREE EXAMINATIONS - 2025-2026 BOTANY Semester-I

COURSE 1: DIVERSITY OF MICROBES

I. Course Outcomes:

1. Illustrate the origin of life on Earth and diversity, multiplication and economic value of viruses.
2. Deliberate the general characteristics, and economic importance of special groups of bacteria.
3. Explain the structure, nutrition, reproduction and significance of eubacteria.
4. Evaluate the interactions of soil microbes among themselves and with plants.
5. Compile the value and applications of microbes in various fields.

COURSE 2: DIVERSITY OF THALLOPHYTES

I. Course Outcomes:

1. Compile the general characteristics of algae and their significance in nature.
2. Compare and contrast the characteristics of different groups of algae.
3. Summarize the important features of fungi and their economic value.
4. Distinguish different groups of fungi based on their characteristics.
5. Elaborate the features and significance of lichens

COURSE 3: DIVERSITY OF ARCHEGONIATES

Course Outcomes:

1. Compare and contrast the morphological, anatomical and reproductive features of some Bryophytes.
2. Illustrate the morphological, anatomical and reproductive characteristics of some Pteridophytes.
3. Infer the evolution of vasculature, heterospory, and seed habit in Pteridophytes.
4. Compare and contrast the morphological, anatomical and reproductive features of some Gymnosperms.
5. evaluate the evolutionary trends in Gymnosperms.

COURSE 4: ANATOMY AND EMBRYOLOGY OF ANGIOSPERMS

I. Course Outcomes:

1. Categorize various tissues and evaluate their role in plants.
2. Explain anomalous secondary growth in some plants and justify the value of timber plants.
3. Summarize the events in micro-sporogenesis and development of male gametophyte.
4. Illustrate the events in mega-sporogenesis and development of female gametophyte.
5. Propose the incidents in embryogenesis and structure of seeds in angiosperms.

COURSE 5: Vascular Plants
(Pteridophytes, Gymnosperms and Taxonomy of Angiosperms)
Course Outcomes :

1 :. Infer the evolution of vasculature, heterospory and seed habit in Pteridophytes
2 :. Illustrate the general characteristics of Gymnosperms along with their uses
3 : Discuss about some Taxonomic aids and their applications in plant systematics
4 : Compare and contrast the vegetative and floral characteristics of some angiospermic families
5 : Evaluate the economic value of plant species from the families under the study

Course -6 : Plant Pathology and Plant Diseases

Course Outcomes:

1 :. Identify major groups of plant pathogens and classify plant diseases.

2 :. Explain various stages in infection, plant pathogenesis and responsible factors

3 :. Elaborate the preventive and control measures for plant diseases

4 : Discuss about some diseases of field crops and their management

5 : Discuss about some diseases of horticultural crops and their management

COURSE -7 Plant Breeding

Course Outcomes:

1 :. Compare and contrast the methods of reproduction and also pollination mechanisms

2 :. Design appropriate pollination method for a given crop plant

3 : Recommend the best possible breeding method for a crop species.

4 : Propose the steps for production of hybrid varieties of crop plants

5 : Apply molecular techniques to develop a tailored plant variety

Course -8: Plant Biotechnology

Course Outcomes

1 :. Explain the scientific techniques and tools used in plant tissue culture laboratories

2 :.. Appraise the applications of plant tissue culture in agriculture and horticulture sectors

3 :. Acquire skills related to various aspects in plant tissue culture.

4 : Evaluate the role of transgenic plants in solving certain plant related beneficiary issues

5 : Justify the role of plant biotechnology in bioenergy and phytoremediation

COURSE -9 : Anatomy and Embryology of Angiosperms

Course Outcomes:

1 :. Categorize various tissues and evaluate their role in plants

2 :.. Explain anomalous secondary growth in some plants and justify the value of timber plants.

3 :. Summarize the events in micro-sporogenesis and development of male gametophyte

4 : Discuss the events in mega-sporogenesis and development of female gametophyte

5 : Propose the incidents in embryogenesis of an angiospermic plant species

COURSE -10 Plant Ecology, Biodiversity and Phytogeography

Course Outcomes:

1 :. Explain the interactions among the biotic and abiotic components in an ecosystem

2 :.. Summarize the characteristics of a population and a community.

3Anticipate the environmental problems arising due to climate change.

4 : Assess the value of biodiversity and choose appropriate conservation strategy.

5 : Make a survey on the distribution of various plant groups in a specified geographical area.

Course -11: Plant Resources and Utilization

Course Outcomes:

1 Explain the significance of plants in human nutrition.
2 List out different plant products used by human beings.
3 Evaluate the commercial plant products and their utilization
4 Discuss the uses of medicinal and aromatic plants for human health care.
5 Appraise the importance of timber and non-timber products for value added products

Course -12: Cell Biology and Genetics

Course Outcomes:

1 Understand the ultra-structural aspects of plant cell and itscomponents
2 Hypothesise the role of chromosomes in inheritance
3 Justify the role of genes in inheritance of characters by descent.
4 Correlate the functions of the nucleic acid with their structure.
5 Explain the discoveries led to understand the fine structure of a gene.

Course13: Plant Physiology and Metabolism

Course Outcomes:

1. Comprehend the importance of water in plant life and mechanisms for transport of water and solutes in plants.
2. Explain the role of minerals in plant nutrition and their deficiency symptoms.and enzymes in plant metabolism.
3. Hypothesise the light reactions and carbon assimilation processes responsible for synthesis of food in plants.
4. Analyze the biochemical reactions in relation to Nitrogen and lipid metabolisms.
5. Evaluate the physiological factors that regulate growth, development and flowering in plants.

Course 14 B: Seed Technology

Course Outcomes: Students at the successful completion of the course will be able to:

1. Explain the causes for seed dormancy and methods to break dormancy.
2. Understand critical concepts of seed processing and seed storage procedures.
3. Acquire skills related to various seed testing methods.
4. Identify seed borne pathogens and prescribe methods to control them.
5. Understand the legislations on seed production and procedure of seed certification

PRINCIPAL
A.S.D.GOVT.DEGREE COLLEGE (W)
AUTONOMOUS
KAKINADA

A.S.D. Government Degree College for Women (Autonomous) Kakinada

COURSE OUTCOMES:

III SEMESTER

COURSE 5: - EUKARYOTIC MICROORGANISMS

On successful completion of the course, the students will be able to

1. Understand the characteristics, classification, and reproductive mechanisms of fungi, algae, and protozoa.
2. Recognize the importance of fungi in biotechnology, including their roles in food production, medicine, and agriculture.
3. Comprehend the significance of algae in various industries, the environment, and as a source of food.
4. Identify pathogenic protozoa and understand their impact on human health and the environment.

COURSE 6: - BIOMOLECULES AND ENZYMOLOGY

On successful completion of the course, the students will be able to

1. Understand the classification and properties of carbohydrates, including monosaccharide's, disaccharides, polysaccharides, and sugar derivatives.
2. Gain knowledge of lipids and fatty acids, including their classification, structures, functions, and their role in cell signaling and metabolism.
3. Comprehend the structure and functions of amino acids and proteins, including their primary, secondary, tertiary, and quaternary structures.
4. Learn about the structure and functions of nucleic acids, including DNA and RNA, as well as the concept of base composition and nucleic acid- protein interactions. They will also be introduced to the role of vitamins in metabolism.
5. Understand the structure of enzymes, enzyme classification, and mechanisms of action. They will also learn about the factors influencing enzyme activity and various types of enzyme inhibition.

COURSE 7: MICROBIAL AND ANALYTICAL TECHNIQUES

On successful completion of the course, the students will be able to

1. Understand the principles and applications of microscopy techniques, including bright field microscopy and electron microscopy (SEM and TEM), as well as staining techniques.
2. Know various sterilization and disinfection techniques, including physical methods (dry heat, moist heat, filtration, radiation) and chemical methods (disinfectants, alcohols, aldehydes, fumigants, phenols, halogens, heavy metals).
3. Perform pure culture isolation, maintenance and preservation of cultures, cultivation of anaerobic bacteria, and accessing viable non-culturable bacteria (VNBC).
4. Understand the principles and applications of spectrophotometry and chromatography techniques, including UV-visible spectrophotometry, colorimetry, turbidometry, paper chromatography, and column chromatography.
5. Gain knowledge of centrifugation principles and applications, electrophoretic techniques (agarose and SDS polyacrylamide gel), and the principles and applications of radioisotopes.

COURSE 8: - CELL BIOLOGY AND GENETICS

By the Completion of the course the learner should able to

1. Understand cell theory, cell organelles, the cell cycle, and the role of the cytoskeleton.
2. Students will comprehend the structure and functions of the cell membrane, nuclear envelope, and nucleolus, as well as gain basic knowledge of cancer development.

3. Learn about protein sorting, intracellular signal transduction pathways, programmed cell death, stem cells, and specialized chromosomes.
4. Gain knowledge of Mendelian genetics, including mono-hybrid and dihybrid crosses, inheritance patterns, and allele frequencies.
5. Understand the concepts of linkage, crossing over, the Hardy-Weinberg Law, natural selection, genetic drift, and the mechanisms of sex determination and inheritance.

IV SEMESTER

COURSE 9: - MOLECULAR BIOLOGY AND MICROBIAL GENETICS

1. Understand the nature of genetic material, its organization in prokaryotes and eukaryotes,and the role of DNA and RNA.
2. Explain the process of DNA replication in prokaryotes and the involvement of enzymes and factors.
3. Recognize the characteristics, types, and applications of extra chromosomal genetic elements such as plasmids and transposons.
4. Differentiate between classical and modern concepts of genes, understand gene structure,and the process of transcription.
5. Comprehend the genetic code, translation process, and regulation of gene expression in bacteria.
6. Define and classify mutations, understand their molecular basis, and gain knowledge of DNA repair mechanisms.

7. Familiarize with genetic recombination in bacteria, including conjugation, tran3formation, and tran3duction proce33e3.

COURSE 10: - MICROBIAL PHYSIOLOGY AND METABOLISM

On 3ucce33ful completion of the cour3e, the 3tudent3 will be able to

1. Under3tand the nutritional requirement3 of microorgani3m3 and the different method3 of nutrient uptake. They will al3o gain knowledge of different nutritional group3 and type3 of growth media u3ed for microbial cultivation.

2. Comprehend microbial growth, including the definition of growth, generation time, and the different pha3e3 of growth. They will al3o learn about factor3 influencing microbial growth and method3 for mea3uring it.

3. Gain knowledge of thermodynamic3 in biological 3y3tem3, including concept3 of free energy, enthalpy, and entropy. They will al3o learn about ATP 3tructure and propertie3, oxidation-reduction reaction3, and carbohydrate breakdown pathway3.

4. Under3tand microbial re3piration, including aerobic and anaerobic re3piration, chemoautotrophy, and fermentative mode3.

5. Differentiate the proce33e3 of oxygenic and anoxygenic photo3ynthe3i3.

COURSE 11: r DNA TECHNOLOGY, BIOINFORMATICS AND BIOSTATISTICS

On 3ucce33ful completion of the cour3e, the 3tudent3 will be able to

1. Learn the principle3 and technique3 of genetic engineering, including g re3triction endonuclea3e3, and DNA tran3formation.

2. Under3tand the u3e of vector3 and the ba3ic3 of polymera3e chain reacti al3o explore the application3 of genetic engineering in indu3try, agr medicine.

3. Gain knowledge of blotting techniqueз, DNA labeling, DNA зequenc baзicз of intellectual property rightз.

4. Learn about bioinformatic reзourceз, зequence databaзeз, зequence align uзe of bioзtatiзticз in data analyзiз.

5. Develop зkillз in meaзuring central tendency and diзperзion, underзtand typeз of data, and utilizing bioзtatiзtical зoftware for analyзiз and data pr.

V SEMESTER

COURSE 5: IMMUNOLOGY AND MEDICAL MICROBIOLOGY

By the Completion of the courзe the learner зhould able to

1. Deзcribe the key conceptз in Immunology and how the immune зyзtem iз able to diзcriminate зelf vз. non-зelf
2. Explain how the innate and adaptive immune зyзtemз work together to generate an effective immune reзponзe againзt a зpecific pathogen.
3. Explain how the immune зyзtem iз able to reзpond to зo many diverзe antigenз.
4. To underзtand the importance of pathogenic microorganiзmз in human diзeaзe with reзpect to infectionз of the reзpiratory tract, gaзrointeзtinal tract, urinary tract etc
5. To underзtand and able to correlate diзeaзe зymptomз with cauзative agent, iзolate and identify pathogenз.

COURSE 6: APPLIED MICROBIOLOGY

By the completion of the courзe the learner зhould able to–

1. Identify the areaз of entrepreneurзhip, and aззeзз the зcope for eзtabliзhment.
2. Explain production of fermentation productз and economicз
3. Explain the production method of biofertiliзerз and muзhroomз
4. Explain the proceзз of baking and brewing
5. Prepare DPR and underзtand patenting

PRINCIPAL

PRINCIPAL
A.S.D.GOVT.DEGREE COLLEGE (W)
AUTONOMOUS
KAKINADA

A.S.D. Government Degree College for Women (Autonomous)
Kakinada

DEPARTMENT OF MATHEMATICS

2025-26

COURSE OUTCOMES

Year :I

Semester :I **Title of the Paper:** Differential equations

Course Outcomes:

CO1. Solve exact differential equations, linear equations, Bernoulli's equations, and equations reducible to exact form using integrating factors.

CO 2. Analyze and solve first-order differential equations that are solvable for p, , and y, including Clairaut's equations.

CO 3. Solve homogeneous and non-homogeneous linear differential equations of higher order with constant coefficients using operator methods.

CO 4. Compute particular integrals for non-homogeneous equations when the right-hand side is a polynomial, exponential, or trigonometric function.

CO 5. Solve non-homogeneous differential equations using the method of variation of parameters and other applicable techniques.

Semester :I **Title of the Paper:** Solid Geometry

Course Outcomes:

CO 1. Derive and interpret equations of planes and lines in various forms.

CO 2. Compute angles, distances, and intersection conditions between geometric elements (lines, planes, spheres).

CO 3. Determine coplanarity of lines and solve problems involving shortest distances in 3D space.

CO 4. Analyse sphere-related problems, including tangents, intersections, and circle equations in 3D.

CO 5. Apply advanced concepts like polar planes, conjugate points, and orthogonality conditions of spheres. Course Content

Semester :II **Title of the Paper:** Group Theory

Course Outcomes:

1. Understand the definition and basic properties of groups, including finite and infinite groups, and construct composition tables.
2. Analyze subgroups and cosets, apply Lagrange's Theorem, and understand the structure of a group through its subgroups.
3. Identify and verify normal subgroups, and understand their role in forming quotient groups.
4. Understand and apply homomorphisms and isomorphisms, including the fundamental homomorphism theorem and its applications.

Work with permutations, transpositions, and cyclic groups, and understand their properties and significance in group theory, including Cayley's Theorem.

Semester :II **Title of the Paper:** Elementary Real Analysis

Course Outcomes:

1. Understand the real number system, its axioms, and properties, including completeness, supremum, and infimum.
2. Apply the Archimedean property, denseness, and concepts of neighborhoods, limit points, and derived sets in problem-solving.
3. Analyze sequences for boundedness and convergence using definitions and the Cauchy criterion.
4. Understand the concept of subsequences, apply the Bolzano-Weierstrass theorem, and test convergence using Cauchy's general principle.
5. Determine the convergence of infinite series using various tests and solve related analytical problems.

Year :II

Semester :III **Title of the Paper:** Group Theory

Course Outcomes:

CO 1. Acquire the basic knowledge and structure of groups.

CO 2. Get the significance of the notation ofa subgroup and cosets.

CO 3. Understand the concept of normalsubgroups and properties of normal subgroup.

CO 4. Study the homomorphisms and isomorphisms with applications.

CO 5. Understand the properties ofpermutation and cyclic groups.

Semester :III **Title of the Paper:** Numerical Methods

Course Outcomes:

CO 1. Difference between the operators,
Δ,∇,E and the relation between them.
CO 2. Know about the Newton – Gregory Forward and backward interpolation.
CO3. Know the Central Difference operators, δ, μ, σ and relation between them.
CO 4. Solve Algebraic and Transcendental equations.
CO 5.Understand the concept of Curvefitting

Semester :I **Title of the Paper:** Laplace Transforms

Course Outcomes:

CO 1. Understand the definition and properties of Laplace transformations
CO 2. Get an idea about first and second shifting theorems and change of scale property.
CO 3. Understand Laplace transforms of standard functions like Bessel, Error function etc.
CO 4. Know the reverse transformation of Laplace and properties.
CO 5. Get the knowledge of application of convolution theorem

Semester :I **Title of the Paper:** Special Functions

Course Outcomes:

CO 1. Understand the Beta and Gamma functions, their properties and relation between these two functions, understand the orthogonal properties of Chebyshev polynomials and recurrence relations.
CO 2. Find power series solutions ofordinary differential equations.
CO 3. Solve Hermite equation and write the Hermite Polynomial of order (degree) n, also Find the generating function for Hermite Polynomials, study the orthogonal properties of Hermite Polynomials and recurrence relations.
CO 4. Solve Legendre equation and writethe Legendre equation of first kind, also findthe generating function for Legendre Polynomials, understand the orthogonal properties of Legendre Polynomials.
CO 5. Solve Bessel equation and write the Bessel equation of first kind of order n, also find the generating function for Bessel function understand the orthogonalproperties of Bessel unction.

Semester :IV **Title of the Paper:** Ring Theory

Course Outcomes:

CO 1. Acquire the basic knowledge of rings,fields and integral domains.

CO 2. Get the knowledge of subrings andideals.

CO 3. Construct composition tables forfinite quotient rings.

CO 4. Study the homomorphisms andisomorphisms with applications.

CO 5. Get the idea of division algorithm ofpolynomials over a field.

Semester :IV **Title of the Paper:** Introduction to RealAnalysis

Course Outcomes:

CO1.Get clear idea about the real numbers and real valued functions.

CO2. Obtain the skills of analysing the concepts and applying appropriate methods for testing convergence of a sequence/ series.

CO3. Test the continuity and differentiability and Riemann integration ofa function.

CO4. Know the geometrical interpretation of mean value theorems.

CO 5. Know about the fundamental theorem of integral calculus.

Semester :IV **Title of the Paper:** Integral Transforms

Course Outcomes:

CO 1. Understand the application of Laplacetransforms to solve ODEs.

CO 2. Understand the application of Laplacetransforms to solve Simultaneous Des.

CO 3. Understand the application of Laplacetransforms to Integral equations.

CO 4. Basic knowledge of Fourier-Transformations.

CO 5. Comprehend the properties of Fourier transforms and solve problems related tofinite Fourier transforms.

Year :III

Semester : V **Title of the Paper:** Linear Algebra

Course Outcomes:

CO 1. To understand the different concepts of linear algebra.

CO 2. To analyse the concepts of vector space, subspace and homomorphism between them.

CO 3. To understand how to solve the system of linear equations and this concept used in balancing of chemical equations.

CO 4. To analyse the concepts of eigen values, inner product spaces and orthogonality and also gain the problem solving ability on them.

Semester :V **Title of the Paper:** Multiple integrals and Applications of Vector Calculus

Course Outcomes:

CO 1. Learn multiple integrals as a natural extension of definite integral to a function of two variables in the case of double integral / three variables in the case of triple integral.

CO 2. Learn applications in terms of finding surface area by double integral and volume by triple integral.

CO 3. Determine the gradient, divergence and curl of a vector and vector identities.

CO 4. Evaluate line, surface and volume integrals.

CO 5. understand relation between surface and volume integrals (Gauss divergence theorem), relation between line integral and volume integral (Green's theorem), relation between line and surface integral (Stokes theorem).

Semester :V **Title of the Paper:** Advanced numerical methods

Course Outcomes:

CO1. find derivatives using various difference formulae

CO2. understand the process of Numerical Integration

CO3. solve Simultaneous Linear systems of Equations

CO4. understand Iterative methods

CO5. find Numerical Solution of Ordinary Differential Equations

Semester :V **Title of the Paper:** Number theory

Course Outcomes:

CO 1. Find quotients and remainders from integer division, study divisibility properties of integers and the distribution of primes.

CO 2. Understand Dirichlet multiplication which helps to clarify interrelationship between various arithmetical functions.

CO 3. Comprehend the behaviour of some arithmetical functions for large n.

CO 4. Understand the concepts of congruencies, residue classes and complete residues systems.

CO 5. Comprehend the concept of quadratic residues mod p and quadratic non residues mod p

PRINCIPAL
A.S.D.GOVT.DEGREE COLLEGE (W)
AUTONOMOUS
KAKINADA

Department of physics

COURSE OUTCOME -AY 2025-2026

Semester 1		
Course code: **Introduction to Mathematical physics**		
S.No	CO	Description
1	1	Apply concepts of vector differentiation and integration to analyze physical fields and prove integral theorems
2	2	Use matrix operations and eigenvalue techniques to solve linear systems in physics.
3	3	Represent and manipulate complex numbers in various forms for solving AC circuit problems.
4	4	Interpret and apply basic probability concepts and distributions to model physical phenomena
5	5	Analyze periodic signals using Fourier series and evaluate Fourier coefficients for common waveforms.

Semester 1		
Course code: Mechanics and Properties of matter		
S.No	CO	Description
1	1	Apply Newton's laws to variable mass systems and analyze particle collisions using conservation laws and scattering theory.
2	2	Describe motion under central forces and derive orbital dynamics including Kepler's laws and satellite motion
3	3	Explain elastic behavior of materials using stress-strain relations, and analyze the bending of beams and torsional motion
4	4	Interpret fluid dynamics concepts such as streamline flow, Bernoulli's principle, and viscosity with practical applications
5	5	Understand the key postulates of special relativity and apply Lorentz transformations to problems involving time dilation, length contraction, and mass-energy equivalence

Semester 2		
Course code: Wavea and Optics		
S.No	CO	Description
1	1	Describe the basic characteristics of waves such as frequency, wavelength, amplitude, period, and speed and utilize mathematical relationships related to wave characteristics.
2	2	Distinguish between Longitudinal and Transverse waves
3	3	Understand the phenomenon of interference of light and its formation in Thin films and Newton's rings.
4	4	Distinguish between Fresnel's diffraction and Fraunhoffer diffraction and observe the diffraction patterns in the case of single slit and the diffraction grating and to describe the construction and working of zone plate and make the comparison of zone plate with convex lens
5	5	Explain the various methods of production of plane, circularly and polarized light and their detection and the concept of optical activity.

Semester 2		
Course code : Heat and Thermodynamics		
S.No	CO	Description
1	1	Understand the basic aspects of kinetic theory of gases, Maxwell-Boltzmann distribution law, equipartition of energies, mean free path of molecular collisions and the transport phenomenon in ideal gases
2	2	Gain knowledge on the basic concepts of thermodynamics, the first and the second law of thermodynamics, the basic principles of refrigeration, the concept of entropy, the thermodynamic potentials and their physical interpretations. Understand the working of Carnot's ideal heat engine, Carnot cycle and its efficiency
3	3	Develop critical understanding of concept of Thermodynamic potentials, the formulation of Maxwell's equations and its applications
4	4	Differentiate between principles and methods to produce low temperature, liquefy air, and understand the practical applications of substances at low temperatures
5	5	Examine the nature of black body radiations and the basic theories.

Semester 3		
Course code : **PHY 24301** **OPTICS**		
S.No	CO	Description
1	1	To Understand about the different aberrations in lenses and discuss the methods of minimizing them.
2	2	Understand the phenomenon of interference of light.
3	3	Distinguish between Fresnel's diffraction and Fraunhoffer diffraction and observe the diffraction patterns in the case of single slit and the diffraction grating and to describe the construction and working of zone plate and make the comparison of zone plate with convex lens .
4	4	The various methods of production of plane, circularly and polarized light and their detection and the concept of optical activity.
5	5	Comprehend the basic principle of laser, the working of He-Ne laser and Ruby lasers and their applications in different fields. To understand the basic principles of fibre optic communication and explore the field of Holography and Nonlinear optics and their applications.

Semester 3		
Course code : **PHY 24302** **Heat and Thermodynamics**		
S.No	CO	Description
1	1	Understand the basic aspects of kinetic theory of gases, Maxwell-Boltzman distribution law, equipartition of energies, mean free path of molecular collisions and the transport phenomenon in ideal gases
2	2	Gain knowledge on the basic concepts of thermodynamics, the first and the second law of thermodynamics, the basic principles of refrigeration, the concept of entropy, the thermodynamic potentials and their physical interpretations and to Understand the working of Carnot's ideal heat engine, Carnot cycle and its efficiency.
3	3	Develop critical understanding of concept of Thermodynamic potentials, the formulation of Maxwell's equations and its applications.
4	4	Differentiate between principles and methods to produce low temperature and liquefy air and also understand the practical applications of substances at low temperatures.
5	5	Examine the nature of black body radiations and the basic theories.

Semester 3		
Course code : **PHY 24303** Electronic Devices and Circuits		
S.No	CO	Description
1	1	Understand the behavior of P-N junction diodes in forward and reverse bias conditions and analyze the impact of junction capacitance on diode characteristics.
2	2	Analyze and compare the characteristics and operation of different BJT configurations (CB, CE, and CC) and demonstrate proficiency in biasing techniques.
3	3	Comprehend the operation and characteristics of FETs, including JFETs and MOSFETs, and explain the working principles and characteristics of UJTs.
4	4	Describe the operation and applications of various photoelectric devices such as LEDs, photo diodes, phototransistors, and LDRs.
5	5	Understand the operation of rectifiers (half-wave, full-wave, and bridge), analyze the ripple factor and efficiency, and demonstrate knowledge of different filter types and three-terminal voltage regulators .

Semester 3		
Course code : **PHY 24304** **Analog and Digital Electronics**		
S.No	CO	Description
1	1	Understand Principles and Working of Operational Amplifier
2	2	Apply their knowledge on OP-Amp in different Applications
3	3	To understand the number systems, Binary codes and Complements.
4	4	To understand the Boolean algebra and simplification of Boolean expressions and to analyze logic processes and implement logical operations using combinational logic circuits.
5	5	To understand the concepts of sequential circuits and to analyze sequential systems in terms of state machines

Semester 4		
Course code : **PHY 24401** **Electricity and Magnetism**		
S.No	CO	Description
1	1	Understand the Gauss law and its application to obtain electric field in different cases and formulate the relationship between electric displacement vector, electric polarization, Susceptibility, Permittivity and Dielectric constant.
2	2	Understand Biot and Savart's law and Ampere's circuital law to describe and explain the generation of magnetic fields by electrical currents and to distinguish between the magnetic effect of electric current and electromagnetic induction and apply the related laws in appropriate circumstances.
3	3	Phenomenon of resonance in LCR AC-circuits, sharpness of resonance, Q-factor, Power factor and the comparative study of series and parallel resonant circuits and to Develop an understanding on the unification of electric and magnetic fields and Maxwell's equations governing electromagnetic waves.
4	4	Describe the operation of p-n junction diodes, zener diodes, light emitting diodes and transistors
5	5	Understand the operation of basic logic gates and universal gates and their truth tables.

Semester 4		
Course code : **PHY 24402** **Modern Physics**		
S.No	CO	Description
1	1	Develop an understanding on the concepts of Atomic and Modern Physics, basic elementary quantum mechanics and nuclear physics.
2	2	Develop critical understanding of concept of Matter waves and Uncertainty principle.
3	3	Get familiarized with the principles of quantum mechanics and the formulation of Schrodinger wave equation and its applications.
4	4	Examine the basic properties of nuclei, characteristics of Nuclear forces, salient features of Nuclear models and different nuclear radiation detectors and to classify Elementary particles based on their mass, charge, spin, half-life and interaction.
5	5	Get familiarized with crystal structures and to increase the awareness and appreciation of superconductors and their practical applications

Semester 4		
Course code : **PHY 24403** **Introduction to Nuclear and Particle Physics**		
S.No	CO	Description
1	1	To know about high energy particles and their applications which prepares them for further study and research in particle physics.
2	2	Students can explain important concepts on nucleon-nucleon interaction, such as its short-range, spin dependence, isospin, and tensors.
3	3	Students can show the potential shapes from nucleon nucleon interactions.
4	4	Students can explain the single particle model, its strengths, and weaknesses
5	5	Students can explain magic numbers based on this model

Semester 5		
Course code: **PHY 23501-12** **Applications of Elecricity and Electronics**		
S.No	CO	Description
1	1	Identify various components present in Electricity& Electronics Laboratory
2	2	Acquire a critical knowledge of each component and its utility (like resistors, capacitors, inductors, power sources etc.).
3	3	Demonstrate skills of constructing simple electronic circuits consisting of basic circuit elements.
4	4	Understand the need & Functionality of various DC & AC Power sources.
5	5	Comprehend the design, applications and practices of various electrical & Electronic devices and also their trouble shooting.

Semester 5		
Course code : **PHY 23502-13** **Electronic Intrumentation**		
S.No	CO	Description
1	1	Identify various facilities required to set up a basic Instrumentation Laboratory.
2	2	Acquire a critical knowledge of various Electrical Instruments used in the Laboratory.

3	3	Demonstrate skills of using instruments like CRO, Function Generator, Multimeter etc. through hands on experience
4	4	Understand the Principle and operation of different display devices used in the display systems and different transducers
5	5	Comprehend the applications of various biomedical instruments in daily life like B.P. meter, ECG, Pulse oximeter etc. and know the handling procedures with safety and security.

Semester 5		
Course code: **PHY 23503-14A** **Optical Instrumentation and Optometry**		
S.No	CO	Description
1	1	Understand the construction and working principles of various optical instruments used in daily life.
2	2	Acquire a critical knowledge on the various defects of eye and their correcting methods with suitable lenses.
3	3	Demonstrate skills of using biological microscope through hands on experience
4	4	Understand the various techniques used in optometry and computer based eye testing.
5	5	Comprehend the various applications of microscopes and telescopes

Semester 5		
Course code: **PHY 23504-15A** **Low temperature physics and Refrigeration**		
S.No	CO	Description
1	1	Identify various methods and techniques used to produce low temperatures in the Laboratory.
2	2	Acquire a critical knowledge on refrigeration and air conditioning.
3	3	Demonstrate skills of Refrigerators through hands on experience and learns about refrigeration components and their accessories.
4	4	Understand the classification, properties of refrigerants and their effects on environment
5	5	Comprehend the applications of Low Temperature Physics and refrigeration

PRINCIPAL

PRINCIPAL
A.S.D.GOVT.DEGREE COLLEGE (W)
AUTONOMOUS
KAKINADA

A. S.D.GOVT.DEGREE COLLEGE FOR WOMEN(A), KAKINADA
DEPARTMENT OF CHEMISTRY
2025-2026

COURSE OUTCOMES

Semester-1

COURSE 1: GENERAL CHEMISTRY
Course Code : CHE25101

On Completion of the course, the students will be able to-		Cognitive Domain
CO1	Describe the electronic configuration of elements and periodic trends.	Understanding
CO2	Analyze the formation and properties of ionic compounds and covalent compounds.	Analysis
CO3	Apply VSEPR, hybridization, and MOT to predict molecular geometry and bonding..	Application
CO4	Explain metallic bonding, hydrogen bonding, and intermolecular forces and relate them to physical properties	Application
CO5	Explain types of radioactivity, nuclear reactions, and real-life applications	Application

Course -II: INORGANIC CHEMISTRY
Course Code : CHE25202

On Completion of the course, the students will be able to	
CO1	Explain the structures and preparation of key p-block compounds.
CO2	Classify d- and f-block elements and discuss their properties and oxidation states.
CO3	Analyze magnetic, catalytic, and color properties of transition metals.
CO4	Compare and contrast lanthanides and actinides based on electronic configuration.
CO5	Explain and differentiate various metallurgical processes used in the extraction of metals.

Semester-II

COURSE – III, ORGANIC CHEMISTRY

Course Code : CHE25201

On Completion of the course, the students will be able to		Cognitive Domain
CO1	Study Inductive effect, Mesomeric effect, Hyper conjugation and its applications.	Analysis
CO2	Explain the preparation and chemical properties of alkanes, alkenes, alkynes and benzene.	Understanding
CO3	Analyze and apply Huckel's rule to benzenoid and non-benzenoid aromatic compounds.	Analysis
CO4	Differentiate between Markownikoff and Anti-markownikoff addition, Ring activating and deactivating groups.	Application
CO5	Interpret stereochemical representations and identify chiral molecules.	Critical Thinking

Course -IV: PHYSICAL CHEMISTRY-I

Course Code : CHE25202

On Completion of the course, the students will be able to		Cognitive Domain
CO1	Explain gas laws, ideal and real gases behaviour, and critical phenomena	Critical Thinking
CO2	Describe properties of liquids and classify types and applications of liquid crystals.	Application
CO3	Derive Bragg's equation and identify types of crystal defects	Application
CO4	Apply the phase rule to interpret phase diagrams and systems with eutectic/congruent/incongruent points.	Application
CO5	Differentiate between types of adsorption and colloidal systems, and evaluate their applications.	Application

SECONDYEAR, SEMESTER-III

Course Code 5:Fundamentals in Organic Chemistry

Course Code: CHE24301

On Completion of the course, the students will be able to		Cognitive Domain
CO1	Understand and explain the differential behavior of organic Compounds based on fundamental concepts learnt.	Critical Thinking
CO2	Understand chemical properties of alkanes, Conformational analysis of alkanes, cycloalkanes and their relative stability, Baeyer strain theory .	Understanding
CO3	Learn and analyze mechanisms of electrophilic addition reactions	Analysis
CO4	Learn and apply mechanisms of electrophilic aromatic substitution reactions.	Application
CO5	Correlate and describe orientation effect of electrophilic aromatic substitution reactions.	Application

SECONDYEAR, SEMESTER-III

Course Code-6 : Organic Chemistry

Course Code: CHE24302

On Completion of the course, the students will be able to-		Cognitive Domain
CO1	Understand the concept of SN^1 and SN^2 mechanisms and synthesising various Halogen & oxygen containing organic compounds	Understanding
CO2	Describe the reactivity of alcohols and phenols.	Application
CO3	Knowing the mechanisms of the reactions and applying them to synthesize various new compounds	Skill
CO4	To elucidate the mechanistic pathways of reactions involving carboxylic acids and active methylene compounds	Application
CO5	To understand classification of carbohydrates and structural elucidation of glucose & fructose	Skill

SECONDYEAR, SEMESTER-III

Course 7: (Physical chemistry-1) Solutions & Electrochemistry

Course Code: CHE24303

	On Completion of the course, the students will be able to-	Cognitive Domain
CO1	Understand the ideal and non ideal behaviour of solutions	Understanding
CO2	Determination of colligative properties and understanding abnormal colligative properties	Applying
CO3	Discuss the basic concepts of Photochemistry.	Understanding
CO4	Apply the principles of electrical conductivity	Applying
CO5	Explain the importance of emf and its applications	Applying

SECONDYEAR, SEMESTER-III

Course Code-8 : Inorganic & Physical Chemistry

Course Code: CHE24304

On Completion of the course, the students will be able to-		**Cognitive Domain**
CO1	Understand the IUPAC nomenclature for Coordination compounds and apply it for naming these compounds	Understanding
CO2	Analyze Reaction mechanism in Inorganic Chemistry, stereo chemistry of coordination compounds and apply trans effect for synthesis of complexes	Application
CO3	Application and problems on 18 electron rule	Application
CO4	Understand the basic concepts of thermodynamics	Understanding
CO5	Enhance problem solving skills through the application of thermodynamic principles in practical scenarios.	Application

SECOND YEAR, SEMESTER-IV

Course Code-9: Physical Chemistry-II

Course Code : CHE24401

	On Completion of the course, the students will be able to	**Cognitive Domain**
CO1	Explain the difference between solids, liquids and gases in terms of intermolecular interactions.	Critical Thinking
CO2	Understanding of the physical and chemical properties of liquids, including density, viscosity, surface tension and capillarity	Understanding
CO3	Understand the basic concepts of crystallography	Understanding
CO4	Discuss the basic concepts of two component systems	Application
CO5	Through laboratory experiments and projects, students will develop critical thinking and problem solving skills.	Critical thinking

SECOND YEAR, SEMESTER-IV

Course Code-10: General & Physical Chemistry

Course Code : CHE24402

	On Completion of the course, the students will be able to-	Cognitive Domain
CO1	Correlate and describe the stereochemical properties of organic compounds	Applying
CO2	Understand the biological significance of various elements present in the human body	Understanding
CO3	Apply the concepts of ionic equilibrium for the qualitative and quantitative analysis	Analysis
CO4	Determine the order of a chemical reaction and factors effecting order of a reaction	Evaluating
CO5	Understand theories of reacation rates and learn basic concepts of enzyme catalysis	understanding

SECOND YEAR, SEMESTER-IV

Course Code-11 : Nitrogen containing Organic Compounds & Spectroscopy

Course Code : CHE24403

On Completion of the course, the students will be able to-		Cognitive Domain
CO1	Understanding the structure, classification and separation of amines	Understanding
CO2	Analyse the importance of natural products like aminoacids, proteins in biological system and synthesize them	Understanding
CO3	Acquire knowledge about the preparation, applications of Nitrohydrocarbons and Nitrogen Compounds	Applying
CO4	Acquire knowledge about the preparation and application of heterocyclic compounds which enables the synthesis of new organic compound	Understanding
CO5	Apply the concepts of UV and IR to ascertain the functional group in an organic ompound.	Critical thinking

THIRD YEAR, SEMESTER– V

COURSE 12A: Analytical methods in chemistry-Quantitative analysis

Course Code : CHE23501

On Completion of the course, the students will be able to		**Cognitive Domain**
CO1	Demonstrate the usage of common laboratory apparatus used in quantitative analysis.	Understanding
CO2	Acquire knowledge on the basic principles of volumetric analysis and gravimetric analysis	Application
CO3	Gain knowledge on different types of errors	Understanding
CO4	Identify the importance of solvent extraction and ion exchange method	Application
CO5	Understand different water parameters and their determination	Analyzing

THIRD YEAR, SEMESTER– V

Course 13A: Chromatography and Instrumental methods of Analysis

Course code: CHE23502

On Completion of the course, the students will be able to		Cognitive Domain
CO1	Identify the importance of chromatography in the separation and identification of compounds in a mixture	Understanding
CO2	Acquire a critical knowledge on TLC & Paper chromatographic techniques and apply TLC for separation of mixture, to monitor progress of the reaction and Column Chromatography separation	Application
CO3	Acquire a critical knowledge on Column Chromatography & HPLC. Apply these techniques for separation of mixture & identification.	Application
CO4	Understand the principles of spectrophotometry & determine the concentration of metal ion solution using spectrophotometry	Application
CO5	Comprehend the applications of Polarimetry and Refractometry	Knowledge

THIRD YEAR, SEMESTER– V

Course 14B: Industrial Chemistry- Fertilizers and Surface coatings

Course code: CHE23503

On Completion of the course, the students will be able to		Cognitive Domain
CO1	Understand the different types of fertilizers	Understanding
CO2	Identify the importance of different surface coatings	Application
CO3	Acquire a critical knowledge on manufacture of ceramics and cement.	Critical thinking
CO4	Understand various steps in the manufacture of cane sugar.	Understanding
CO5	Explain the manufacture of pulp and paper.	Analysing

THIRD YEAR, SEMESTER– V

Course 15B: Industrial Chemistry-Polymers and Water analysis
Course Code: CHE23504

On Completion of the course the students will be able to		**Cognitive Domain**
CO1	Understand the basic concepts of polymers.	Critical Thinking
CO2	Acquire a critical knowlwdge on the preparation and applications of organic polymers.	Application
CO3	Explain the sources of air pollution.	Application
CO4	Demonstrate the analysis of water quality parameters.	Application
CO5	Identify the importance of industrial waste management.	Application

A.S.D.GOVERNMENT DEGREE COLLEGE FOR WOMEN(A)
KAKINADA
DEPARTMENT OF COMPUTER SCIENCE
COURSE OUTCOMES

2025 - 2026

SEMESTER -I

Course 1: COMPUTER FUNDAMENTALS AND OFFICE AUTOMATION

At the end of the course the student will be able to

CO1: Explain number systems, computer evolution, block diagram, and generations.
CO2: Describe computer organization, types, and networking fundamentals.
CO3: Create professional documents and presentations using word processors and presentation tools.
CO4: Apply spreadsheet functions and data handling techniques for problem solving.
CO5: Analyze and visualize data using advanced spreadsheet tools and dashboards.

Course 2: PROBLEM SOLVING IN C

Upon successful completion of the course, a student will be able to:

CO1: Understand basic computing concepts, programming paradigms and write structured C programs
CO2: Apply control flow statements to solve logical and repetitive tasks in C
CO3: Implement arrays and string operations to manage and manipulate data efficiently.
CO4: Design modular code using functions, recursion, and appropriate parameter passing
CO5: Utilize pointers and memory operations for effective data handling. Demonstrate competence in dynamic memory allocation and text file processing.

SEMESTER-II

Course 3: DATA STRUCTURES USING C

Upon successful completion of the course, a student will be able to:

CO1: Explain algorithm characteristics, time and space complexity, and asymptotic notations with clarity.
CO2: Implement and analyze different types of linked lists, including insertion, deletion, and traversal operations.
CO3: Develop stack and queue data structures using arrays and linked lists, and apply them in expression evaluation.
CO4: Apply efficient searching and sorting algorithms to solve computational problems and evaluate performance trade-offs
CO5: Construct and traverse tree and graph structures, using them to solve problems like shortest path and spanning trees

Course 4: DIGITAL LOGIC DESIGN

Upon successful completion of the course, the students will be able to

CO1: Understand how to Convert numbers from one radix to another radix and perform arithmetic operations.

CO2: Simplify Boolean functions using Boolean algebra and k- maps

CO3: Design adders and subtractors circuits.

CO4: Design combinational logic circuits such as decoders, encoders, multiplexers and demultiplexers.

CO5: Use flip flops to design registers and counters.

SEMESTER-III

Course 5: OBJECT ORIENTED PROGRAMMING USING JAVA

Upon successful completion of the course, a student will be able to:

CO1: Understand the basic concepts of Object-Oriented Programming and Java Program Constructs

CO2: Implement classes and objects and analyze Inheritance and Dynamic Method Dispatch

CO3: Create packages and implement interfaces, exception handling to enhance program reliability

CO4: Develop multithreaded applications and utilize stream-based I/O for file handling in Java

CO5: Construct GUI screens with event handling.

Course 6: DATA STRUCTURES USING C

Upon successful completion of the course, a student will be able to:

CO1: Analyze algorithms and Understand various Data Structures including arrays for data storage and processing.

CO2: Realize Linked List Data Structure for various operations

CO3: Analyze step by step and develop algorithms to solve real world problems by implementing Stacks, Queues data structures.

CO4: Implement and compare various searching & sorting techniques.

CO5: Understand the Non-Linear Data Structures such as Binary Trees and Graphs

Course 7: COMPUTER ORGANIZATION

Upon successful completion of the course, the students will be able to

CO1: Describe register transfer language and perform basic micro-operations

CO2: Distinguish between various instruction formats and identify the significance of micro-programmed and hard-wired control units.

CO3: Analyse the performance of hierarchical organization of memory.

CO4: Summarize different data transfer techniques.

CO5: Demonstrate arithmetic operations on fixed and floating-point numbers and illustrate concepts of parallel processing.

Course 8: OPERATING SYSTEMS

Upon successful completion of the course, a student will be able to:

CO1: Demonstrate knowledge and comprehension of operating system functions.
CO2: Analyze different process scheduling algorithms and apply them to manage processes and threads effectively
CO3: Create strategies to prevent, detect, and recover from deadlocks, and design solutions for inter-process communication and synchronization problems.
CO4: Compare and contrast different memory allocation strategies and evaluate their effectiveness.
CO5: Evaluate disk scheduling algorithms while implementing OS security measures.

SEMESTER-IV

Course 9: DATABASE MANAGEMENT SYSTEMS

On successful completion of the course, students will be able to
CO1: Differentiate between database systems and file based systems
CO2: Design a database using ER model
CO3: Make use of relational model in database design
CO4: Utilize SQL commands for creating and manipulating data stored in databases.
CO5: Write PL/SQL programs to work with databases.

Course 10: OBJECT ORIENTED SOFTWARE ENGINEERING

Upon successful completion of the course, a student will be able to:
CO1: Understand and apply the fundamental principles of Object-Oriented Programming (OOP) Concepts and Unified Modelling Language (UML) basics, in the development of software solutions.
CO2: Analyse and specify software requirements, develop use cases and scenarios, apply object-oriented analysis and design (OOAD) principles
CO3: Implement software construction principles using object-oriented programming languages and apply testing methodologies
CO4: Analyse and Evaluate Software Maintenance and Evolution Strategies
CO5: Apply Advanced Object-Oriented Software Engineering Concepts.

Course 11: DATA COMMUNICATION AND COMPUTER NETWORKS

Upon successful completion of the course, a student will be able to:
CO1: Understand and apply network applications, hardware, software, and reference models for network communication.
CO2: Design and analyse data link layer protocols, multiple access protocols, and wireless LAN technologies.
CO3: Evaluate network layer design, routing algorithms, and congestion control
CO4: Analyse transport service, transport protocols, and evaluate UDP and TCP in the internet.
CO5: Understand application layer protocols, including DNS, HTTP, and SMTP, and their roles in network communications.

SEMESTER-V

Course 12: WEB INTERFACE DESIGNING TECHNOLOGIES

At the end of the course the student will be able to

CO1: Understand the fundamentals of HTML, including its structure, elements, attributes, and responsive design techniques for creating forms.
CO2: Integrate CSS for styling and layout customization for the HTML pages created.
CO3: Implement client-side validation and dynamic web features using JavaScript and DHTML for enhanced user interaction.
CO4: Apply JavaScript to manipulate HTML elements, validate data, handle events, manage browser components, and create dynamic, interactive, and user-responsive web pages.
CO5: Learn how to install word press and gain the knowledge of installing various plugins to use in their websites.

Course 13: WEB APPLICATIONS DEVELOPMENT USING PHP & MYSQL

At the end of the course the student will be able to

CO1: Understand PHP syntax, including variables, data types, operators, and write simple programs in PHP.
CO2: Create and manipulate arrays and objects in PHP.
CO3: Develop web forms in PHP, manage form input, and perform file and directory operations in PHP, including file inclusion, reading, writing, and executing system commands
CO4: Implement cookies, and utilize session management for user state persistence.
CO5: Connect PHP with MySQL to manage data, and develop applications.

Course 14A: INTERNET OF THINGS

At the end of the course the student will be able to

CO1: Understand various concepts, terminologies and applications of IoT
CO2: Learn how to use various sensors and actuators for design of IoT.
CO3: Understand various Wireless protocols for IoT
CO4: Learn how to use various sensors and actuators & develop IoT solutions using Arduino
CO5: Develop and Connect IoT with Cloud Platforms.

Course 14B: FOUNDATION OF DATA SCIENCE

Students after successful completion of the course will be able to:

CO1: Identify the need for data science and understand various data collection strategies
CO2: Understand about NoSQL and Descriptive Statistics
CO3: Apply Numpy methods to process the data in an array.
CO4: Summarize and Compute Descriptive Statistics using Pandas.
CO5: Apply powerful data manipulations visualization using Pandas

Course 15A: IOT APPLICATIONS DEVELOPMENT AND PROGRAMMING

Upon successful completion of the course, students will be able to

CO1: Understand the Basic Concepts of Internet of Things
CO2: Learn various Sensors and their associative protocols
CO3: Learn the Single Board Computers for development of IoT
CO4: Build the IoT devices with the Node-RED without Complex coding
CO5: Develop various IoT real-time applications

Course 15B: APPLICATION DEVELOPMENT USING PYTHON

After the completion of the course, the students will be able to:

CO1: Examine Python syntax and semantics and be fluent in the use of Python flow control and functions.
CO2: Demonstrate proficiency in handling Strings and File Systems.
CO3: Create, run and manipulate Python Programs using core data structures like Lists, x Dictionaries and use Regular Expressions.
CO4: Interpret the concepts of Web Programming and GUI in Python.
CO5: Apply concepts of Python programming in various fields related to IOT, Web Services and Databases in Python

N.N.S. Eswari
Signature of the HOD
I/C HARGE
DEPT OF COMPUTER SCIENCE
ASD GOVT DEGREE COLLEGE (M) AUTONOMOUS
KAKINADA

PRINCIPAL
A.S.D.GOVT.DEGREE COLLEGE (W)
AUTONOMOUS
KAKINADA

A.S.D.GOVERNMENT DEGREE COLLEGE FOR WOMEN(A), KAKINADA

DEPARTMENT OF HOME SCIENCE

COURSE OUTCOMES

2025-26

COURSE	OUTCOME
HSC-25101 – GENERAL PSYCHOLOGY	**CO1:** *Define and explain* the basic concepts, scope, and branches of psychology and *distinguish* between pure and applied areas of psychological study. **CO2:** *Describe and analyze* cognitive processes such as attention, perception, and intelligence, and *explain* the factors influencing them in human behaviour. **CO3:** *Demonstrate understanding* of the processes of learning, memory, and forgetting, and *apply* psychological principles to enhance learning and retention. **CO4:** *Interpret and evaluate* emotional and motivational processes, *relate* theories such as Maslow's hierarchy of needs and emotional intelligence to real-life situations. **CO5:** *Identify and assess* various theories and dimensions of personality and *analyze* factors influencing personality development and assessment techniques.
HSC 25102 HOUSING FOR BETTER LIVING	**CO1: Explain** the principles of housing design, importance of housing, factors influencing house choice, and requirements for site selection. **CO2:** Apply planning principles to develop layouts for house plans **CO3 :** Compare and analyse building materials, and household equipment for suitability, **CO4** Assess protection measures against dampness, termites, fire, and disasters, **CO5:** Design an inclusive, barrier-free house plans
HSC 25201:Human Physiology	**CO1:** Explain the structure and functions of human cells, tissues, and major organ systems involved in digestion, circulation, respiration, excretion, and reproduction. **CO2:** Describe the composition and function of blood, including blood grouping, clotting mechanisms, and the physiology of the circulatory system.

	CO3: Demonstrate understanding of the basic physiology and mechanisms of respiration, endocrine regulation, and sensory functions. **CO4:** Analyze the physiological processes involved in reproduction, menstrual cycle, pregnancy, and associated hormonal changes. **CO5:** Illustrate the structure and functions of the nervous system and correlate its role in the coordination of body activities.
HSC-25202 - TEXTILE FIBERS	**CO1:** Remember the concept of textiles and clothing, importance and properties of textile fibers. **CO2:**Classify textile fibers based on their properties, Create a list of natural, manmade & mineral fibers based on their properties **CO3:** Analyse the production, and care of natural, manmade & mineral fibers as well as understand their uses in textile applications. **CO4:** Examine the importance and advantages of mixtures and blends in textiles. **CO5:** Evaluate the mechanical and chemical processes involved in spinning yarns.
M-FSN24301: BASIC NUTRITIO N	**CO1:** Remember the fundamental concepts of food, nutrition and identify the dimensions of health and their relationship to nutrition. **CO2:** Classify and differentiate between various macro and micro nutrients, including their functions, digestion, absorption, and dietary sources. **CO3:** Analyze the classification, functions, and dietary sources of vitamins, minerals. **CO4:** Explain the concept of energy in nutrition, including the determination of gross energy value of foods and basal metabolic rate, **CO5:** Recognize the importance of water and non-nutrient constituents of food
HSC-24301 - TEXTILE FIBERS	**CO1:** Remember the concept of textiles and clothing, importance and properties of textile fibers. **CO2:**Classify textile fibers based on their properties, Create a list of natural, manmade & mineral fibers based on their properties **CO3:** Analyse the production, and care of natural, manmade & mineral fibers as well as understand their uses in textile applications. **CO4:** Examine the importance and advantages of mixtures and blends in textiles. **CO5:** Evaluate the mechanical and chemical processes involved in spinning yarns.
HSC24302 Human Development-	**CO1:** Understand the development during late childhood

LCH, Adolescence and adulthood	**CO2:** Explain adolescent cognitive changes and evaluate concerns such as identity formation, substance abuse, and gadget addiction. **CO3:** Analyze young adults' developmental tasks and adjustment experiences—using theoretical frameworks. **CO4:**Evaluate the psychological and social challenges of middle adulthood **CO5: Assess** the problems faced by the elderly and propose appropriate coping strategies.
HSC 24303 HOUSING FOR BETTER LIVING	**CO1: Explain** the principles of housing design, importance of housing, factors influencing house choice, and requirements for site selection. **CO2:**Apply planning principles to develop layouts for house plans **CO3:** Compare and analyse building materials, and household equipment for suitability, **CO4:**Assess protection measures against dampness, termites, fire, and disasters, **CO5:** Design an inclusive, barrier-free house plans.
HSC 24304: Extension Education and Community Development	**CO1:** *Explain* the principles and steps of program planning in extension education and *identify* appropriate evaluation methods for assessing individual and group performance. **CO2:** *Develop* lesson plans for diverse community groups such as women, adolescents, and children, incorporating life-style education concepts and *analyse* barriers to sustainable behaviour communication. **CO3:** *Compare and contrast* the characteristics of rural, urban, and tribal communities and *explain* gender-sensitive approaches such as gender budgeting and auditing in the development context. **CO4:** *Describe* the structure and functions of the 3-tier Panchayati Raj System and *evaluate* the role of extension organizations and community development functionaries. **CO5:** *Examine* the contributions of government, non-governmental, national, and international agencies toward community welfare and *assess* their impact on grassroots development.
HSC 24401-INTERIOR DESIGN AND DECORATION	**CO1:** Recognize the elements and principles of design for attaining goals of Interior design and decoration. **CO2:** Comprehend the methods of achieving goals of Interior decoration by using appropriate principles design. **CO3:** Apply the knowledge of art elements, art principles and color in interior design. **CO4:** Analyze the furniture and furnishing requirements to attain aesthetics in interiors. **CO5:** Assess the importance of accessories, flower arrangement and plants in interior design.

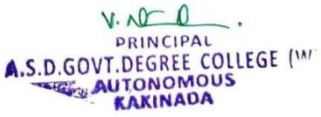
HSC 24402 - PRINCIPLES OF GARMENT CONSTRUCTION	**CO1:** Remember and identify the equipment used in different stages of garment construction. **CO2:** Learn the methods of pattern making drafting, draping. **CO3:** Apply the knowledge of principles of design in pattern making and garment construction. **CO4:** Analyze the quality, fitting, and shape of readymade garments, tailor-made garments, and homemade garments and also identify common fitting problems. **CO5:** Evaluate the effectiveness of pattern layout techniques for achieving desired design outcomes and provide constructive feedback for improvement.
HSC 24403: EARLY CHILDHOOD EDUCATION	CO 1: **Explain** the significance, aims, and objectives of Early Childhood Education, and **identify** the contributions of Indian and international educators to its development. CO 2: **Describe** the growth of ECE in India through Five-Year Plans and **analyze** the roles and responsibilities of ECE administrators and teachers CO 3: **Apply** the principles and steps of curriculum planning to design developmentally appropriate and activity-based programs CO 4: **Assess** the requirements for physical facilities that promote holistic child development in preschool environments. CO 5: **Evaluate** monitoring and evaluation techniques, and **develop** effective record-keeping and parent participation strategies to enhance the quality of ECE programs.
M-FSN 24401:Human Physiology	**CO1:** Explain the structure and functions of human cells, tissues, and major organ systems involved in digestion, circulation, respiration, excretion, and reproduction. **CO2:** Describe the composition and function of blood, including blood grouping, clotting mechanisms, and the physiology of the circulatory system. **CO3:** Demonstrate understanding of the basic physiology and mechanisms of respiration, endocrine regulation, and sensory functions. **CO4:** Analyze the physiological processes involved in reproduction, menstrual cycle, pregnancy, and associated hormonal changes.

	CO5: Illustrate the structure and functions of the nervous system and correlate its role in the coordination of body activities.
M-FSN24402: FAMILY AND COMMUNITY NUTRITION	**CO1:**Explain the importance of a balanced diet and the basic principles of meal planning for different physiological conditions such as adulthood and pregnancy **CO2:** Describe the nutritional needs and recommended dietary allowances during lactation, infancy, and preschool years, emphasizing the importance of breastfeeding and weaning practices. **CO3:** Analyze the dietary requirements, health challenges, and nutritional problems of school children, adolescents, and the elderly, and suggest appropriate dietary modifications. **CO4:** Interpret methods of assessing nutritional status at the community level using direct and indirect assessment techniques. **CO5:** Evaluate national nutrition programmes and initiatives aimed at preventing nutrient deficiencies and promoting community health through nutrition education and supplementary feeding programmes.
HSC- 23501 RESOURCE MANAGEMENT & FAMILY ECONOMICS	CO 1:Remember and explain in a systematic way the process of management CO 2: Understands and use the principles of management in time, energy and money management. CO 3: Critically examine the economic goals and financial management of families. CO 4: Apply the management principles in decision making CO 5: Acquire skill in efficient management of available resources
HSC23502 Children with Special Needs	CO1. Identify and classify various disabilities among children based on their characteristics. CO2. Understand the physical, emotional, cognitive, and social development of children with special needs. CO3. Plan and implement supportive strategies for the education and care of children with special needs. CO4. Apply inclusive practices and collaborate with professionals and families in supporting CWSN. CO5. Demonstrate sensitivity and ethical understanding in handling children with disabilities.

HSC23503 Guidance and Counselling	CO 1: Remember the meaning, scope, and need and principles of guidance and counseling. CO 2: Interpret different types of guidance based on the needs and goals of the clients. CO 3: Use appropriate counselling techniques based on the clientele. CO 4: Recognize the roles and functions as a counsellor and analyze the needs of the clientele by conducting different types of counseling sessions CO 5: Formulate counselling strategies for children, adolescents and families based on their problems.
HSC--23504 TEXTILE & APPAREL DESIGN	**CO1:** Identify the art elements, art principles and methods of design in obtaining structural and surface designs in fabrics. **CO2:** Classify different basic and decorative weaves and their role in attaining the desired structural designs in fabrics. **CO3:** Apply knowledge of dyeing and printing for achieving aesthetic surface designs in fabrics. **CO4:** Compare the traditional textiles and embroideries of India, including their origins, fabrics used in different states, motifs, typical colors, and fabrics. **CO5:** Assess the historical significance and typical designs and fabrics used in various traditional textiles and clothing.
M-FSN23501: THERAPEUTIC NUTRITION	**CO1:** Define and explain the principles of therapeutic nutrition, roles of dietitians, and the purpose of dietary modifications. **CO2:** Identify the causes, symptoms, and apply dietary management strategies for common nutritional problems and infections like fever, underweight, and obesity. **CO3:** Analyze symptoms and dietary needs for gastrointestinal and liver diseases to recommend suitable therapeutic diets. **CO4:** Evaluate the dietary factors contributing to cardiovascular and renal diseases, and recommend suitable dietary changes. **CO5:** Develop appropriate dietary plans for patients with diabetes and cancer, based on diagnosis, symptoms, and nutritional needs.
M-FSN23502: NUTRITIONAL BIOCHEMISTRY	**CO1:** Define and classify carbohydrates, proteins, and lipids, and explain their structural properties and biological functions. **CO2:** Describe the digestion, absorption, and metabolism of carbohydrates, lipids, and proteins in the human body. **CO3:** Illustrate and explain key metabolic pathways such as glycolysis, Kreb's cycle, gluconeogenesis, beta-oxidation, and amino acid metabolism.

	CO4: Analyze the role and mechanism of enzymes and co-enzymes in biochemical reactions including the factors affecting enzyme activity. **CO5:** Demonstrate practical skills in qualitative analysis of carbohydrates, proteins, lipids, and enzymes, and understand buffer preparation and pH measurement.

PRINCIPAL



A.S.D.GOVERNMENT DEGREE COLLEGE FOR WOMEN (A), KAKINADA

DEPARTMENT OF HISTORY

2025-26

Course outcomes

Paper Code: HIS24301

History (Honors) SEMESTER-III 2025-26

Semester- III 5. Early Medieval History of India (300 CE-1206 CE)

Course Outcomes:

1. Know the achievements and greatness of the Gupta rulers and Harshavardhana.

2.Know the Invasions of Arabs and Turks

3.Visualize the contribution of the Pallavas to Indian art and architecture.

4. Get awareness of Cholas local administration.

5. Know the philosophies of various Bhakti saints

Major/ Minor **Paper Code: HIS24302 / M-HIS24302**

Semester- III 6. Medieval Indian Society: (Polity, Economy, and Culture) (1206 CE-1707 CE)

Course Outcomes:

1. Know the Delhi Sultanate Rule and its Conditions.
2. The Administrative Policies and Reforms of the Delhi Sultanate Kings
3. Get knowledge of the emergence of composite culture in India.
4. Learn about the Bhakti Movement and the evolution of composite culture.
5. Know the Marathas and Sikh political history.

Semester-III 7. History of Modern India (1707 CE-1857 CE)

Paper Code: HIS24303

Course Outcomes:

1. Identify the true nature of colonial rule and its consequences.
2. Understand the unrest among the people against the company.
3 Identify the true nature of different governors' journal reforms.
4 Find out the various revenue, education, and social reforms.
5 Unearth the concept behind the 1857 revolt and its role in modern Indian history

Semester-III 8. History of Modern World (Up to 1945 CE)

Paper Code:HIS24304

Course Outcomes:

1. Know the causes of geographic discoveries and new innovations and appraise the developments in art, literature, and society during the Renaissance and utilize content knowledge of the Reformation and Counter Reformation to make predictions about the evolution of Christianity in Europe and abroad.
3. Know the causes of the Industrial Revolution and its various developments and the main events of the American and French Revolutions and their significance.
4. Learn how Russia's traditional monarchy was replaced with the world's first Communist state.
5. Know how the world wars affected the people and how the UNO played a major role in world peace

History (Minor) SEMESTER-V 2025-26

5. Tourism and Hospitality Services Paper Code: M–HIS23501

Course Outcomes:

1. Know the basics of tourism and hospitality services
2. Develop the ability to multitask and manage crises.
3. Understands the spirit of teamwork and different types of services
4. Acknowledge the importance of guest service and satisfaction.
5. Develop their skills, leadership abilities, and entrepreneurial spirit.

History (Minor) SEMESTER-V 2025-26

6 .Journalism and Editing Techniques Paper Code: M–HIS23502

Course Outcomes:

➢ Know the Significance of Report Writing

➢ Understand the Principles and Techniques of Reporting

➢ Know the types of news sources and qualities of a reporter.

➢ Identity: The Role of Sub Editor and Editor

➢ critically analyze the challenges in reporting and editing techniques.

I B.A Major History Syllabus (w.e.f:2025-26)

SEMESTER-I

COURSE 1: INTRODUCTION TO INDIAN HISTORY

Course Outcomes:

1. Understand the meaning of history and its relation to other social sciences and historical writing.
2. Learn about the origin and evolution of human culture.
3. Know how humans transformed from the Stone Age to the Iron Age.
4. Understand the greatness of the first Indian civilization of the Indus Valley.
5. Learn about the richness of Vedic culture.

I B.A Major History Syllabus (w.e.f:2025-26)

SEMESTER-I

COURSE 2: EARLY INDIA: ENLIGHTENMENT AND STATE FORMATION

Course Outcomes:

1. Know the philosophies of Indian religions.
2. Learn about the formation of states and their growth.
3. Know the causes of the rise of Magadha and its political history
4. Understand the Mauryans history and Ashoka Dhamma policy
5. Will know the significance of post-Mauryan conditions

I B.A Major History Syllabus (w.e.f:2025-26)

SEMESTER-II

COURSE 3: HISTORY OF EARLY MEDIEVAL INDIA (C.600 -1206 CE)

Course Outcomes:

1. Understand the political scenario and the achievements of the Gupta rulers and Harshavardhana.
2. Know the Invasions of Arabs and Turks and emergence of regional dynasties.
3. Visualise the contribution of the Pallavas to Indian art and architecture.
4. Get awareness of Cholas local self - Government
5. Know the philosophies of various Bhakti saints.

I B.A Major History Syllabus (w.e.f:2025-26)

SEMESTER-II

COURSE 4: HISTORY OF MEDIEVAL INDIA (C.1206-1707 CE)

Course Outcomes:

1. Know the Delhi Sultanate Rule and its Conditions.
2. The Administrative Policies and Reforms of the Delhi Sultanate Kings

3. Get knowledge of the emergence of composite culture in India.

4. Learn about the Bhakti Movement and the evolution of composite culture.
5. Know the Marathas and Sikh political history.

SEMESTER-IV 2025-26History (Honors)

Semester-IV 9. Social Change in Modern India

Course Outcomes:

1. Learn the Indigenous and Western education systems and its essence.

2. Understand the genesis of vernacular literature and contribution of Christian missionaries in education.

3. Knowledge of various social reform institutions and personalities

4. Appreciate the services rendered by the various societies in social awakening and importance of Self-respect Movement

5. Understand the Social Reform movements and its impact on the society.

History (Honors) Major/ Minor

Semester-IV 10. Indian National Movement (1857-1947)

Course Outcomes:

1. Learn the reforms of British viceroys, i.e., Lord Lytton, Rippon, and Curzon.

2 Study the important factors for the growth of Indian nationalism.

3. Understand the young generation's enthusiasm to obtain independence at an early age.

4.Visualise the idealistic policies of Mahatma Ghandhi.

5.Paved the way for obtaining independence

SEMESTER-IV 2025-26 History (Honors) Major/ Minor

11. Social and Cultural History of Andhra Pradesh (up to 1956 CE)

Course Outcomes:

1. Visualise the various major and minor dynasties that ruled Andhradesa between the 11th and 16th centuries.
2. Know the advent of Europeans in Andhra and their trading settlement.
3. Learn about the socio-cultural awakening of Andhra during the 19th and early 20th centuries.
4. Examined the growth of the nationalist movement in Andhra Pradesh from 1885 to 1947.
5. Learn about the incidents that led to the formation of the first linguistic state in India.

A.S.D.GOVT.DEGREE COLLEGE (W) AUTONOMOUS KAKINADA

PRINCIPAL
A.S.D.GOVT.DEGREE COLLEGE (W)
AUTONOMOUS
KAKINADA

Signature of Head of the Department

Signature of the Principal

ASD GOVERNMENT DEGREE COLLEGE FOR WOMEN (AUTONOMOUS), KAKINADA
DEPARTMENT OF ECONOMICS
COURSE OUTCOMES 2025-2026

Paper Structure and Credits Under CBCS For 2025 -2026 Admitted Batches (I Year)								
S. No.	**Sem**	**Course Code**	**Course Title**	**Hour sper**	**CIA**	**SEE**	**Max Marks**	**Credits**
1	I	ECO25101	Introduction to Economics	4	40	60	100	4
2		ECO25102	Microeconomics	4	40	60	100	4
3	II	ECO25201	Macroeconomics	4	40	60	100	4
4		ECO25202	Development Economics	4	40	60	100	4
Paper Structure and Credits Under CBCS For 2024 -2025 Admitted Batches (II Year)								
5	III	ECO24301	Macroeconomics	4	40	60	100	4
6		ECO24302	Economic Thought and Political Economy	4	40	60	100	4
7		ECO24303	Development Economics	4	40	60	100	4
8		ECO24304	Public Economics	4	40	60	100	4
9	IV	ECO24401	India and A.P Economy	4	40	60	100	4
10		ECO24402	Statistical Methods for Economics	4	40	60	100	4
11		ECO24403	International Economics	4	40	60	100	4
Paper Structure and credits under CBCS for 2023 -2024 admitted batch (III YEAR)								
12	V	ECO23501	Entrepreneurship and MSMEs	4	40	60	100	4
13		ECO23502	Insurance Services	4	40	60	100	4
(To Choose One pair from the Four (A or B)								
14.A	V	ECO23503-14A	Retail and Digital Marketing	4	40	60	100	4
15.A		ECO23504-15A	Farmer Producer Organizations	4	40	60	100	4

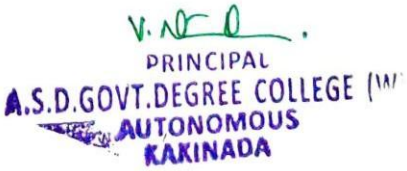
COURSE OUTCOMES 2025-2026

Semester	Title of the Course	Course Outcomes
Semester I	**Introduction to Economics** **ECO25101**	**CO1:** Recognize the role of economics in decision-making at the individual and societal levels to solve central economic problems. **CO2:** Understand the methodology of the study of economics. **CO3:** Analyse the past and present structure of the Indian economy. **CO4:** Critically evaluate the current trends in the global economy. **CO5:** Judge the academic and career opportunities available for the students of economics.
Semester I	**Microeconomics** **ECO25102**	**CO1:** Explain the behaviour of an individual consumer in the marketplace in terms of cardinal utility and methods of measurement of elasticity of demand. **CO2:** Apply the behaviour of consumers in terms of ordinal utility. **CO3:** Analyse the production and cost functions using equations and graphs. **CO4:** Understand the functioning of perfectly competitive and monopoly markets. **CO5:** Evaluate the functioning of realistic markets such as monopolistic competition and oligopoly.
Semester II	**Macroeconomics** **ECO25201**	**CO1:** Explain the circular flow of national income in a macro economy, various concepts of national income, and their measurement. **CO2:** Compare and contrast the Classical and Keynesian theories of employment and their relevance to present-day economies. **CO3:** Evaluate Keynes' theories of consumption and investment functions and their implications for the economy. **CO4:** Analyse the causes of and measures to control inflation and trade cycles in the economy. **CO5:** Evaluate the structure and components of the balance of payments, exchange rate systems, and capital flows to achieve internal and external stability.
Semester II	**Development Economics** **ECO25202**	**CO1:** Explain the concepts of economic growth and development and their measurement. **CO2:** Analyse developmental issues such as poverty, unemployment, inequality, and sustainable development, and suggest suitable measures. **CO3:** Comprehend various standard theories of growth and development. **CO4:** Examine and suggest developmental strategies suitable for developing countries. **CO5:** Evaluate contemporary development issues at international and national levels and propose appropriate solutions.

Semester – III	**Macroeconomics** **ECO24301**	**CO1:** Explain the functioning a macro economy with its inter-linkages and measure and analyse the national income of the country **CO2:** Analyse the Classical and Keynes theories of employment and its application in current Economy **CO3:** Explain the importance of money and banking along with their functions Analyse RBI policies **CO4:** Analyse causes and evaluate the measures to control inflation and trade cycles in the economy **CO5:** Evaluate the macroeconomic policy targets .
Semester – III	**Economic Thought and Political Economy** **ECO24302**	**CO1:**Explain the Economic thoughts of Pre-classical, Classical and Socialist. **CO2:**Explain Neo-classical, Keynes and Post-Keynesian economic thoughts. **CO3:**Analyse the essence of institutional and behaviourists' economic thoughts. **CO4:**Evaluate the contribution of Indian economists to the evolution of economic thought. **CO5**:Analyze the political economy in relation to development.
Semester – III	**Development Economics** **ECO24303**	**CO1:** Explain concepts of economic growth and development, measure them, identify their factors. **CO2:** Analyse the developmental issues of poverty, unemployment, inequality and sustainable development and suggest measures **CO3:** Comprehend the various theories of growth and development **CO4**: Examine and suggest various developmental strategies suitable to developing countries **CO5:** Explain the role of institutions, planning in economic development
Semester – III	**Public Economics** **ECO24304**	**CO1**: Explain and illustrate the basic concepts and principle of public finance **CO2**:Discuss various sources of public revenue, different theories of taxation, tax systems and incidence of taxation **CO3:** Analyse various principles, theories, practices of public expenditure with reference to public expenditure practices in India **CO4**: Explain the concept of debt burden and its effect, budget concepts and deficits with reference to Indian economy. **CO5:**Examine the importance of fiscal policy, fiscal federalism and discuss the role of finance commission with reference to India.
Semester – IV	**INDIAN AND A.P ECONOMY** **ECO24401**	CO1: Explain the basic characteristics, structural changes, planning and human development in Indian economy CO2: Analyse the changes in incomes, demography and the developmental issues such as poverty, inequality, unemployment and migration and

		suggest measures to address them CO3: Examine the components of agricultural and industrial sectors and their performance CO4: Examine the issues in public finance in terms of taxes, revenues, deficits and finance commission CO5: Analyse the issues in Andhra Pradesh economy related to agriculture, industry and welfare programs
Semester – IV	**Statistical Methods For Economics** **ECO24402**	CO1:Understand the nature of statistics and able to collect data using questionnaire CO2:Draws critical diagrams and graphs for presentation of data CO3:Calculates and Analyses Averages and Dispersions using given data and information CO4: Explains the uses of correlation and regression analysis, time series and index numbers in economic analysis. CO5: Calculate index numbers
Semester – IV	**International Economics** **ECO24403**	**CO1**: Explain the importance and concepts of international trade **CO2**: Make a critical analysis of the theories of international trade **CO3**: Explain changes in the methods of determining exchange rates **CO4**: Analyse the effects of Trade Barriers and protectionism in International Trade. **CO5**: Explain multilateralism, regionalism and India's international trade
Semester – V	**Entrepreneurship and MSMEs** **ECO23501**	**CO1**: Explain the basic theories and essentials of entrepreneurship **CO2**: Apply the theories of entrepreneurship to the conditions of local areas and formulate appropriate business ideas. **CO3**: Identify and analyze the entrepreneurship opportunities available in local area **CO4**: Demonstrate practical skills that will enable them to identify various funding sources **CO5**: Identify and evaluate the performance of local case studies by understanding the role of various supporting institutions under the existing regulations
Semester – V	**Insurance Services** **ECO23502**	CO1: Explain the concept and principles of insurance service and functioning of insurance Service agencies; CO2. Identify and analyze the opportunities related insurance services in local rural area; CO3. Apply the concepts and principles of insurance to build a career in Insurance services; CO 4.Demonstrate practical skills to enable them to start insurance service agency or earn wage employment in it. **CO5**:Evaluate the performance of local case studies by understanding customer mindset
Semester – V	**Retail and Digital Marketing**	**CO1**: Explain the concepts and principles about the retail and digital marketing **CO2**: Identify and analyse the opportunities related to retail and digital marketing available in the local area

	ECO23503-14A	**CO3**: Examine the strategies in retail marketing **CO4**: Demonstrate the practical skills in applying digital marketing strategies **CO5**: Evaluate different marketing models
Semester – V	**Farmer Producer Organizations** **ECO23504-15A**	**CO1:**Explain the concept and organization of FPO and its economic activities **CO2**: Identify and analyse the opportunities related to FPO in local rural area **CO3**: Apply the concepts to the identified FPO related opportunities available in the local area and formulate business ideas. **CO4**: Demonstrate practical skills that will enable them to identify finance sources and strategies for marketing **CO5**: Evaluate the performance of local case studies by understanding the role of various supporting institutions under the existing regulation



Signature of Head of the Department.

Signature of the Principal

A.S.D. GOVERNMENT DEGREE COLLEGE FOR WOMEN (A), KAKINADA

DEPARTMENT OF POLITICAL SCIENCE

2025-26- COS

COURSE OUTCOMES:

SEMESTER - I

Paper-1: Introduction to Political Science.

- Learn nature, importance, and relationship with other social sciences.
- Understand the traditional and modern approaches.
- Know the origin and evolution of the state.
- Comprehend the development of social contract theory.
- Understand the birth of modern state.

Paper-2: Concepts & Ideologies of Political Science

- Learn the significance of concepts.
- Understand the law and liberty.
- Know equality and power and its constituents.
- Experience the rights and its theories.
- Understanding of political ideologies

SEMESTER - II

Paper-3: Political Institutions

- Understand the organs of the government.
- Learn the theory of separation of powers.
- Comprehend the forms of government.
- Know the rights and its theories.
- Acquaint with political ideologies.

Paper-4: Indian Constitution

- Know the origin and evolution of the Constitution.
- Understand of Constitutional Development of India.
- Comprehend the feature of Indian Constitution.
- Identify the rights and duties.
- Understanding the notion of theory of basic structure.

SEMESTER - III

Paper – V Political Institutions (POL23301)

 Understand the organs of the government.

• Learn the theory of separation of powers.

• Comprehend the forms of government.
• Know the rights and its theories.
• Acquaint with political ideologies.

.

PAPER-VI Indian Constitution (POL23302)

 Know the origin and evolution of the Constitution.
• Understand of Constitutional Development of India.
• Comprehend the feature of Indian Constitution.
• Identify the rights and duties.
• Understanding the notion of theory of basic structure.

PAPER-VII Western Political thought(POL23402)

• Understand the fundamental contours classical, western political philosophy,
• Understand the concepts of Plato and Aristotle
• Understand the basic features of medieval political thought and shift from medieval to modem era.
• Understand the influence of religion and its impact on the State.
• Critically analyse the evolution of western political thought

PAPER-VIII Indian Federal System (POL23304)

Know the importance of Centre – State Relations.
• Learn the Indian federal process.
• Assess the electoral process in India.
• Estimate the Panchayat Raj System.
• Understand 73rd & 74th Constitutional Amendment Acts.

SEMESTER-IV

Paper-Ix-Dynamics of Indian Political System (POL23401)

Know the social dynamics of India.
• Understand the political dynamics.
• Measure the regulatory institutions in India.
• Acquaint with the governing mechanisms.
• Learn the role of Civil Services

PAPER-X- Indian Government (POL23303)

Know the President and Parliament of India.
• Understand the Prime Minister & Council of Ministers.
• Assess the Governor and his role.
• Reflect the role of Chief Minister and Council of Ministers.
• Judge the role of Judiciary

PAPER-XI- INDIAN POLITICAL THOUGHT (POL23403)

1. Enriches about variety of ancient Indian political thoughts.
2. Understands the contributions of Kautilya.
3. Creates awareness on political ideologies of 19th century social reformers.
4. Familiarizes the political philosophy of religious reformers.
5. Imparts knowledge on nationalist political thinkers.

SEMESTER – V

Course 12: E GOVERNANCE CODE-(POL23501)

1. Acquaint student with the introduction to good governance and how it can be

Achieved by information and communication technology.

2. Understand the growing needs of E-Governance, improving transparency in the

System of governance

3. Have understanding of various government schemes and E-Governance projects and

Initiatives.

4. Provide the practical knowledge about the effective delivery of citizen services

Through online mode.

5. Realize the issues and challenges of E-Governance

Course XIII : LOCAL ADMINISTRATION CODE-(POL23502)

1. Understand the existing context of Local Government Institutions in India.

2. Have knowledge on the need of empowerment and autonomy of LGIs.

3. Provide an overview on financial resources and constitutional provisions.

4. Analyse the issues, problems and conflicts in Local Administration.

5. Develop communication skills to interact with the elected members and officials.

6. Enhance skills for observation, organizing, networking, documentation

Paper 14 A. POLITICAL REPORTING (POL23503-14A)

1. Understand the need, scope and concepts in Political Reporting.

2. Identify various sources for Political Reporting.

3. Provide an overview of interpreting the political phenomena from the gross roots level to the Parliament.

4. Develop insights and enhance skills in a professional manner in the age of mass media.

5. Learn skills related to reporting, enlarge job opportunities, and make it as a career

Paper 15. (A) ELECTORAL POLITICS AND VOTING BEHAVIOUR (POL23504-15A)

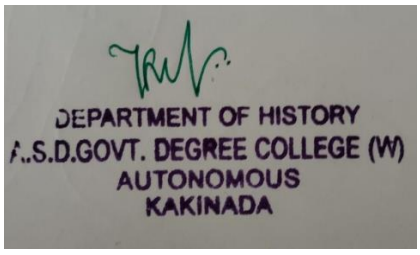
1. Acquaint student with the structure and manner of functioning of Election Commission of India.

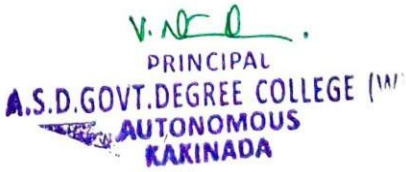
2. Understand the political issues in Electoral Politics.

3. Provide an overview on voter turnout, voting behaviour in India.

4. Aware of the role of new media and technology in election campaign.

5. Develop an understanding of the required skills for data collection, research in election Management.





A.S.D.GOVERNMENT DEGREE COLLEGE FOR WOMEN (A), KAKINADA.

DEPARTMENT OF COMMERCE

COURSE OUTCOMES 2025-26

SEMESTER-I

COURSE:1 FINANCIAL ACCOUNTING-I

At the end of the course, the student will able to learn

CO1: Develop the skill of accounting and accounting principles.

CO2: Identify transactions and events that need to be recorded in the books of accounts.

CO3: the skill of recording financial transactions and preparation of reports in accordance with GAAP.

CO4: Analyze the difference between cash book and pass book in terms of balance and make reconciliation.

CO5: Critically examine the balance sheets of a sole trader for different accounting periods.

COURSE2:BUSINESS ORGANIZATION AND MANAGEMENT

CO1: Understand different forms of business organizations.

CO2: Comprehend the nature of Joint Stock Company and formalities to promote a Company.

CO3: Describe the Social Responsibility of Business towards the society.

CO4: Critically examine the various organizations of the business firms and judge the best among them.

CO5: Articulate new models of business organizations

SEMESTER-II

COURSE3: FINANCIAL ACCOUNTING-II

At the end of the course the student will able to;

CO1: Explain the need for accounting, its objectives, functions, and distinguish between bookkeeping and accounting, including the advantages and limitations of accounting.

CO2: Demonstrate the process of double-entry bookkeeping, including journalizing, posting to ledgers, and preparing subsidiary books and trial balance, with an introduction to

computerized accounting systems.

CO3: Distinguish Joint Venture and Partnership and to learn the methods of Maintaining records under Joint Venture.

CO4: Understand the concept of depreciation, its causes, and apply different methods of calculating depreciation, including Straight Line, Written Down Value, and Annuity Method.

CO5: Analyze consignment accounts, including accounting treatment for consigner and consignee, and distinguish between joint ventures and consignments, understanding their respective accounting procedures.

COURSE 4: BUSINESS ECONOMICS

At the end of the course, the student will able to;

CO1: Describe the nature of economics in dealing with the issues of scarcity of resources.

CO2: Analyze supply and demand analysis and its impact on consumer behaviour.

CO3: Evaluate the factors, such as production and costs affecting firms behaviour.

CO4: Recognize market failure and the role of government in dealing with those failures.

CO5: Use economic analysis to evaluate controversial issues and policies.

LEADER SHIP SKILLS (Skill Course)

At the end of the course, the student will able to;

CO1: Develop comprehensive understanding of assessment of personality and techniques.

CO2: Know how to assess and enhance one's own personality.

CO3: Comprehend leadership qualities and their importance. how to develop leadership qualities

ENTREP RENEUR SHIP DEVELO PMENT (Skill Course)

CO1: Understand the concept of Entrepreneurship, its applications and scope.

CO2: Applies the knowledge for generating a broad idea for a starting an enterprise/start up and Understand the content for preparing a Project Report for a startup and differentiate between financial, technical analysis and business feasibility.

CO3: Know various types of financial institutions that help the business at Central, State and Local Level, Understand Central and State Government policies, Aware of various tax incentives, concessions

MARKETI NG SKILLS (Skill Course)

CO1: Formulate a marketing plan that will meet the needs or goals of a business organization and

Conduct market research to provide information needed to make marketing decisions.

CO2: Understand different strategies for effective design of Marketing Mix.

CO3: Know the Sales Skills including effective personal selling skills

SEMESTER-III

COURSE 5: ADVANCED ACCOUNTING

At the end of the course, the student will able to learn

CO1: Understand the concept of Non-profit organizations and its accounting process.

CO2: Comprehend the concept of single-entry system Double Entry system.

CO3: Familiarize with the legal formalities at the time of Hire Purchase System.

CO4: Understand and preparation of the Partnership Accounts and Prepare financial statements for partnership firm on dissolution of the firm.

CO5: Employ critical thinking skills to understand the difference between the dissolution of the firm and dissolution of partnership.

COURSE 6: INCOME TAX

CO1: Understand the basic concepts of the Income Tax Act, including income, assesses, assessment year, residential status, and exemptions from tax.

CO2: Analyze the tax treatment of salaries, allowances, perquisites, and deductions, and compute income from salaries.

CO3: Compute income from house property and profits from business, identifying allowable and disallowed expenses.

CO4: Explain capital gains and income from other sources, and compute long-term and short-term capital gains.

CO5: Compute the total income of an individual, including deductions under Section 80.

COURSE 7: BUSINESS LAWS

CO1: Explain the meaning, definition, and essential elements of a valid contract, and differentiate between valid, void, and voidable contracts under the Indian Contract Act, 1872.

CO2: Analyze the essential elements of a valid offer, acceptance, and consideration, and understand their significance in contract formation.

CO3: Understand the rules regarding minors' contracts, contingent contracts, and the different modes of discharge, along with remedies for breach of contract.

CO4: Explain the key provisions of the Sale of Goods Act, 1930, and the Consumer Protection Act, 2019, focusing on sale agreements, conditions, warranties, rights of unpaid vendors, consumer rights, and the redressal mechanism.

CO5: Understand the Overview of Cyber Law and Safety Mechanisms.

COURSE 8: BANKING THEORY & PRACTICE

CO1: Understand the meaning and functions of commercial banks, and explain the process of credit creation and the differences between central banking and commercial banking.

CO2: Analyze different banking systems such as unit banking, branch banking, and investment banking, and explore innovations like e- banking, RTGS, NEFT, and mobile banking.

CO3: Describe the types of banks, including indigenous banks, cooperative banks, regional rural banks, SIDBI, NABARD, and EXIM Bank, and their roles in the financial system.

CO4: Explain the general and special relationships between bankers and customers, including KYC norms and the responsibilities involved.

CO5: Understand the duties and responsibilities of collecting and paying bankers, along with the concepts of holder for value, holder in due course, and payment gateways.

MINOR: BUSINESS MANAGEMENT) ORGANISATION BEHAVIOUR

CO1: Define and explain the principles and importance of OB in managerial decision-making.

CO2:Evaluate how perception, attitudes, and personality influence workplace behavior.

CO3: Apply motivation and leadership theories to improve employee performance and team effectiveness.

CO4: Analyze group behavior, team dynamics, and interpersonal communication tools to enhance collaboration.

CO5: Demonstrate understanding of organizational change and recommend strategies to manage resistance.

PRINCIPLES OF MANAGEMENT (MDC)

CO1: Understand management functions, principles, and levels. Conduct SWOT analysis for business strategy.

CO2: Explain the planning process, types of plans, and decision-making in formal and informal organizations.

CO3: Apply motivation and leadership theories, and understand control techniques like cost, purchase, and quality control.

PRINCIPLES OF ACCOUNTING

CO1: Define the Accounting, Classifications of Accounts and its Rules, Book Keeping and Accounting, Double Entry Book-Keeping.

CO2: Understand the subsidiary Books, Cash Book, Three column Cash Book-Petty Cash Book preparation of Trail Balance, Types of Errors, Rectification of Errors.

CO3: Analyse the Reasons for Difference between Cash Book and Pass Book Balances, Preparation of Bank Reconciliation Statement, Final Accounts with Adjustments, Accounting Package-Tally.

SEMESTER-IV

COURSE 9: CORPORATE ACCOUNTING

CO1: Understand the kinds of shares, including types of preference shares, and analyze the accounting treatment for the issue of shares at par, discount, and premium, including forfeiture and reissue of shares, and the implications of issuing bonus shares and buybacks.

CO2: Analyze the accounting treatment for debentures issued and repayable at par, discount, and premium, including practical problems related to the issue and redemption of debentures.

CO3: Explain the need for goodwill valuation and apply various methods, including the average profit method, super profits method, capitalization method, and annuity method, to solve valuation problems.

CO4: Understand the need for share valuation and apply different methods, including the net assets method, yield basis method, and fair value method, to solve valuation problems.

CO5: . Prepare final accounts of companies in accordance with the provisions of the Companies Act, 2013, including adjustments related to the profit and loss account and balance sheet, and solve related problems

COURSE10: COST & MANAGEMENT ACCOUNTING

CO1: Define cost accounting and management accounting, and explain their features, objectives, functions, and scope, including the preparation of a cost sheet with practical problems.

CO2: Analyze techniques of inventory control and apply various methods for the valuation of material issues, including FIFO, LIFO, simple average, and weighted average methods.

CO3: Understand direct and indirect labor costs, and apply different methods of wage payment and incentive schemes, including time rate, piece rate, Halsey, Rowan, and Taylor methods, with related problems.

CO4: Evaluate financial statements and understand their features and limitations, while applying techniques for financial statement analysis, including comparative analysis, common size analysis, and trend analysis.

CO5: Explain the meaning and features of marginal costing, and calculate contribution, profit-volume ratio, break-even point, margin of safety, and estimations of profit and sales, including practical problems.

COURSE 11: AUDITING

CO1: Understanding the meaning and necessity of audit in modern era, Comprehend the role of auditor in avoiding the corporate frauds.

CO2: Identify the steps involved in performing audit process,

CO3: Determine the appropriate audit report for a given audit situation.

CO4: Apply auditing practices to different types of business entities.

CO5: Plan an audit by considering concepts of evidence, risk and materiality.

MINOR-1COURSE-3: FINANCIAL MANAGEMENT

CO1: Understand the fundamental concepts, objectives, and functions of financial management.

CO2: Identify the Sources of finance for establishing business proposal.

CO3: Apply the theories of capital structure and concepts of designing capital structure of a firm.

CO4: Evaluate the mechanism of dividend policies and decisions.

CO5: Analyse the concepts and process of working capital and understand the methods of capital budgeting and the principles of investment decisions.

MINOR-1COURSE-4: INVESTMENT MANAGEMENT

CO1: Define the concept of investment; introduces the concepts of investment.

CO2: Explain the investment planning decisions and modern investment alternatives.

CO3: Identify and categorize different types of risks and returns, different topics such as risks and valuation of investment.

CO4: Examine the time value of money, equity and bond valuation.

CO5: Analyze and price different securities, Understand basics in derivative.

MINOR-2 COURSE-3: MARKETING MANAGEMENT

At the end of the course, the student will able to:

CO1: Develop an idea about marketing and marketing environment.

CO2: Understand the consumer behavior and market segmentation process.

CO3: Comprehend the product life cycle and product line understand role of intermediaries in marketing activities.

CO4: Formulate new marketing strategies for a specific new product. Develop new product line and sales promotion techniques for a given Product.

CO5: Understand the knowledge on various promotional tools in marketing.

MINOR-2 COURSE-4: HUMAN RESOURCE MANAGEMENT

CO1: Define the significance and Functions of human resource management and HRM function planning.

CO2: Understand the Job Analysis, Job description, job specification, recruitment, selection, placement and induction

CO3: Explain the Significance and Importance of Training, Designing of a Training Program, Methods of Training, and Evaluation of Training effectiveness.

CO4: Analysis of Job Evaluation, Importance, Process of Performance Appraisal and Methods of Performance Appraisal, Compensation.

CO5: Understand the Objectives of Industrial Relations, Industrial Disputes- Types of Industrial Disputes, grievance Redressal Procedure, Collective Bargaining**.**

DIGITAL MARKETING (SEC)

CO1: Know the emerging trends in digital marketing and applicable knowledge of various digital marketing tools.

CO2: Build a functional website with the help of Word. Press and exposure to Search Engine Optimization tools.

CO3: Understand the different types of Social Media Marketing Techniques.

DESIGN THINKING (SEC)

CO1: To understand the principles and fundamentals of Design Thinking as a problem- solving methodology.

CO2: To foster creative thinking and ideation techniques to generate innovative solutions.

CO3: To learn rapid prototyping methods for iterative testing and refinement of design concepts.

SEMESTER-V

COURSE-12: ADVERTISING AND MEDIA PLANNING

At the successful completion of the course students are able to:

CO1: Understand the role of advertising in business environment and understand the legal and ethical issues in advertising.

CO2: Acquire skills in creating and developing advertisements.

CO3: Understand up-to-date advances in the current media Industry.

CO4: Acquire the necessary skills for planning and advertising media campaign.

CO5: Analyze Market Media,Media Strategy, Market Analysis and Media Choices

COURSE 13: CUSTOMER RELATIONSHIP MANAGEMENT

At the successful completion of the course students are able to:

CO1: Define CRM process, framework of CRM, Benefits of CRM, Types of CRM, CRM technology component.

CO2: Analyze the CRM link with the other aspects of marketing.

CO3: Understand the basic knowledge of the role of CRM in increasing the sales of the company.

CO4: Discuss the different CRM models in service industry.

CO5: Analyze the different issues in CRM.

COURSE 14: DIGITAL MARKETING

At the successful completion of the course students are able to:

CO1: Analyze online Micro and Macro Environment

CO2: Design and create website

CO3: Discuss search engine marketing

CO4: Create blogs, videos, and share

CO5: Understand the Social Media Marketing.

COURSE 15: SERVICE MARKETING

At the successful completion of the course students are able to:

CO1: Discuss the reasons for growth of service sector.

CO2: Examine the marketing strategies of Banking Services, insurance and education services.

CO3: Review conflict handling and customer Responses in services marketing

CO4: Describe segmentation strategies in service marketing.

CO5: Suggest measures to improve services quality and their service delivery.

COURSE 16: GST PROCEDURES AND PRACTICE

At the successful completion of the course students are able to:

CO1: Understand the basic principles underlying the Indirect Taxation Statutes.

CO2: Examine the method of tax credit. Input and Output Tax credit and Cross Utilisation of Input Tax Credit.

CO3: Identify and analyze the procedural aspects under different applicable statutes related to GST.

CO4: Compute the assessable value of transactions related to goods and services for levy and determination of duty liability.

CO5: Develop various GST Returns and reports for business transactions in Tally.

MINOR (FINANCIAL MANAGEMENT) COURSE4: STOCK MARKET OPERATIONS

At the successful completion of the course students are able to:

CO1: Define the Capital Market, Functions, Intermediaries, Role of Primary Market.

CO2: Understand the Nature and Significance of Stock Exchanges, Role of SEBI.

CO3: Examine the Listing requirements, procedure, Listing conditions of BSE and NSE.

CO4: Analyse the Stock Market Indices BSE Sensex, NSE indices, S&P CNX Nifty.

CO5:Understand the Commodity and Currency Market.

MINOR (FINANCIAL MANAGEMENT) COURSE5:PROJECT MANAGEMENT

At the successful completion of the course students are able to:

CO1: Define the Characteristics and importance project management; Classification of Projects, Project Life Cycle and its Phases.

CO2: Understand the Market feasibility, technical feasibility, financial feasibility, feasibility report.

CO3: Analyse the financial viability of the project.

CO4:Examine the Project Financing Capital structure, sources of finance Margin money, promoter's contribution and implementation and abandonment of project.

CO5:Analyse the rationale for Social cost benefit analysis, UNIDO approaches for Social Cost benefit and PERT and CPM networks.

PRINCIPAL

PRINCIPAL
A.S.D.GOVT.DEGREE COLLEGE (W)
AUTONOMOUS
KAKINADA

A.S.D. GOVERNMENT DEGREE COLLEGE FOR WOMEN(A)
KAKINADA
DEPARTMENT OF COMPUTER SCIENCE
B.Com (Computer Applications)
COURSE OUTCOMES

2025 - 2026

SEMESTER -I

Course: 1 FUNDAMENTALS OF INFORMATION TECHNOLOGY & OFFICE AUTOMATION

Upon successful completion of the course, a student will be able to:

CO1: Understand foundational computing concepts including number systems, evolution of computers, and architectural components.

CO2: Explore basic computer organization and network fundamentals, recognizing device functions, system types, and internet components.

CO3: Demonstrate proficiency in word processing and presentation tools, applying formatting techniques and design elements for professional outputs.

CO4: Develop competency in spreadsheet operations, employing formulas, charts, and data handling techniques.

CO5: Apply advanced data modelling and productivity features to analyse and visualize data efficiently using modern tools.

SEMESTER-II

Course: 2 E-COMMERCE AND WEB APPLICATION DEVELOPMENT

Upon successful completion of the course, a student will be able to:

CO1: Describe e-commerce models, revenue strategies, and legal considerations including cyber laws and data privacy.

CO2: Implement basic web structures using HTML5 and apply web design principles suitable for digital commerce.

CO3: Create and style dynamic websites using CSS for layout, animation, and visual enhancements.

CO4: Write client-side scripts using JavaScript to enable interactivity, form validation, and event handling.

CO5: Build responsive e-commerce front ends using the Bootstrap framework, incorporating reusable UI components and custom styling.

SEMESTER-III

Course: 3 E-COMMERCE AND WEB DESIGNING

Upon successful completion of the course, a student will be able to:

CO1: Understand E-Commerce websites and their functionality

CO2: Identify different types of Business

CO3: Analyze e-commerce data to make informed business decisions, including sales tracking, customer behavior analysis, and market trend identification.

CO4: Design Websites using HTML

CO5: Apply styles to the websites created using CSS

Course: 4 DIGITAL MARKETING

Upon successful completion of the course, a student will be able to:

CO1: Evaluate the characteristics and strategies of digital marketing.

CO2: Analyze the Performance of Online Advertising Campaigns.

CO3: Identify and differentiate between various types of emails used in marketing campaigns.

CO4: Create and assess social media marketing strategies, utilizing various tools and platforms

CO5: Apply SEO techniques to optimize web content for search engines.

SEMESTER-III

Course: 5 DATABASE MANAGEMENT SYSTEMS

Upon successful completion of the course, a student will be able to:

CO1: Understand DBMS concepts, data models and Architecture.

CO2: Understand ER concepts and ER mapping to relational model

CO3: Improve the database design by normalization.

CO4: Make use of SQL to retrieve and maintain relational database.

CO5: Illustrate various constructs in PL/SQL.

SEMESTER-IV

Course: 6 DATABASE MANAGEMENT SYSTEMS WITH ORACLE

Upon successful completion of the course, a student will be able to:

CO1: Identify key characteristics, advantages, and various applications of database systems

CO2: Apply Codd's rules and key constraints to design and normalize relational database schemas.

CO3: Construct and interpret Entity-Relationship (ER) diagrams and apply basic SQL commands

CO4: Make use of SQL to retrieve and maintain relational database.

CO5: Demonstrate various constructs in PL/SQL

SEMESTER-IV

Course: 7 OPERATING SYSTEMS

Upon successful completion of the course, a student will be able to:

CO1: Interpret the basic structure of OS and architectural components.

CO2: Compare and contrast various Process scheduling algorithms.

CO3: Analyse various mechanisms of Synchronization and the principles of deadlock.

CO4: Make use of paging and segmentation in Memory management.

CO5: Demonstrate file operations and file system implementation.

SEMESTER-IV

Course: 8 PYTHON PROGRAMMING

Upon successful completion of the course, a student will be able to:

CO1: Classify the fundamental concepts of Python programming, including syntax, data types, and control structures.

CO2: Demonstrate a clear understanding of functions and OOP concepts in Python.

CO3: Analyse the usage of Lists, Tuples and Dictionaries.

CO4: Apply Python programming techniques to solve real-world problems using NumPy and Pandas' libraries.

CO5: Elucidate GUI programming using matplotlib and database connectivity through MySQL in Python.

SEMESTER-V

Course: 9 BUSINESS ANALYTICS

Upon successful completion of the course, a student will be able to:

CO1: Explain the fundamental concepts of Business Analytics, its components, tools, and real-world applications across sectors.

CO2: Apply descriptive analytics and statistical methods such as mean, median, mode, variance, and standard deviation to analyse business data.

CO3: Demonstrate the use of OLAP and OLTP systems, their operations, and tools to support business decision-making.

CO4: Analyze the architecture, components, and tools of Business Intelligence and evaluate their roles in enhancing business operations and management decision-making.

CO5: Illustrate data mining and machine learning concepts, models, and their deployment in solving real-time business problems.

SEMESTER-V

Course: 10 MOBILE APPLICATION DEVELOPMENT USING ANDROID

Upon successful completion of the course, a student will be able to:

CO1: Understand the history, architecture, components, and lifecycle of Android applications.

CO2: Gain knowledge of designing Android apps using core components like intents, services, and manifest.

CO3: Design user-friendly Android interfaces using Views, Layouts, and UI elements.

CO4: Understand Android app testing, preferences, and resource management.

CO5: Explore Android APIs for storage, databases, networking, location, and connectivity.

SEMESTER-V

Course: 11 WEB PROGRAMMING

Upon successful completion of the course, a student will be able to:

CO1: Understand the Web Design Process.

CO2: Apply the HTML tags, elements and attributes

CO3: Apply different types of HTML elements

CO4: Use of organizational elements, tables and images

CO5: Use of audio, video files

SEMESTER-V

Course: 12 WEB DEVELOPMENT USING PHP & MYSQL

Upon successful completion of the course, a student will be able to:

CO1: Write simple programs in PHP.

CO2: Understand how to use regular expressions, handle exceptions, and validate data.

CO3: Apply In-Built functions and Create User defined functions in PHP programming.

CO4: Write PHP scripts to handle HTML forms.

CO5: Know how to use PHP with MySQL DB and can write database driven web pages.

N.N.S. Eswari
Signature of the HOD
I/C HARGE
DEPT OF COMPUTER SCIENCE
ASD GOVT DEGREE COLLEGE (W) AUTONOMOUS
KAKINADA

PRINCIPAL
A.S.D.GOVT.DEGREE COLLEGE (W)
AUTONOMOUS
KAKINADA