

SYLLABUS

MANONMANIAM SUNDARANAR UNIVERSITY, TIRUNELVELI-12

UG COURSES – AFFILIATED COLLEGES

B.C.A.

(Choice Based Credit System)

(with effect from the academic year 2021-2022 onwards)

Semester-I				
Part	Subject Status	Subject Title	Subject Code	Credit
I	Language	Tamil / Other Language	C1TL11 / C1MY51	4
II	Language	English	C2EN11	4
III	Core	Programming in C	CMCA11	4
	Major Practical - I	C Programming Lab	CMCAP1	2
		Professional English For Physical Sciences - I	CPPS11	2
	Allied-I	Digital Design	CACA11	3
	Allied Practical-I	Office automation Lab	CACAP1	2
IV	Common	Environmental studies	CEVS11	2



Total Marks: 100 Internal Exam: 25 marks + External Exam: 75 marks

A. Scheme for internal Assessment:

Maximum marks for written test: **20 marks**

3 internal tests, each of **1 hour** duration shall be conducted every semester.

To the average of the **best two** written examinations must be added the marks scored in. The **assignment** for 5 marks.

The break up for internal assessment shall be:

Written test- 20 marks; Assignment -5 marks Total - 25 marks

B. Scheme of External Examination

3 hrs. examination at the end of the semester

A – Part : 1 mark question two - from each unit

B – Part : 5 marks question one - from each unit

C – Part : 8 marks question one - from each unit

➤ **Conversion of Marks into Grade Points and Letter Grades**

S.No	Marks	Letter Grade	Grade point (GP)	Performance
1	90-100	O	10	Outstanding
2	80-89	A+	9	Excellent
3	70-79	A	8	Very Good
4	60-69	B+	7	Good
5	50-59	B	6	Above Average
6	40-49	C	5	Pass
7	0-39	RA	-	Reappear
8	0	AA	-	Absent

➤ **Cumulative Grade Point Average (CGPA)**

$$CGPA = \frac{\Sigma (GP \times C)}{\Sigma C}$$

- **GP** = Grade point, **C** = Credit
- CGPA is calculated only for Part-III courses
- CGPA for a semester is awarded on cumulative basis

➤ **Classification**

- First Class with Distinction : $CGPA \geq 7.5^*$
- First Class : $CGPA \geq 6.0$
- Second Class : $CGPA \geq 5.0$ and < 6.0
- Third Class : $CGPA < 5.0$



முதலாம் பருவம்

பாடத்திட்டப்பதிப்பு -2021-2022

பகுதி – ஒன்று – பொதுத்தமிழ் - முதல் தாள்

Unit:1

செய்யுள்

தமிழ்த்தாய் வாழ்த்து முதல் நாட்டுப்புறப்பாடல்கள் வரை

பல்கலைக்கழக வெளியிடு,

அனுசித்ரா பப்ளிகேஷன்ஸ், சென்னை-33.

தொலைபேசிஎண் : 044-24743719,

Email : anuchitrapublications@gmail.com

Unit:2

இலக்கணம் : எழுத்து இலக்கணம்

1. எழுத்தின் விளக்கம்
2. எழுத்தின் வகைகள் - முதல் எழுத்துக்கள், சார்பு எழுத்துக்கள்
3. வினா எழுத்துக்கள், சுட்டெழுத்துக்கள்
4. வல்லினம் மிகும் இடங்கள், வல்லினம் மிகா இடங்கள்
5. ஒலிப்பு மாறுபாடுகளும் பொருள் வேறுபாடுகளும்

Unit:3

உரைநடை

இலக்கியச்சாரல் - தொகுப்பாசிரியர் முனைவர் ச.அருள்மணி

பிரிசாட் பப்ளிகேஷன்ஸ், சென்னை – 3

Unit:4

சிறுகதை

நவரத்தினக்கதைகள் - தொகுப்பாசிரியர் முனைவர் சு.நயினார்

அறிவுப்பதிப்பகம்(பி)லிட்., சென்னை –14, தொலைபேசி எண் : 044-28482441

Unit:5

இலக்கிய வரலாறு

1. புதுக்கவிதையின் தோற்றமும் வளர்ச்சியும்
2. சிறுகதையின் தோற்றமும் வளர்ச்சியும்
3. நாவலின் தோற்றமும் வளர்ச்சியும்
4. நாடகத்தின் தோற்றமும் வளர்ச்சியும்
5. நாட்டுப்புறப்பாடல்களின் தோற்றமும் வளர்ச்சியும்



PART-1 MALAYALAM

Course Structure under Choice Based Credit System (CBCS)

For the Academic Year 2021-2022 onwards

For B.Com., BCA, B.Sc. Computer Science, B.Sc. Electronics, BBA and other Job Oriented Courses, Part-1 Language will be in the first two semesters only. In that case they are supposed to study Paper-III & Paper-IV only. Other B.A. & B.Sc. Degree Course Students should study all four papers. Each paper shall divide into five units having one or two poems / prose works / parts / chapters etc for detailed study. In addition to these lessons, the teachers should brief about the Origin and History of the Literary Movements, Disciplines, Theories of Classical and Modern Theatre, Print & Visual Media.

The present Board of Studies in Malayalam is strictly adhered to the directions put forwarded by UGC & TANSCHHE Govt. of Tamilnadu. Presently the language learning is closely associated with Print and Visual Media. The learner must be aware about the practicality of the language in the present scenario. That is why in the last semester media literature and art of advertising is included. The new curriculum is designed on par with the Part-1 Malayalam Syllabus of other major Universities in Kerala. The Course Structure is 75% equal in compared with other Universities

OBJECTIVE OF THE STUDY

The study of early days of Malayalam poetry, origin from Pattu movement to contemporary poetry should be introduced. The aim is to develop general knowledge about Malayalam poetry. To Develop ability to appreciate poetry and critical analysis. By understanding the history of poetry and its growth over time, one can understand the various levels associated with poetical studies and criticism.



THIRD SEMESTER PAPER - III

A1MY31 - ദൃശ്യകലാസാഹിത്യം (Drusyakalasaahithyam)- Classical and Modern Theatre / Cinema Literature

OBJECTIVE OF THE STUDY

In the present scenario Visual arts especially, Cinema is influenced a lot. It gives lot of job opportunity also. Inclusion of Drama and Cinema in this semester will create interest among the students to opt for future endeavours. It helps to know more about the visual arts sensitivities and enable them to appreciate the art forms very well. To achieve these it is necessary to create a general awareness among the students to Visual Arts and their literary Genres. We need to convince the students about the specific factors of art forms that are changing from time to time and their relevance. To enable them to understand the general nature of a Film Script, Screen Play and the transition of a story/short-story/Novel/an idea into a film.

UNIT - 1- Thullal- A Satirical Classical Visual Art Form

തുള്ളൽ

തുള്ളൽപ്രസ്ഥാനം - ചരിത്രം - സാമൂഹ്യമാറ്റങ്ങൾ - ആക്ഷേപഹാസ്യം - ജനകീയത
- പ്രധാനപ്പെട്ട തുള്ളലുകൾ - ഇവയുടെ പരിചയം

FOR DETAILED STUDY

1. കഞ്ചൻ നമ്പ്യാർ - ഹേമാഷ്വരാത്ര
(ലൈതേതരസുഖരസികന്മാരായ്...
...പരങ്ങളാൽ പല വിക്രമപാതകമുണ്ടിപ്പോൾ മമ കൗരവവീര)

UNIT - 2-KADHAKALI- A Classical Visual Art Form

കഥകളി

ചരിത്രം - കാക്കാരിശ്ശി നാടകം - പൊറട്ട് നാടകം - ചവിട്ടു നാടകം - തെയ്യം -
എന്നിവയെ പരിചയപ്പെടുത്തുക - സംസ്കാരം - സാമൂഹ്യപ്രാധാന്യം - പുതിയ കാലത്തെ
മാറ്റങ്ങൾ - സാങ്കേതിക കാര്യങ്ങൾ - അഭിനയരീതികൾ - വേഷം

FOR DETAILED STUDY

2. നളചരിതം ആട്ടക്കഥ നാലാം ദിവസം (പ്രഭ. ആർ. രാജരാജവർമ്മയുടെ കാന്താരതാരകം)
ഉണ്ണായിവരിയർ
ആദ്യത്തെ ആറു രംഗങ്ങൾ

UNIT - 3- Translation of a Sanskrit Drama

നാടകം (സംസ്കൃത നാടക വിവർത്തനം)
 നാടകവുമായി ബന്ധപ്പെട്ട വിവർത്തനചരിത്രം - ആദ്യകാലത്തെ
 വിവർത്തനങ്ങളുടെ പ്രത്യേകതകൾ - സംസ്കൃതനാടകവുമായി ബന്ധപ്പെട്ട സങ്കേതങ്ങൾ -
 നാടകാസ്വാദനവുമായി ബന്ധപ്പെട്ട ചുറ്റുപാടുകൾ - സാമൂഹ്യവസ്ഥ - പ്രാധാന്യം

FOR DETAILED STUDY

3. മലയാളശാകന്തളം - നാലാമകം - വിവർത്തനം ഏ. ആർ. രാജരാജവർമ്മ

UNIT - 4- A Modern Drama in Malayalam

നാടകം (മലയാള നാടകം)
 മലയാളനാടകചരിത്രം - പ്രധാനപ്പെട്ട നാടകചാര്യന്മാർ - ആദ്യകാലത്തെ
 പ്രവർത്തനങ്ങൾ - അരങ്ങം നാടകസാഹിത്യവും - പ്രധാനപ്പെട്ട നാടകങ്ങൾ - സാമൂഹ്യ
 മാറ്റങ്ങൾ - രാഷ്ട്രീയചരിത്രം - പ്രവർത്തനങ്ങൾ - നാടകത്തിന്റെ സമകാലികാവസ്ഥ -
 രേഖീയോ തുടങ്ങിയ മാധ്യമങ്ങൾ - പ്രൊഫഷണൽ നാടകങ്ങൾ - അമേച്വർ നാടകങ്ങൾ

FOR DETAILED STUDY

4. സി. എൻ. ശ്രീകണ്ഠനായർ - കാഞ്ചനസീത
 ആദ്യത്തെ രണ്ട് രംഗം

UNIT - 5- Cinema

സിനിമ
 സിനിമയുടെ ചരിത്രം - ആദ്യകാലം - ഓരോ ഘട്ടത്തിലെയും വികാസം - സിനിമാ
 പഠനം - സിദ്ധാന്തങ്ങൾ - മലയാള സിനിമ - ആദ്യകാലത്തെ സിനിമ - ശബ്ദചിത്രം -
 നിശ്ശബ്ദചിത്രം - ദൃശ്യഭാഷ - സംവിധാനം - തിരക്കഥയിൽ നിന്ന് സിനിമയിലേക്കുള്ള
 വികാസം

FOR DETAILED STUDY

5. അടൂർ ഗോപാലകൃഷ്ണൻ - മതിലുകൾ

REFERENCE BOOKS

കൈരളിയുടെ കഥ - പ്രൊഫ. എൻ. കൃഷ്ണപിള്ള
 നളചരിതം ആട്ടക്കഥ - കാന്താരതാരകം - ഏ. ആർ. രാജരാജവർമ്മ
 ഉയരുന്ന യവനിക - സി. ജെ. തോമസ്
 മലയാളനാടകസാഹിത്യചരിത്രം - ഡോ. വയലാ വാസുദേവൻ പിള്ള
 മലയാളനാടകസാഹിത്യചരിത്രം - ജി. ശങ്കരപ്പിള്ള



സിനിമയുടെ വ്യക്തത - ഡോ. ടി. ജി. ജി. ജി.
 തിരക്കഥാകൃത്ത് - കലയും സിദ്ധാന്തവും - ജോസ്. കെ. മാണവൽ
 കഥയും തിരക്കഥയും - ആർ. വി. എം. ദിവാകരൻ
 നാടോടി വിജ്ഞാനീയം - എം. വി. വിജ്ഞാനസുതിരി
 മലയാള സംഗീതനാടകചരിത്രം - കെ. ശ്രീകുമാർ
 ചവിട്ടുനാടകം - സെബിനാറാഫി
 കേരളത്തിലെ നാടോടി നാടകങ്ങൾ - ഡോ. എസ്. കെ. നായർ
 ഹോക്കിമോൾ - താലൂക്കൻ പയ്യന്നൂർ
 നാട്ടരങ്ങ് - ജി. ഭാർഗവതൻ പിള്ള
 കഞ്ചൻനമ്പ്രതം അദ്വൈതത്തിന്റെ കൃതികളും - വി. എസ്. ശർമ്മ



PART II ENGLISH

Unit I

1. Listening and Speaking
 - a. Introducing self and others
 - b. Listening for specific information
 - c. Pronunciation (without phonetic symbols)
 - i. Essentials of pronunciation
 - ii. American and British
 - iii. pronunciation
2. Reading and Writing
 - a. Reading short articles – newspaper reports / fact based articles
 - I. Skimming and scanning
 - II. Diction and tone
 - III. Identifying topic sentences
 - b. Reading aloud: Reading an article/report
 - c. Journal (Diary) Writing
3. Study Skills - 1
 - a. Using dictionaries, encyclopaedias, Thesaurus
4. Grammar in Context:

Naming and Describing

 - Nouns & Pronouns
 - Adjectives

Unit II

1. Listening and Speaking
 - a. Listening with a Purpose
 - b. Effective Listening
 - c. Tonal Variation
 - d. Listening for Information
 - e. Asking for Information
 - f. Giving Information
2. Reading and Writing
 1. a. Strategies of Reading:

Skimming and Scanning
 - b. Types of Reading :

Extensive and Intensive Reading
 - c. Reading a prose passage
 - d. Reading a poem
 - e. Reading a short story
2. Paragraphs: Structure and Types
 - a. What is a Paragraph?
 - b. Paragraph structure
 - c. Topic Sentence
 - d. Unity



- e. Coherence
- f. Connections between Ideas: Using Transitional words and expressions
- g. Types of Paragraphs
- 3. Study Skills II:
Using the Internet as a Resource
 - a. Online search
 - b. Know the keyword
 - c. Refine your search
 - d. Guidelines for using the Resources
 - e. e-learning resources of Government of India
 - f. Terms to know
- 4. Grammar in Context
Involving Action-I
 - a. Verbs
 - b. Concord

Unit III

- 1. Listening and Speaking
 - a. Giving and following instructions
 - b. Asking for and giving directions
 - c. Continuing discussions with connecting ideas
- 2. Reading and writing
 - a. Reading feature articles (from newspapers and magazines)
 - b. Reading to identify point of view and perspective (opinion pieces, editorials etc.)
 - c. Descriptive writing – writing a short descriptive essay of two to three paragraphs.
- 3. Grammar in Context:
Involving Action – II
 - a. Verbals - Gerund, Participle, Infinitive
 - b. Modals

Unit IV

- 1. Listening and Speaking
 - a. Giving and responding to opinions
- 2. Reading and writing
 - a. Note taking
 - b. Narrative writing – writing narrative essays of two to three paragraphs
- 3. Grammar in Context:
Tense
 - a. Present
 - b. Past
 - c. Future



Unit V

1. Listening and Speaking
 - a. Participating in a Group Discussion
2. Reading and writing
 - a. Reading diagrammatic information – interpretations maps, graphs and pie charts
 - b. Writing short essays using the language of comparison and contrast
3. Grammar in Context:
Voice (showing the relationship between Tense and Voice)



Programming in C

Unit I

Overview of C:

Introduction- Importance of C - Sample C Programs - Basic structure of C - Executing C program

Constant, variables and data types:

Introduction- Character set - tokens – keywords and identifiers – constants – variables- data types – declaration of variables – assigning values of variables.

Operators and expressions:

Introduction – arithmetic of operations- relational operator – assignment operator – increment and decrement operator – conditional operator – bitwise operator – special operator – evaluation of expressions – precedence of arithmetic operators – type conversion in expression- operator precedence and associatively- mathematical functions

Unit II

Managing input and output operators:

Introduction: Reading a character- writing a character – formatted input – formatted output

Decision making and branching:

Introduction – decision making with IF statement- simple IF statement – The IF ELSE statement- nesting of IF –ELSE statement –ELSE IF ladders- The switch statement – The?: operators – The GOTO statement

Decision making and looping:

The While statement – The Do statement – The for statement- Jump in loops

Unit III Arrays:

One dimensional arrays – two dimensional arrays -Initializing two dimensional arrays – multi dimensional arrays

Handling of character strings:

Introduction: declaring and Initializing string variables- Reading string from terminal- writing string to screen – arithmetic operation on characters – putting strings together – comparison of two strings together – string handling functions



Unit IV

User defined functions:

Introduction – need for user- define functions- A multi- function program – The form of C functions- return values and their types – calling a function- category of function – no argument and no return values – argument with no return values - argument with return values – handling of non integer functions – nesting of functions – recursion – function with arrays – the scope and life time of variables in functions.

Unit V

Pointers

Introduction: understanding pointers – accessing the address of variables – declaring and initializing pointers – accessing a variable through its pointer – pointer expressions – pointer increments and scale factor – pointers and character strings – pointers and functions – points on pointer.

Text Book:

Programming in ANSI C –By E. Balagurusamy, Tata Mc Graw-Hill Publishing

Company Reference Book:

Programming with ANSI and TURBO C – by Ashok N. Kamthane



PROFESSIONAL ENGLISH FOR PHYSICAL SCIENCES

OBJECTIVES:

- To develop the language skills of students by offering adequate practice in professional contexts.
- To enhance the lexical, grammatical and socio-linguistic and communicative competence of first year physical sciences students
- To focus on developing students' knowledge of domain specific registers and the required language skills.
- To develop strategic competence that will help in efficient communication
- To sharpen students' critical thinking skills and make students culturally aware of the target situation.

LEARNING OUTCOMES:

- Recognise their own ability to improve their own competence in using the language
- Use language for speaking with confidence in an intelligible and acceptable manner
- Understand the importance of reading for life
- Read independently unfamiliar texts with comprehension
- Understand the importance of writing in academic life
- Write simple sentences without committing error of spelling or grammar

(Outcomes based on guidelines in UGC LOCF – Generic Elective)

NB: All four skills are taught based on texts/passages.

UNIT 1: COMMUNICATION

Listening: Listening to audio text and answering questions

- Listening to Instructions

Speaking: Pair work and small group work.

Reading: Comprehension passages –Differentiate between facts and opinion

Writing: Developing a story with pictures.

Vocabulary: Register specific - Incorporated into the LSRW tasks

UNIT 2: DESCRIPTION

Listening: Listening to process description.-Drawing a flow chart.

Speaking: Role play (formal context)

Reading: Skimming/Scanning-

Reading passages on products, equipment and gadgets.

Writing: Process Description –Compare and Contrast

Paragraph-Sentence Definition and Extended definition-

Free Writing.



Vocabulary: Register specific -Incorporated into the LSRW tasks.

UNIT 3: NEGOTIATION STRATEGIES

Listening: Listening to interviews of specialists / Inventors in fields
(Subject specific)

Speaking: Brainstorming. (Mind mapping).
Small group discussions (Subject- Specific)

Reading: Longer Reading text.

Writing: Essay Writing (250 words)

Vocabulary: Register specific - Incorporated into the LSRW tasks

UNIT 4: PRESENTATION SKILLS

Listening: Listening to lectures.

Speaking: Short talks.

Reading: Reading Comprehension passages

Writing: Writing Recommendations
Interpreting Visuals inputs

Vocabulary: Register specific - Incorporated into the LSRW tasks

UNIT 5: CRITICAL THINKING SKILLS

Listening: Listening comprehension- Listening for information.

Speaking: Making presentations (with PPT- practice).

Reading: Comprehension passages –Note making.
Comprehension: Motivational article on Professional Competence,
Professional Ethics and Life Skills)

Writing: Problem and Solution essay– Creative writing –Summary writing

Vocabulary: Register specific - Incorporated into the LSRW tasks

Allied – I

DIGITAL DESIGN**Unit I :****Digital System and binary numbers:**

Digital systems – binary numbers – number base conversion – Octal and hexa decimal numbers – complements – signed binary numbers – binary codes – binary storage and registers – binary logic.

Boolean algebra: Introduction – basic definition – axiomatic definition of Boolean algebra – basic theorem and properties and of Boolean algebra – Boolean functions.

Unit II : Logic gates:

Canonical and standard forms – other logic operations – digital logic gates and integrated circuits

Gate-Level minimization: Introduction : The Map method – Four- variable Maps – Five-variable Map – Product –of-sums simplifications- Don't conditions

Unit III :

NAND and NOR implementation- other two level implementations – Exclusive OR Functions

Combinational Logic: Introduction – Combinational circuits – Analysis Procedure - Design Procedure – Binary Adder – Subtractor – Decimal Adder - Binary Multiplier - Magnitude Comparator

Unit IV :

Decoders - Encoders – Multiplexers

Synchronous Sequential Logic:

Introduction –Sequential Circuits – Storage Element Latches - Storage Element Flip-Flops - Analysis of Clocked Sequential Circuits

Unit V :

Registers and Counters: Registers – Shift Registers – Ripple Counters – Synchronous Counters – Other counters

Memory : Introduction – Random access memory – Memory Decoding – Error Detection and Correction – Read Only Memory.



Text Book:

Digital Design Fourth Edition – M, Morris Mano, Michael D Ciletti , Prentice Hall of India Pvt Ltd.

Reference Books:

1. Digital Principles and Applications Fourth Edition – Albert Paul
2. Malvino, Donald P Leach, Tata Mc Graw Hill Publishing Company Ltd.
3. Digital Principles and Design – Donald d.Givone, Tata McGraw –
4. Hill Publishing Company Limited



Allied Practical – I

Office Automation Lab –I

MS-WORD

1. Creating and saving documents
2. Letter Typing and Editing
3. Design an invitation
4. Design a Calendar
5. Design a Time Table
6. Prepare student Bio-Data
7. Using of Header/Footer/Book mark/Spell Check
8. Design an cover page
9. Mathematical Equations and Symbols
10. Mail Merge

MS-EXCEL

1. Mark sheet Preparation
2. Pay roll Preparation
3. Sales details
4. Graphs and Charts
5. Mathematical/Statistical /Logical Functions
6. Budget Preparation



Major Practical

C Programming Lab – Practical List

1. Find the Area of the Triangle
2. To find the possible roots of the Quadratic equation
3. To arrange a List of numbers in Descending Order
4. To Find NcR Value using Functions
5. To Check given String is Palindrome or not
6. To find Transpose of a Matrix
7. To Multiply two Matrices
8. To Prepare a Mark list
9. To Sort a List of names in Alphabetical order



ENVIRONMENTAL STUDIES

UNIT I:

THE MULTIDISCIPLINARY NATURE OF ENVIRONMENTAL STUDIES

Definition, scope and importance Natural resources and associated problems:

- a) Forest resources: Use and over-exploitation, deforestation, timber extraction, dams and their effects on forests and tribal people.
- b) Water resources: Use and over-utilization of surface and ground water, floods, drought, dams-benefits and problems, water conservation and watershed management.
- c) Mineral resources: Use and exploitation, environmental effects.
- d) Food resources: World food problems, changes, effects of modern agriculture, fertilizer-pesticide problems.
- e) Energy resources: Growing energy needs, renewables and non-renewable energy sources, alternate energy sources.
- f) Land resources: Land as a resource, land degradation, man-induced landslides, soil erosion and desertification.
- g) Role of an individual in conservation of natural resources.
- h) Equitable use of resources for sustainable lifestyles.

UNIT II:

ECOSYSTEMS

- a) Forest Ecosystem
- b) Grassland Ecosystem
- c) Desert ecosystem
- d) Aquatic Ecosystem (Ponds rivers, oceans, estuaries)
Food Chains, Food Webs and Ecological Pyramids Energy flow in the ecosystem
Ecological succession

UNIT III :

BIODIVERSITY AND ITS CONSERVATION

Introduction Definition: Genetic, species and ecosystem diversity. Bio geographical classification of India Values of Biodiversity

Biodiversity at global, national and local levels India as a mega-diversity nation

Hot-Spots of biodiversity Threats to biodiversity

Endangered and endemic species of India

Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity.



UNIT IV:

ENVIRONMENTAL POLLUTION

Definition- Causes, effects and control measures of:-

- a) Air Pollution
- b) Water Pollution
- c) Soil Pollution
- d) Marine Pollution
- e) Noise Pollution.
- f) Thermal Pollution
- Solid Waste Management
- Disaster Management: Floods, earthquake, cyclone and landslides.

UNIT V:

SOCIAL ISSUES AND THE ENVIRONMENT

- Climatic change, global warming, acid rain, ozone depletion.
- Wasteland reclamation
- Consumerism and Waste products, use and through plastics
- Environment Protection Act
- Air (Prevention and Control of Pollution Act
- Water (Prevention and Control of Pollution) Act
- Wildlife Protection Act
- Forest Conservation Act
- Population Explosion — Family Welfare Programme
- Human Rights

REFERENCES:

1. Vijayalakshmi, G. S., A. G. Murugesan and N. Sukumaran.2006. Basics of Environmental Science, Manonmaniam Sundaranar University Publications, Tirunelveli, pp.160
2. Agarwal. K. C.2001.Environmental Biology, Nidi Publications Limited, Bikaner.
3. A.K. De.1999. Environmental Chemistry, Wiley Eastern Limited, India.
4. Jadhav, H. and Bhosale,V.M.1995. Environmental Protection and Laws, Himalaya Publishing House, Delhi. pp284.
5. Odum, E.P.1971. Fundamentals of Ecology, W.B.Saunders Co.,USA.pp.574.

