ప్రాచీన తెలుగు కవిత్వం

డిగ్రీ (జనరల్) / సెమిస్టర్

రచయితలు

డా॥ బి. అశోక్

తెలుగు విభాగం

ఎస్. వి. విశ్వ విద్యాలయం

తిరుపతి, ఆంధ్రప్రదేశ్ - 517 502

Dr. B. R. Ambedkar Open University

Eluru, Andhra Pradesh, India

www.drbraouap.org

Dr. B. R. Ambedkar Open University
Eluru, Andhra Pradesh, India
www.drbraouap.org

విజయోస్తు

మమ్మీ అన్న మాటలో మమకారం కన్న
అమ్మ! అన్న మాటలో మాధుర్యం మిన్న
అమ్మ నుండి అలవడే అమృత భాష
ఆత్మీయతను పెంచే ఆంధ్ర భాష

మాధుర్యాన్ని పెంచే మాన్యభాష
రాగసుధలను రంగరించే రాష్ట్ర భాష
మమకారాన్ని పంచే మాతృభాష
తేనెలొలుకు భాష మన తెలుగు భాష

తెలుగు భాషను గౌరవిద్దాం
తెలుగు భాషలో మాట్లాడుదాం
తెలుగు జాతికి వన్నెతెద్దాం
ఇదే తెలుగుతల్లికి మనమిచ్చే నీరాజనాలు

– రచయితలు

జనరల్ తెలుగు / సెమిస్టర్ - 1

ప్రాచీన తెలుగు కవిత్వం

ఈ కోర్సు విజయవంతంగా ముగించాక, విద్యార్థులు క్రింది అభ్యసన ఫలితాలను పొందగలరు.

1. ప్రాచీన తెలుగుసాహిత్యం యొక్క ప్రాచీనతను, విశిష్టతను గుర్తిస్తారు. తెలుగు సాహిత్యంలో ఆదికవి నన్నయ కాలంనాటి భాషానంన్క ృతులను, ఇతిహాసకాలంనాటి రాజనీతి విషయాలపట్ల పరిజ్ఞానాన్ని సంపాదించగలరు.
2. శివకవుల కాలంనాటి మతపరిస్థితులను, భాషావిశేషాలను గ్రహిస్తారు. తెలుగు సుడికారం, సామెతలు, లోకోక్తులు మొదలైన భాషాంశాల పట్ల పరిజ్ఞానాన్ని పొందగలరు.
3. తిక్కన భారతంనాటి మత, ధార్మిక పరిస్థితులను, తిక్కన కవితాశిల్పాన్ని, నాటకీయతను అవగాహన చేసుకోగలరు.
4. ఎఱ్ఱన సూక్తివైచిత్రిని, ఇతిహాస కవిత్వంలోని విభిన్న రీతులపట్ల అభిరుచిని పొందగలరు. శ్రీనాథుని కాలం నాటి కవితావిశేషాలను, మొల్ల కవితా విశిష్టతను గుర్తించగలరు.
5. తెలుగు పద్యం స్వరూప-స్వభావాలను, సాహిత్యాభిరుచిని పెంపొందించుకుంటారు. ప్రాచీన కావ్యభాషలోని వ్యాకరణాంశాలను అధ్యయనం చేయడం ద్వారా భాషాసామర్థ్యాన్ని, రచనలో మెళకువలను గ్రహించగలరు.

పాఠ్య ప్రణాళిక

యూనిట్ - I

రాజనీతి - నన్నయ

మహాభారతం - సభాపర్వం - ప్రథమాశ్వాసం - (26-57 పద్యాలు)

యూనిట్ - II

దక్షయజ్ఞం - నన్నెచోడుడు

కుమారసంభవం - ద్వితీయాశ్వాసం - (49 - 86 పద్యాలు)

యూనిట్ - III

ధౌమ్య ధర్మోపదేశము – తిక్కన

మహాభారతం – విరాటపర్వం – ప్రథమాశ్వాసం – (116 – 146) పద్యాలు

యూనిట్ - IV

పలనాటి బెబ్బులి – శ్రీనాథుడు (పలనాటి వీరచరిత్ర – ద్విపద కావ్యం పుట 108 – 112 'బాలచంద్రుడు భీమంబగు సంగ్రామం బొనర్చుట.. (108)...

వెఱగంది కుంది' (112) సం. అక్కిరాజు ఉమాకాంతం ముద్రణ. వి. కె. స్వామి, బెజవాడ 1911.

యూనిట్ - V

సీతారావణ సంవాదం – మొల్ల

రామాయణము – సుందరకాండము – (40 – 87 పద్యాలు)

వ్యాకరణం

సంధులు: ఉత్వ, త్రిక, ద్రుతప్రకృతిక, నుగాగమ, ద్విరుక్తటకారాదేశ, యణాదేశ, వృద్ధి, శ్చుత్వ, జశ్త్వ, అనునాసిక సంధులు.

సమాసాలు: అవ్వయిభావ, తత్పురుష, కర్మధారయ, ద్వంద్వ, ద్విగు, బహువ్రీహి.

అలంకారాలు:

అర్థాలంకారాలు: ఉపమ, ఉత్ప్రేక్ష, రూపక, స్వభావోక్తి, అర్థాంతరవ్యాస, అతిశయోక్తి.

శబ్దాలంకారాలు: అనుప్రాస (వృత్యనుప్రాస, ఛేకానుప్రాస లాటానుప్రాస, అంత్యానుప్రాస)

ఛందస్సు

వృత్తాలు: ఉత్పలమాల, చంపకమాల, శార్దూలము, మత్తేభము;

జాతులు: కందం, ద్విపద; ఉపజాతులు: ఆటవెలది, తేటగీతి, సీసం మరియు ముత్యాలసరాలు

విషయ సూచిక

ప్రాచీన తెలుగు కవిత్వం

యూనిట్-1: రాజనీతి

యూనిట్-2: దక్షయజ్ఞం

A Course in
Communication and Soft Skills

As per Choice Based Credit System (CBCS)
For Degree I-Year/I-sem
Common to all Branches

Authors
Prof. V. Ravi Naidu
Dept. of English
S.V. University, Tirupati - 517502 AP

Dr. B. R. Ambedkar Open University
Eluru, Andhra Pradesh, India
www.drbraouap.org

Year : 2026

Edtion : First

Dr. B. R. Ambedkar Open University

Eluru, Andhra Pradesh, India

www.drbraouap.org

A Course in Communication and Soft Skills

Learning Outcomes

By the end of the course the learner will be able to:

- Use grammar effectively in writing and speaking.
- Demonstrate the use of good vocabulary
- Demonstrate an understating of writing skills
- Acquire ability to use Soft Skills in professional and daily life.
- Confidently use the tools of communication skills

Unit-1: Listening Skills

i. Importance of Listening
ii. Types of Listening
iii. Barriers to Listening
iv. Effective Listening

Unit-2: Speaking Skills

a. Sounds of English: Vowels and Consonants
b. Word Accent
c. Intonation

Unit-3: Grammar

a. Concord
b. Modals
c. Tenses (Present/Past/Future)
d. Articles
e. Prepositions
f. Question Tags
g. Sentence Transformation (Voice, Reported Speech & Degrees of Comparison)
h. Error Correction

Unit-4: Writing

i. Punctuation
ii. Spelling
iii. Paragraph Writing

Unit-5: Soft Skills

a. SWOC
b. Attitude
c. Emotional Intelligence
d. Telephone Etiquette
e. Interpersonal Skills

Content

A Course in Communication and Soft Skills

Unit-1: Listening skills

Unit-2: Speaking Skills

Life Skill Course

Human Values and Professional Ethics

As per Choice Based Credit System (CBCS)
Common to all Branches

Author
Dr. M. Shanthi
Dept. of Management Studies
S.V. University, Tirupati - 517502 AP

Dr. B. R. Ambedkar Open University
Eluru, Andhra Pradesh, India
www.drbraouap.org

Year : 2026

Edtion : First

Dr. B. R. Ambedkar Open University
Eluru, Andhra Pradesh, India
www.drbraouap.org

Human Values and Professional Ethics

Learning Outcome

On completion of this course, the UG students will be able to:

- Understand the significance of value inputs in a classroom and start applying them in their life and profession
- Distinguish between values and skills, happiness and accumulation of physical facilities, the Self and the Body, Intention and Competence of an individual, etc.
- Understand the value of harmonious relationship based on trust and respect in their life and profession
- Understand the role of a human being in ensuring harmony in society and nature.
- Distinguish between ethical and unethical practices, and start working out the strategy to actualize a harmonious environment wherever they work.

Unit-1: Introduction - Definition, Importance, Process & Classifications of Value Education

- Understanding the need, basic guidelines, content and process for Value Education
- Understanding the thought provoking issues; need for Values in our daily life
- Choices making - Choosing, Cherishing & Acting
- Classification of Value Education: understanding Personal Values, Social Values, Moral Values & Spiritual Values.

Unit-2: Harmony in the Family - Understanding Values in Human Relationships

- Understanding harmony in the Family- the basic unit of human interaction
- Understanding the set of proposals to verify the Harmony in the Family;

- Trust (*Vishwas*) and Respect (*Samman*) as the foundational values of relationship
- Present Scenario: Differentiation (Disrespect) in relationships on the basis of body, physical facilities, or beliefs.
- Understanding the Problems faced due to differentiation in Relationships
- Understanding the harmony in the society (society being an extension of family): *Samadhan*, *Samridhi*, *Abhay*, *Sah-astitva* as comprehensive Human Goals
- Visualizing a universal harmonious order in society- Undivided Society (*Akhand Samaj*), Universal Order (*Sarvabhaum Vyawastha*)- from family to world family.

Unit-3: Professional Ethics in Education

- Understanding about Professional Integrity, Respect & Equality, Privacy, Building Trusting Relationships.
- Understanding the concepts; Positive cooperation, Respecting the competence of other professions.
- Understanding about Taking initiative and Promoting the culture of openness.
- Depicting Loyalty towards Goals and objectives.

Content
Human Values and Professional Ethics

Unit-1: Introduction

Skill Development Course

Office Secretaryship

As per Choice Based Credit System (CBCS)
Common to all Branches

Author
Dr. M. Shanthi
Dept. of Management Studies
S.V. University, Tirupati - 517502 AP

Dr. B. R. Ambedkar Open University
Eluru, Andhra Pradesh, India
www.drbraouap.org

Year : 2026

Edtion : First

Dr. B. R. Ambedkar Open University
Eluru, Andhra Pradesh, India
www.drbraouap.org

Office Secretaryship

Learning Outcomes

By the successful completion of course, the student will be able to;

1. Understand the organizational hierarchy and outlines of functioning.
2. Comprehend the role of office secretaryship in a small and medium organization.
3. Acquire knowledge on office procedures and interpersonal skills.
4. Apply the skills in preparing and presenting notes, letters, statements, reports in different situations.

Unit-I: Introduction

Introduction - Organisational structure of a small and medium organization - Types of offices - Kinds of secretaries - The scope of office secretaryship.

Unit-II: Office Secretary

The role of an office secretary - Duties and responsibilities - Usage of different devices - Flowchart and office manuals - Coordinating different wings of an office/organisaton - Arranging common meetings - Operations of banking and financial services - travel and hospitality management services.

Unit-III: Office Procedures

Office procedures - Filing - Circulating files - Preparation of notes, circulars, agenda and minutes of meetings - Issue of press notes - Maintenance of files and records - Inventory, office, human resources, financial and confidential - maintaining public relations.

Content

Office Secretaryship

Unit-1: Introduction

Differential Equations

As per Choice Based Credit System (CBCS)

I - B.Sc(Mathematics) / I - Semester

Authors

Prof. Bharathi

Dept. of Mathematics

S.V. University

Tirupati - 517 502 AP

Dr. B. R. Ambedkar Open University

Eluru, Andhra Pradesh, India

www.drbraouap.org

Year : 2026

Edtion : First

Dr. B. R. Ambedkar Open University

Eluru, Andhra Pradesh, India

www.drbraouap.org

Differential Equations

Course Outcomes

After successful completion of this course, the student will be able to;

1. Solve linear differential equations
2. Convert non exact homogeneous equations to exact differential equations by using integrating factors.
3. Know the methods of finding solutions of differential equations of the first order but not of the first degree.
4. Solve higher-order linear differential equations, both homogeneous and non homogeneous, with constant coefficients.
5. Understand the concept and apply appropriate methods for solving differential equations.

Unit-I: Differential Equations of first order and first degree

Linear Differential Equations; Differential equations reducible to linear form; Exact differential equations; Integrating factors; Change of variables.

Unit-II: Orthoginal Trajectories Differential Equations of first order but not of the first degree

Equations solvable for p; Equations solvable for y; Equations solvable for x; Equations that do not contain x (or y); Equations homogeneous in x and y; Equations of the first degree in x and y – Clairaut's Equation.

Unit-III: Higher order linear differential equations-I

Solution of homogeneous linear differential equations of order n with constant coefficients; Solution of the non-homogeneous linear differential equations with constant coefficients by means of polynomial operators. General Solution of f(D)y = 0.

General Solution of f(D)y = Q when Q is a function of $x, \frac{1}{f(D)}$ is expressed as partial fractions.

P.I. of f(D)y = Q when $Q = be^{ax}$, P.I. of f(D)y = Q when Q is b sinax or b cos ax.

Unit-IV:Higher Order Linear Differential Equations-II

Solution of the non-homogeneous linear differential equations with constant coefficients.

P.I. of f(D) y = Q when $Q = bx^k$

P.I. of f(D) y = Q when $Q = e^{ax}V$, where V is a function of x.

P.I. of f(D) y = Q when Q = xV, where V is a function of x.

P.I. of f(D) y = Q when $Q = x^mV$, when V is a function of x.

Unit-V: Higher Order Linear Differential Equations-III

Method of variation of parameters; Linear Differential Equations with non-constant coefficients; The Cauchy-Euler Equation, Legendre's linear equations, miscellaneous differential equations.

Content

Differential Equations

Chapter-1: Introduction

Descriptive Statistics

As per Choice Based Credit System (CBCS)
I - (B.A./B.Sc) / I - Semester

Authors

Dr. P. S. R. K. Prasad
Professor, Department of Humanities and Sciences
Sree Venkateswara College of Engineering
Nellore, A.P. - 524 316

Ms. P. Niharika
Lecturer in Statistics
M S R Degree College
Kavali, A.P. - 524 201

Dr. B. R. Ambedkar Open University
Eluru, Andhra Pradesh, India
www.drbraouap.org

Year : 2026

Edtion : First

Dr. B. R. Ambedkar Open University

Eluru, Andhra Pradesh, India

www.drbraouap.org

Descriptive Statistics

Outcomes

Students will acquire

1. Knowledge of Statistics and its scope and importance in various areas such as Medical.
2. Knowledge of various types of data, their organization and evaluation of summary measures such as measures of central tendency and dispersion etc.
3. Knowledge of other types of data reflecting quality characteristics including concepts of independence and association between two attributes,
4. Insights into preliminary exploration of different types of data.
5. Knowledge of correlation, regression analysis, regression diagnostics, partial and multiple correlations.

Unit-I: Introduction to Statistics

Introduction to Statistics: Importance of Statistics. Scope of Statistics in different fields. Concept of primary and secondary data. Diagrammatic and graphical representation of data: Histogram, frequency polygon, Ogives, Pie. Measures of Central Tendency: Mean, Mode, Geometric Mean and Harmonic Mean. Median and Mode through graph.

Unit-II: Measures of Dispersion

Measures of Dispersion: Range, Quartile Deviation, Mean Deviation and Standard Deviation, Variance. Central and Non-Central moments and their inter relationship. Sheppard's correction for moments. Skewness and kurtosis.

Unit-III: Correlation

Curve fitting: Bi - variate data, Principle of least squares, fitting of degree polynomial. Fitting of straight line, Fitting of Second degree polynomial of parabola, Fitting of power curve and exponential curves.

Correlation: Meaning, Types of Correlation, Measures of Correlation: Scatter diagram, Karl Pearson's Coefficient of Correlation, Rank Correlation Coefficient (with and without ties), Bivariate frequency distribution, correlation coefficient for bi-variate data and simple problems. Concept of multiple and partial correlation coefficients (three variables only) and properties.

Unit-IV: Regression

Regression: Concept of Regression, Linear Regression: Regression lines, Regression coefficients and it's properties, Regressions lines for bi-variate data and simple problems. Correlation vs regression.

Unit-V: Attributes

Attributes: Notations, Class, Order of class frequencies, Ultimate class frequencies, Consistency of data, Conditions for consistency of data for 2 and 3 attributes only, Independence of attributes Association of attributes and its measures, Relationship between association and colligation of attributes, Contingencytable: Square contingency, Mean square contingency, Coefficient of mean square contingency, Tschuprow's coefficient of contingency.

Content

Descriptive Statistics

Unit-1: Introduction to Statistics

Problem Solving in 'C'

As per Choice Based Credit System (CBCS)

I - B.Sc(Computer Science) / I - Semester

Authors

Prof. Anjan Babu

Dept. of Computer Science

S.V. University

Tirupati - 517502 AP

Dr. B. R. Ambedkar Open University

Eluru, Andhra Pradesh, India

www.drbraouap.org

Year : 2026

Edtion : First

Dr. B. R. Ambedkar Open University

Eluru, Andhra Pradesh, India

www.drbraouap.org

Problem Solving in 'C'

Outcomes

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

1. Understand the evolution and functionality of a Digital Computer.
2. Apply logical skills to analyse a given problem.
3. Develop an algorithm for solving a given problem.
4. Understand 'C' language constructs like Iterative statements, Array processing, Pointers, etc.
5. Apply 'C' language constructs to the algorithms to write a 'C' language program.

Unit-I

General Fundamentals: Introduction to computers: Block diagram of a computer, characteristics and limitations of computers, applications of computers, types of computers, computer generations.

Introduction to Algorithms and Programming Languages: Algorithm - Key features of Algorithms, Flow Charts, Programming Languages - Generations of Programming Languages - Structured Programming Language- Design and Implementation of Correct, Efficient and Maintainable Programs.

Unit-II

Introduction to C: Introduction - Structure of C Program - Writing the first C Program - File used in C Program - Compiling and Executing C Programs - Using Comments - Keywords - Identifiers - Basic Data Types in C - Variables - Constants - I/O Statements in C - Operators in C - Programming Examples.

Decision Control and Looping Statements: Introduction to Decision Control Statements - Conditional Branching Statements - Iterative Statements - Nested Loops - Break and Continue Statement - Goto Statement

Unit-III

Arrays: Introduction - Declaration of Arrays - Accessing elements of the Array - Storing Values in Array - Operations on Arrays - one dimensional, two dimensional and multi dimensional arrays, character handling and strings.

Unit-IV

Functions: Introduction - using functions - Function declaration/ prototype - Function definition - function call - return statement - Passing parameters - Scope of variables - Storage Classes - Recursive functions.

Structure, Union, and Enumerated Data Types: Introduction - Nested Structures - Arrays of Structures - Structures and Functions - Union - Arrays of Unions Variables - Unions inside Structures - Enumerated Data Types.

Unit-V

Pointers: Understanding Computer Memory - Introduction to Pointers - declaring Pointer Variables - Pointer Expressions and Pointer Arithmetic - Null Pointers - Passing Arguments to Functions using Pointer - Pointer and Arrays - Memory Allocation in C Programs - Memory Usage - Dynamic Memory Allocation - Drawbacks of Pointers

Files: Introduction to Files - Using Files in C - Reading Data from Files - Writing Data to Files - Detecting the End-of-file - Error Handling during File Operations - Accepting Command Line Arguments.

Content

Problem Solving in 'C'

Chapter-6: Functions

ఆధునిక తెలుగు సాహిత్యం

డిగ్రీ (జనరల్) / సెమిస్టర్ - II

రచయితలు

డా॥ ఎస్. సునీల్ కుమార్

తెలుగు విభాగం

ఎస్. వి. విశ్వ విద్యాలయం

తిరుపతి, ఆంధ్రప్రదేశ్ - 517 502

Dr. B. R. Ambedkar Open University

Eluru, Andhra Pradesh, India

www.drbraouap.org

Dr. B. R. Ambedkar Open University
Eluru, Andhra Pradesh, India
www.drbraouap.org

జనరల్ తెలుగు / సెమిస్టర్ – II

ఆధునిక తెలుగు సాహిత్యం

అభ్యసన ఫలితాలు

ఈ కోర్సు విజయవంతం ముగించాక, విద్యార్థులు క్రింది అభ్యసన ఫలితాలను పొందగలరు.

1. ఆంగ్లభాష ప్రభావం కారణంగా తెలుగులో వచ్చిన ఆధునిక సాహిత్యాన్ని, అని విశిష్టతను గుర్తిస్తారు.
2. సమకాలీన ఆధునిక సాహిత్య ప్రక్రియలైన వచన కవిత్వం, కథ, నవల, నాటకం, విమర్శ లపై అవగాహన పొందుతారు.
3. భావకవిత, అభ్యుదయ కవితలక్ష్యాలను గూర్చిన జ్ఞాన్నాన్ని పొందుతారు. అస్తిత్వవాద ఉద్యమాలపుట్టుకను, అవశ్యకతను గుర్తిస్తారు.
4. కథాసాహిత్యం ద్వారా సామాజిక చైతన్యాన్ని పొందుతారు. సిద్ధాంతాల ద్వారా కాకుండా, వాస్తవ పరిస్థితులను తెలుసుకోవడం ద్వారా సిద్ధాంతాన్ని సమీక్షించగలరు.
5. ఆధునిక తెలుగు కల్పనాసాహిత్యం ద్వారా సామాజిక, సాంస్కృతిక, రాజకీయ చైతన్యాన్ని పొందుతారు.

పాఠ్య ప్రణాళిక

j ãÖ' { Ù I: ఆధునిక కవిత్వం

1.	ఆధునిక కవిత్వం	:	పరిచయం
2.	కొండవీడు	:	దువూరి రామిరెడ్డి
			(కవికోకిల గ్రంథావళి ఖండకావ్యాలు నక్షత్రమాల సంపుటి నుండి)
3.	మాతృసంగీతం	:	అనిసెట్టి సుబ్బారావు (అగ్నివీణ కవితాసంపుటి నుండి)
4.	తాతకో నూలుపోగు	:	బందరు ప్రసాదమూర్తి (కలనేత కవితాసంపుటి నుండి)

యూనిట్ - II: కథానిక

5.	తెలుగు కథానిక	:	పరిచయం
6.	భయం (కథ)	:	కాళీపట్నం రామరావు
7.	స్వేదం ఖరీదు....(కథ)	:	రెంటాల నాగేశ్వరరావు

యూనిట్ - III: నవల

యూనిట్ - IV: నాటకం

యూనిట్- V: విమర్శ

విషయ సూచిక

ఆధునిక తెలుగు సాహిత్యం

యూనిట్ - 1: ఆధునిక కవిత్వం

12. యక్షగానం (నాటిక)

13. అపురూప కళారూపాల విధ్వంస దృశ్యం యక్షగానం

యూనిట్ - V: విమర్శ

14. తెలుగు సాహిత్య విమర్శ – పరిచయం

15. విమర్శ – స్వరూప స్వభావాలు

A Course in

Reading & Writing Skills

As per Choice Based Credit System (CBCS)
For Degree I-year / II-sem
Common to all Branches

Authors
Dr. E. Gangadhar
Dept. of English
S.V. University, Tirupati - 517502 AP

Dr. B. R. Ambedkar Open University
Eluru, Andhra Pradesh, India
www.drbraouap.org

Year : 2026

Edtion : First

Dr. B. R. Ambedkar Open University

Eluru, Andhra Pradesh, India

www.drbraouap.org

A Course in Reading & Writing Skills

Learning Outcomes

By the end of the course the learner will be able to:

- Use reading skills effectively
- Comprehend different texts
- Interpret different types of texts
- Analyse what is being read
- Build up a repository of active vocabulary
- Use good writing strategies
- Write well for any purpose
- Improve writing skills independently for future needs

Unit-1

Prose : 1. How to Avoid Foolish Opinions Bertrand Russell

Skills : 2. Vocabulary: Conversion of Words

: 3. One Word Substitutes

: 4. Collocations

Unit-2

Prose	: 1. The Doll's House	Katherine Mansfield
Poetry	: 2. Ode to the West Wind	P B Shelley
Non-Detailed Text	: 3. Florence Nightingale	Abrar Mohsin
Skills	: 4. Skimming and Scanning	

Unit-3

Prose : 1. The Night Train at Deoli Ruskin Bond

Poetry : 2. Upagupta Rabindranath Tagore

Skills : 3. Reading Comprehension

: 4. Note Making/Taking

Unit-4

Poetry : 1. Coromandel Fishers Sarojini Naidu

Skills : 2. Expansion of Ideas

: 3. Notices, Agendas and Minutes

Unit-5

Non-Detailed Text : 1. An Astrologer's Day R K Narayan

Skills : 2. Curriculum Vitae and Resume

: 3. Letters

: 4. E-Correspondence

Content

A Course in Reading & Writing Skills

Unit-1

Unit-2

Unit-3

Life Skill Course

Indian Culture & Science

As per Choice Based Credit System (CBCS)
Common to all Branches

Author
Dr. B. Sudheeshna
Dept. of Management Studies
S.V. University, Tirupati - 517502 AP

Dr. B. R. Ambedkar Open University
Eluru, Andhra Pradesh, India
www.drbraouap.org

Year : 2026

Edtion : First

Dr. B. R. Ambedkar Open University

Eluru, Andhra Pradesh, India

www.drbraouap.org

Indian Culture & Science

Learning Outcomes

By successful completion of the course, students will be able to:

1. Understand the evolution of India's culture.
2. Analyze the process of modernization of Indian society and culture from past to future.
3. Comprehend objective education and evaluate scientific development of India in various spheres.
4. Inculcate nationalist and moral fervor and scientific temper.

Unit-I: Unity in Diversity in India

Coexistence of various religions since ancient times - Hinduism, Buddhism, Jainism and Atheism, and later Sikhism, Islam and Christianity

The Bhakti (Vishnavite and Saivaite) and Sufi Movements

The concepts of seela, karuna, kshama, maitri, vinaya, santhi and ahimsa Achievements in Literature, Music, Dance, Sculpture and Painting - Craftsmanship in cloth, wood, clay, metal and ornaments

Cultural diversity, Monogamy, Family system, Important seasonal festivals

Unit-II: Social Reforms and Modern Society

Reforms by Basaveswara - Raja Rama Mohan Roy - Dayananda Saraswathi - Swamy Vivekananda - Mahatma Gandhi - B. R. Ambedkar - Reforms in Andhra by Vemana,Veerabrahmam, Gurajada, Veeresalingam and GurramJashua (only reforms in brief, biographies not needed)

Modern Society: Family unity, Community service, Social Harmony, Civic Sense, Gender Sensitivity, Equality, National Fervor

Unit-III: Science and Technology

Objectivity and Scientific Temper - Education on Scientific lines (Bloom's Taxonomy) - Online Education

Developments in Industry, Agriculture, Medicine, Space, Alternate Energy, Communications, Media through ages

Co-curricular Activities Suggested

1. Assignments, Group discussions, Quiz etc
2. Invited Lecture by a local expert
3. Visit to a scientific institutions, local heritage sites, museums, industries etc

Content
Indian Culture & Science

Unit-1: Indian Culture & Science

Skill Development Course

Advertising

As per Choice Based Credit System (CBCS)
Common to all Branches

Authors
Dr. B. Sudheeshna
Dept. of Management Studies
S.V. University, Tirupati - 517502 AP

Dr. B. R. Ambedkar Open University
Eluru, Andhra Pradesh, India
www.drbraouap.org

Year : 2026

Edtion : First

Dr. B. R. Ambedkar Open University

Eluru, Andhra Pradesh, India

www.drbraouap.org

Advertising

Learning Outcomes

After Successful completion of this course, the students are able to;

1. Understand the field of Advertising
2. Comprehend opportunities and challenges in Advertising sector
3. Prepare a primary advertising model
4. Understand applying of related skills
5. Examine the scope for making advertising a future career

Unit-1

Introduction of advertising concepts- functions - Types of advertising - Creative advertising messages - Factors determining opportunities of a product/service/Idea

Unit-2

Role of advertising agencies and their responsibilities - scope of their work and functions - Ethical issues - Identifying target groups -Laws in advertising. Advertising Statutory Bodies in India - Role of AAAI (Advertising Agencies Association of India), ASCI (Advertising Standard Council of India)

Unit-3

Types of advertising - Basic characteristics of a typical advertisement - Reaching target groups - Local advertising - Feedback on impact of advertisement - Business promotion.

Content

Advertising

Unit-1

Unit - 2

Unit - 3

Three Dimensional Analytical Solid Geometry

As per Choice Based Credit System (CBCS)

I - B.Sc(Mathematics) / II - Semester

Authors

Dr. Sudhakaraiah

Dept. of Mathematics

S.V. University

Tirupati - 517 502 AP

Dr. B. R. Ambedkar Open University

Eluru, Andhra Pradesh, India

www.drbraouap.org

Year : 2026

Edtion : First

Dr. B. R. Ambedkar Open University

Eluru, Andhra Pradesh, India

www.drbraouap.org

Course Outcomes: After successful completion of this course, the student will be able to;

1. Get the knowledge of planes.
2. Basic idea of lines, sphere and cones.
3. Understand the properties of planes, lines, spheres and cones.
4. Express the problems geometrically and then to get the solution.

Unit-I: The Plane

Equation of plane in terms of its intercepts on the axis, Equations of the plane through the given points, Length of the perpendicular from a given point to a given plane, Bisectors of angles between two planes, Combined equation of two planes, Orthogonal projection on a plane.

Unit-II: The Line

Equation of a line; Angle between a line and a plane; The condition that a given line may lie in a given plane; The condition that two given lines are coplanar; Number of arbitrary constants in the equations of straight line; Sets of conditions which determine a line; The shortest distance between two lines; The length and equations of the line of shortest distance between two straight lines; Length of the perpendicular from a given point to a given line.

Unit-III: The Sphere

Definition and equation of the sphere; Equation of the sphere through four given points; Plane sections of a sphere; Intersection of two spheres; Equation of a circle; Sphere through a given circle; Intersection of a sphere and a line; Power of a point; Tangent plane; Plane of contact; Polar plane; Pole of a Plane; Conjugate points; Conjugate planes;

Unit-IV: The Sphere and Cones

Angle of intersection of two spheres; Conditions for two spheres to be orthogonal; Radical plane; Coaxial system of spheres; Simplified from of the equation of two spheres.

Definitions of a cone; vertex; guiding curve; generators; Equation of the cone with a given vertex and guiding curve; equations of cones with vertex at origin are homogenous; Condition that the general equation of the second degree should represent a cone;

Unit-V: Cones

Enveloping cone of a sphere; right circular cone: equation of the right circular cone with a given vertex, axis and semi vertical angle: Condition that a cone may have three mutually perpendicular generators; intersection of a line and a quadric cone; Tangent lines and tangent plane at a point; Condition that a plane may touch a cone; Reciprocal cones; Intersection of two cones with a common vertex.

Reference Books

1. A text book of Mathematics for BA/B.Sc Vol 1, by V Krishna Murthy & Others, published by S. Chand & Company, New Delhi.
2. A text Book of Analytical Geometry of Three Dimensions, by P.K. Jain and Khaleel Ahmed, published by Wiley Eastern Ltd., 1999.
3. Co-ordinate Geometry of two and three dimensions by P. Balasubrahmanyam, K.Y. Subrahmanyam, G.R. Venkataraman published by Tata-MC Gran-Hill Publishers Company Ltd., New Delhi.
4. Solid Geometry by B.Rama Bhupal Reddy, published by Spectrum University Press.

Content

Three Dimensional Analytical Solid Geometry

Probability Distributions and Statistical Methods

As per Choice Based Credit System (CBCS)

I - B.Sc / II - Semester

Authors

Mr. P. Devendran
Lecturer in Statistics
Smt. NPS Govt. Degree College for Women
Chittoor, A.P. - 517 002

Mr. T. Vinod
Lecturer in Statistics
Gate Degree & PG College
Tirupati - 517 501, A.P.

Dr. B. R. Ambedkar Open University

Eluru, Andhra Pradesh, India

www.drbraouap.org

Year : 2026

Edtion : First

Dr. B. R. Ambedkar Open University

Eluru, Andhra Pradesh, India

www.drbraouap.org

I - Year / II - *Semester* as per CBCS
Probability Distributions and Statistical Methods

Unit-I

Discrete Distributions: Binomial, Poisson, Negative Binomial, Geometric distributions: Definitions, means, variances, M.G.F, C.F, C.G.F, P.G.F, additive property if exists. Possion approximation to Binomial distribution. Hyper-geometric distribution: Defination, mean and variance.

Unit-II

Continuous Distributions: Rectangular, Exponential, Gamma, Beta Distributions: mean , variance, M.G.F, C.F.

Normal Distribution: Definition, Importance, Properties, M.G.F, additive property.

Unit-III

Correlation: Meaning, Types of Correlation, Measures of Correlation: Scatter diagram, Karl Pearson's Coefficient of Correlation, Rank Correlation Coefficient (with and without ties), Bivariate frequency distribution, correlation coefficient for bi-variate data and simple problems.

Regression: Concept of Regression, Linear Regression: Regression lines, Regression coefficients and it's properties, Regressions lines for bi-variate data and simple problems. Correlation vs regression.

Unit-IV

Curve fitting: Bi- variate data, Principle of least squares, fitting of degree polynomial. Fitting of straight line, Fitting of Second degree polynomial or parabola, Fitting of power curve and exponential curves.

Unit-V

Attributes: Notations, Class, Order of class frequencies, Ultimate class frequencies, Consistency of data, Conditions for consistency of data for 2 and 3 attributes only, Independence of attributes, Association of attributes and its measures, Relationship between association and colligation of attributes, Contingencytable: Square contingency, Mean square contingency, Coefficient of mean square contingency, Tschuprow's coefficient of contingency.

Content

Probability Distributions and Statistical Methods

Unit-1: Discrete Distribution

Unit-5: Mathematical Expectation

Data Structures using C

As per Choice Based Credit System (CBCS)
I - B.Sc (Computer Science) / II - Semester

Authors
Dr. G.V. Ramesh Babu
Dept. of Computer Science
S.V. University, Tirupati - 517502 AP

Dr. B. R. Ambedkar Open University
Eluru, Andhra Pradesh, India
www.drbraouap.org

Year : 2026

Edtion : First

Dr. B. R. Ambedkar Open University

Eluru, Andhra Pradesh, India

www.drbraouap.org

Data Structures using C

Learning outcomes of Course

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

1. Understand available Data Structures for data storage and processing.
2. ComprehendData Structure and their real-time applications - Stack, Queue, Linked List, Trees and Graph.
3. Choose a suitable Data Structures for an application.
4. Develop ability to implement different Sorting and Search methods.
5. Have knowledge onData Structures basic operations like insert, delete, search,update and traversal.
6. Design and develop programs using various data structures.
7. Implement the applications of algorithms for sorting, pattern matching etc.

Unit-I

Introduction to Data Structures: Introduction to the Theory of Data Structures, Data Representation, Abstract Data Types, Data Types, Primitive Data Types, Data Structure and Structured Type, Atomic Type, Difference between Abstract Data Types, Data Types, and Data Structures, Refinement Stages

Principles of Programming and Analysis of Algorithms: Software Engineering, Program Design, Algorithms, Different Approaches to Designing an Algorithm, Complexity, Big 'O' Notation, Algorithm Analysis, Structured Approach to Programming, Recursion, Tips and Techniques for Writing Programs in 'C'

Unit-II

Arrays: Introduction to Linear and Non- Linear Data Structures, One- Dimensional Arrays, Array Operations, Two- Dimensional arrays, Multidimensional Arrays, Pointers and Arrays, an Overview of Pointers

Linked Lists: Introduction to Lists and Linked Lists, Dynamic Memory Allocation, Basic Linked List Operations, Doubly Linked List, Circular Linked List, Atomic Linked List, Linked List in Arrays, Linked List versus Arrays

Unit-III

Stacks: Introduction to Stacks, Stack as an Abstract Data Type, Representation of Stacks through Arrays, Representation of Stacks through Linked Lists, Applications of Stacks, Stacks and Recursion.

Queues: Introduction, Queue as an Abstract data Type, Representation of Queues, Circular Queues, Double Ended Queues- Deques, Priority Queues, Application of Queues

UnitIV

Binary Trees: Introduction to Non- Linear Data Structures, Introduction Binary Trees, Types of Trees, Basic Definition of Binary Trees, Properties of Binary Trees, Representation of Binary Trees, Operations on a Binary Search Tree, Binary Tree Traversal, Counting Number of Binary Trees, Applications of Binary Tree

Unit-V

Searching and sorting: Sorting - An Introduction, Bubble Sort, Insertion Sort, Merge Sort, Searching - An Introduction, Linear or Sequential Search, Binary Search, Indexed Sequential Search

Graphs: Introduction to Graphs, Terms Associated with Graphs, Sequential Representation of Graphs, Linked Representation of Graphs, Traversal of Graphs, Spanning Trees, Shortest Path, Application of Graphs.

Content

Data Structures using C

Chapter-1: Introduction to Data Structures

సృజనాత్మక రచన

డిగ్రీ (జనరల్) / సెమిస్టర్ - III

రచయితలు

డా॥ ఎస్. సునీల్ కుమార్

తెలుగు విభాగం

ఎస్. వి. విశ్వ విద్యాలయం

తిరుపతి, ఆంధ్రప్రదేశ్ - 517 502

Dr. B. R. Ambedkar Open University

Eluru, Andhra Pradesh, India

www.drbraouap.org

Dr. B. R. Ambedkar Open University
Eluru, Andhra Pradesh, India
www.drbraouap.org

జనరల్ తెలుగు / సెమిస్టర్ - III

సృజనాత్మక రచన

అభ్యసన ఫలితాలు

ఈ కోర్సు విజయవంతం ముగించాక, విద్యార్థులు క్రింది అభ్యసన ఫలితాలను పొందగలరు.

1. తెలుగు సాహిత్య అభ్యసన ద్వారా నేర్చుకున్న నెపుణ్యాలను, సృజనాత్మక నైపుణ్యాలుగా మార్చుకోగలరు.
2. విద్యార్థులు భాషాతత్వాన్ని, భాష యొక్క ఆవశ్యకతను, భాష యొక్క ప్రాధాన్యాన్ని గుర్తిస్తారు. మనిషి వ్యక్తిగత జీవనానికి, సామాజిక వ్యవస్థ పటిష్టతకు భాష ప్రధానమని తెలుసుకుంటారు.

   తెలుగుభాషలోని కీలకాంశాలైన 'వర్ణం–పదం–వాక్యా'ల ప్రాధాన్యాన్ని గుర్తిస్తూ, వాగ్రూప– లిఖితరూప వ్యక్తీకరణ ద్వారా భాషానైపుణ్యాలను మొరుగుపరచుకోగలరు.
3. భాషానైపుణ్యాలను అలవరుచుకోవడంతోపాటు వినియోగించడం నేర్చుకుంటారు. రచనా, భాషణానైపుణ్యాలను సృజనాత్మక రూపంలో వ్యక్తీకరించగలరు.
4. ప్రాచీన పద్యరచనతో పాటు ఆధునిక కవిత, కథ, వ్యాసం మొదలైన సాహిత్యప్రక్రియల నిర్మాణాలకు సంబంధించిన సిద్ధాంతవిషయాలను నేర్పడంతో పాటు వారిలో రచనా నైపుణ్యాలను పెంపొందించుకోగలరు.
5. సృజన రంగర, ప్రసారమాధ్యమ రంగాల్లో ఉపాధి అవకాశాలను అందిపుచ్చుకోగలరు.
6. అనువాద రంగంలో నైపుణ్యం సంపాదించగలరు.

పాఠ్య ప్రణాళిక

యూనిట్ - 1: వ్యక్తీకరణ నైపుణ్యం

1. భాషా ప్రాథమిక అంశాలు : (భాష– నిర్వచనం, లక్షణాలు, ఆవశ్యకత ప్రయోజనాలు)
2. వర్ణం, పదం, వాక్యం : (లక్షణాలు, సామాన్య– సంయుక్త– సంశ్లిష్ట వాక్యాలు)
3. భాషా నిర్మాణంలో వర్ణం, పదం, వాక్యం

యూనిట్ - II : సృజనాత్మక రచనలు

4. కవితా రచన : ఉత్తమ కవితా – లక్షణాలు
5. కథారచన : ఉత్తమ కథ – లక్షణాలు
6. వ్యాస రచన : ఉత్తమ వ్యాసం లక్షణాలు

యూనిట్ - III: అనువాద రచన

7. అనువాదం– నిర్వచనం, అనువాద పద్ధతులు

8. అనువాద సమస్యలు – భౌగోళిక, భాషా, సంస్కృతిక సమస్యలు, పరిష్కారాలు

9. అభ్యాసం - ఆంగ్లం నుండి తెలుగుకు, తెలుగు నుండి ఆంగ్లానికి ఒక పేరును అనువదించడం

యూనిట్ - IV: మాధ్యమాలకు రచన - 1 (ముద్రణామాధ్యమం/ ప్రింట్ మీడియా)

10. ముద్రణామాధ్యమం: పరిచయం – పరిధి – వికాసం

11. వివిధ రకాల పత్రికలు , పరిశీలన – పత్రికా భాష – శైలి – వైవిధ్యం

12. పత్రికా రచన : (వార్తా రచన, సంపాదకీయాలు, సమీక్షలు – అవగాహన)

యూనిట్ - V: మాధ్యమాల రచన - 2 (ప్రసార మాధ్యమం/ ఎలక్ట్రానిక్ మీడియా)

13. ప్రసార మాధ్యమాలు : (నిర్వచనం,రకాలు, విస్తృతి ప్రయోజనాలు)

14. శ్రవణ మాధ్యమాలు : (రచన, రేడియో రచన, ప్రసంగాలు, నాటికలు, ప్రసార సమాచారం)

15. దృశ్య మాధ్యమాలు : (రచన, వ్యాఖ్యానం(యాంకరింగ్), టెలివిజన్ రచన)

విషయ సూచిక
సృజనాత్మక రచన

A Course in

Conversational Skills

As per Choice Based Credit System (CBCS)
For Degree I - Year / III - Semester
Common to all Branches

Authors
Dr. A. Sreenivasulu
Dept. of English
S.V. University, Tirupati - 517502 AP

Dr. B. R. Ambedkar Open University
Eluru, Andhra Pradesh, India
www.drbraouap.org

Year : 2026

Edtion : First

Dr. B. R. Ambedkar Open University

Eluru, Andhra Pradesh, India

www.drbraouap.org

A Course in Conversational Skiils

Learning Outcomes

By the end of the course the learner will be able to:

- Speak fluently in English
- Participate confidently in any social interaction
- Face any professional discourse
- Demonstrate critical thinking
- Enhance conversational skills by observing the professional interviews

Unit-I

Speech: 1. Tryst with Destiny Jawaharlal Nehru

Skills: 2. Greetings

3. Introductions

Unit-II

Speech: 1. Yes, We Can Barack Obama

Interview: 2. A Leader Should Know How to Manage Failure Dr.A.P.J.Abdul Kalam/ India Knowledge at Wharton

Skills: 3. Requests

Unit-III

Interview: 1. Nelson Mandela's Interview With Larry King

Skills: 2. Asking and Giving Information

3. Agreeing and Disagreeing

Unit-IV

Interview: 1. JRD Tata's Interview With T.N.Ninan

Skills: 2. Dialogue Building

3. Giving Instructions/Directions

Unit-V

Speech: 1. You've Got to Find What You Love Steve Jobs

Skills: 2. Debates

3. Descriptions

4. Role Play

Content

A Course in Conversational Skiils

Unit-1

Unit-2

Unit-3

Life Skill Course

Environmental Education

As per Choice Based Credit System (CBCS)
Common to all Branches

Author
Dr. M. Shanthi
Dept. of Management Studies
S.V. University, Tirupati - 517502 AP

Dr. B. R. Ambedkar Open University
Eluru, Andhra Pradesh, India
www.drbraouap.org

Year : 2026

Edtion : First

Dr. B. R. Ambedkar Open University

Eluru, Andhra Pradesh, India

www.drbraouap.org

Environmental Education

Learning outcomes

On completion of this course the students will be able to …..

1. Understand the nature, components of an ecosystem and that humans are an integral part of nature.
2. Realize the importance of environment, the goods and services of a healthy biodiversity, dependence of humans on environment.
3. Evaluate the ways and ill effects of destruction of environment, population explosion on ecosystems and global problems consequent to anthropogenic activities.
4. Discuss the laws/ acts made by government to prevent pollution, to protect biodiversity and environment as a whole.
5. Acquaint with international agreements and national movements, and realize citizen's role in protecting environment and nature.

Unit-1: Environment and Natural Resources

1. Multidisciplinary nature of environmental education; scope and importance.
2. Man as an integral product and part of the Nature.
3. A brief account of land, forest and water resources in India and their importance.
4. Biodiversity: Definition; importance of Biodiversity - ecological, consumptive, productive, social, ethical and moral, aesthetic, and option value.
5. Levels of Biodiversity: Genetic, species and ecosystem diversity.

Unit-2: Environmental Degradation and Impacts

1. Human population growth and its impacts on environment; land use change, land degradation, soil erosion and desertification.
2. Use and over-exploitation of surface and ground water, construction of dams, floods, conflicts over water (within India).
3. **Deforestation:** Causes and effects due to expansion of agriculture, firewood, mining, forest fires and building of new habitats.
4. Non-renewable energy resources, their utilization and influences.
5. A brief account of air, water, soil and noise pollutions; Biological, industrial and solid wastes in urban areas. Human health and economic risks.
6. Green house effect - global warming; ocean acidification, ozone layer depletion, acid rains and impacts on human communities and agriculture.

7. **Threats to biodiversity:** Natural calamities, habitat destruction and fragmentation, over exploitation, hunting and poaching, introduction of exotic species, pollution, predator and pest control.

Unit-3: Conservation of Environment

1. Concept of sustainability and sustainable development with judicious use of land, water and forest resources; afforestation.
2. Control measures for various types of pollution; use of renewable and alternate sources of energy.
3. **Solid waste management:** Control measures of urban and industrial waste.
4. **Conservation of biodiversity:** In-situ and ex-situ conservation of biodiversity.
5. **Environment Laws:** Environment Protection Act; Act; Wildlife Protection Act; Forest Conservation Act.
6. **International agreements:** Montreal and Kyoto protocols; Environmental movements: Bishnois of Rajasthan, Chipko, Silent valley.

Content
Environmental Education

Unit-1: Environment and Natural Resources

Life Skill Course

Personality Enhancement & Leadership

As per Choice Based Credit System (CBCS)
Common to all Branches

Author
Dr. B. Sudheeshna
Dept. of Management Studies
S.V. University, Tirupati - 517502 AP

Dr. B. R. Ambedkar Open University
Eluru, Andhra Pradesh, India
www.drbraouap.org

Year : 2026

Edtion : First

Dr. B. R. Ambedkar Open University

Eluru, Andhra Pradesh, India

www.drbraouap.org

Personality Enhancement & Leadership

Learning Outcomes

By successful completion of the course, students will be able to:

- Develop comprehensive understanding of personality
- Know how to assess and enhance one's own personality
- Comprehend leadership qualities and their importance
- Understand how to develop leadership qualities

Unit-I

Meaning of Personality – Explanations of Human Personality – Psychodynamic Explanations – Social Cognitive Explanation – Big Five traits of Personality

Unit-II

Assessment of Personality - Projective& Self Report Techniques - Building Self-Confidence – Enhancing Personality Skills

Unit-III

Leadership Characteristics – Types of Leaders – Importance of Leadership – Leadership Skills – Building and Leading Efficient Teams – Leadership Qualities of Abraham Lincoln, mahatma Gandhi, Prakasam Pantulu, Dr. B. R. Ambedkar & J.R.D.Tata

Content
Personality Enhancement & Leadership

Unit-1

Unit-2

Skill Development Course

Disaster Management

As per Choice Based Credit System (CBCS)
Common to all Branches

Authors
Dr. B. Sudheeshna
Dept. of Management Studies
S.V. University, Tirupati - 517502 AP

Dr. B. R. Ambedkar Open University
Eluru, Andhra Pradesh, India
www.drbraouap.org

Year : 2026

Edtion : First

Dr. B. R. Ambedkar Open University

Eluru, Andhra Pradesh, India

www.drbraouap.org

Disaster Management

Learning Outcomes

After successful completion of the course, the students are able to;

1. Understand the nature, cause and effects of disasters
2. Comprehend the importance of Disaster Management and the need of awareness
3. Acquire knowledge on disaster preparedness, recovery remedial measures and personal precautions
4. Volunteer in pre and post disaster management service activities

Unit-I

Introduction of Disaster - Different types of disasters- Natural- (flood, cyclone, earthquake, Famine and pandemic) - Accidental- (Fire, Blasting, Chemical leakage, Rail, Aviation, Road boat tragedies and nuclear pollution) - Disaster Management Act 2005

Unit-II

Causes and immediate effects of Disasters - Preparedness of disasters –Precautions – Dissemination of information - Nature and concepts - Role of National Disaster Management Authority and Role of Government and non governmental organizations in protecting human livestock and natural resources.-Use of technology -Role of Citizens and Youth in the prevention.

Unit-III

Post disaster effects - short term - Procedures for Rehabilitation and Recovery - Role of volunteers and Safety Precautions - Long term remedial and preventive measures – Collection, filing and storage of information - Case studies.

Content
Disaster Management

Unit-1

Unit-3

Abstract Algebra and Real Analysis

As per Choice Based Credit System (CBCS)

I - B.Sc(Mathematics) / III - Semester

Authors
Dr. J Subba Reddy
Dept. of Mathematics
S.V. University
Tirupati - 517 502 AP

Dr. B. R. Ambedkar Open University
Eluru, Andhra Pradesh, India
www.drbraouap.org

Year : 2026

Edtion : First

Dr. B. R. Ambedkar Open University

Eluru, Andhra Pradesh, India

www.drbraouap.org

CONTENTS

PAPER - III: Abstract Algebra and Real Analysis

UNIT - I

GROUPS : Binary operations-Definitions and properties, Groups-Definition and elementary properties, Finite groups and group composition tables, Subgroups and cyclic subgroups. Permutations-Functions and permutations ,groups of permutations, cycles and cyclic notation, even and odd permutations, The alternating groups. Cyclic groups - Elementary properties ,The classification of cyclic groups , sub groups of finite cyclic groups. Isomorphism - Definition and elementary properties, Cayley's theorem, Groups of cosets, Applications, Normal subgroups - Factor groups , Criteria for the existence of a coset group, Inner automorphisms and normal subgroups, factor groups and simple groups, Homomorphism- Definition and elementary properties, The fundamental theorem of homomorphisms, applications.

UNIT - II

RINGS: Definition and basic properties, Fields, Integral domains, divisors of zero and Cancellation laws, Integral domains, The characteristic of a ring, some non – commutative rings, Examples, Matrices over a field, The real quaternions ,Homomorphism of Rings - Definition and elementary properties, Maximal and Prime ideals, Prime fields. Rings of Polynomials – Polynomials in an indeterminate form, The evaluation of homomorphism.

UNIT – III

REAL NUMBERS: The Completeness Properties of R, Applications of the Supremum Property.

Sequences and Series - Sequences and their limits, limit theorems, Monotonic Sequences, Sub-sequences and the Bolzano-Weirstrass theorem,The Cauchy's Criterion, Properly divergent sequences, Introduction to series, Absolute convergence, test for absolute convergence, test for non-absolute convergence.

Continuous Functions-continuous functions, combinations of continuous functions, continuous functions on intervals, Uniform continuity.

UNIT – IV

DIFFERENTIATION AND INTEGRATION: The derivative, The mean value theorems, L'Hospital Rule, Taylor's Theorem.

Riemann integration - Riemann integral, Riemann integrable functions, Fundamental theorem.

***

Database Management Systems

As per Choice Based Credit System (CBCS)

II- B.Sc(Computer Science) / III - Semester

Authors
Dr. M. Sridevi
Dept. of Computer Science
S.V. University, Tirupati - 517502 AP

Dr. B. R. Ambedkar Open University
Eluru, Andhra Pradesh, India
www.drbraouap.org

Year : 2026

Edtion : First

Dr. B. R. Ambedkar Open University

Eluru, Andhra Pradesh, India

www.drbraouap.org

Unit-I: Overview of Database Management System

LINEAR PROGRAMMING

As per Choice Based Credit System (CBCS)

I - B.Sc(Mathematics) / I V- Semester

Authors
Dr. P. Bhaskarudu
Dept. of Mathematics
S.V. University
Tirupati - 517 502 AP

Dr. B. R. Ambedkar Open University
Eluru, Andhra Pradesh, India
www.drbraouap.org

Year : 2026

Edtion : First

Dr. B. R. Ambedkar Open University

Eluru, Andhra Pradesh, India

www.drbraouap.org

CONTENTS

UNIT - I

UNIT - II

UNIT - III

UNIT - IV

UNIT - V

PAPER - IV: Linear Programming

Unit-1

Linear Programming Problem: Convex Set, Extreme Points of convex set,Convex combination, Convex hull, Convex polyhedron, Fundamental theorem of linear programming, Definition, Formulation of linear programming (LPP), Graphical solution of linear programming problems, General formulation of Lp problems, Standard form and matrix form of LP problems.

Unit-2

Simplex Method: Introduction, Definitions and notations, Computational procedure of simplex algorithm, Simple way for simplex computations, Artificial variables, Two-phase method, Alternative method of two –phase simplex method, Big-M method, Degeneracy in LPP and method to solve to resolve degeneracy, Alternative solutions, Unbounded solutions, Non-existing feasible solutions, Solutions of simultaneous equations by simplex method

Unit-3

Duality in Linear Programming and Dual Simplex Method: Introduction**,**Definition of Dual problems, General rules for converting any primal into its Dual ,Relation between the solution of primal and Dual problem, Initial Solution for Dual Simplex Method, Dual Simplex Method.

Unit-4

Assignment Problems: Introduction, Mathematical formulation of Assignment problem, Reduction theorem, Hungarian Method for solving Assignment problem, Unbalanced assignment problem,The traveling salesman problem, Formulation of travelling salesman problem as an Assignment problem and Solution procedure

Unit-5

Transportation Problems

Mathematical formulation of Transportation problem,Tabular Representation,Definitions, Special structure of the solution, North-west corner rule, Lowest cost entry method, Vogel's approximation method, Optimality in transportation Problem,Degeneracy in transportation problems Resolution of degeneracy, Unbalanced transportation problem, Generalized transportation problem

***

JAVA PROGRAMMING

As per Choice Based Credit System (CBCS)

II- B.Sc (Computer Science) / IV - Semester

Authors
Prof. Subba Rao
Dept. of Computer Science
S.V. University, Tirupati - 517502 AP

Dr. B. R. Ambedkar Open University
Eluru, Andhra Pradesh, India
www.drbraouap.org

Year : 2026

Edtion : First

Dr. B. R. Ambedkar Open University

Eluru, Andhra Pradesh, India

www.drbraouap.org

JAVA PROGRAMMING

Unit-1

Introduction to OOP, Procedural Programming Language and Object Oriented Language, principles of OOP, Applications of OOP, History of JAVA, JAVA features, JVM, program Structure. Variables, Primitive Data Types, Identifiers, Literals, Operators, Expressions, Precedence Rules and Associativity, Primitive Type Conversion and Casting, Flow of Control. Classes and Objects, Class declaration, Creating Objects, Methods, Method Overloading.

Unit-II

Constructor, Overloading, Garbage Collector, Importance of Static Keyword and this keywords, Examples, Arrays, Command Line Arguments, Nested Classes.

Inheritance & Polymorphism: Basic concepts of Inheritance, Member access, forms of inheritance- specialization, specification, construction, extenssion, limitation, combination, benefits of inheritance, Relationship, Creating Multilevel Hierarchy, super uses, using final with Inheritance, Polymorphism, Runtime polymorphism, pure polymorphism, method overriding, abstract classes & Methods, Object class

Packages: Defining a Package, PATH, CLASSPATH, Difference between PATH and CLASS PATH, Access protection, importing packages.

Unit-III

Interfaces: Defining an interface, implementing interfaces, Nested interfaces, variables in interfaces and extending interfaces, Multiple inheritances of interfaces, Difference between Abstract class & Interfaces.

Exception handling: Fundamentals of exception handing, Exception types, Termination or resumptive models, Uncaught exceptions, using try and catch, multiple catch clauses, nested try statements, throw, throws and finally, built-in exceptions, creating own exception sub classes.

Multithreading: Thread Introduction, Differences between thread-based multitasking and process-based multitasking, Thread life cycle, creating threads using Thread class and Runnable Interface, Thread Priorities, synchronizing threads, inter thread communication.

Unit-IV

Files: Reading data from files and writing data to files, Random Access File

Applet: Applet class, Applet structure, Applet life cycle, Sample Applet programs. Event handling: Event delegation model, Sources of event, Event Listeners, Adapter classes, Inner classes.

Chapter-I: Introduction to OOPS

Chapter-5: Exception Handling

Chapter-6: Multithreading