FACULTY OF VOCATIONAL STUDIES

SYLLABUS

of

Bachelor of Vocation (Photography & Journalism)

(Semester IV)

(Under Credit Based Continuous Evaluation Grading System)

Session: 2020-21



The Heritage Institution

KANYA MAHA VIDYALAYA

JALANDHAR

(Autonomous)

SCHEME AND CURRICULUM OF EXAMINATIONS OF THREE YEAR DEGREE PROGRAMME

B.Voc Photography and Journalism

Session (2020-21)

Semester III Session(2019-20) Marks Course Examination **Type** Total Ext. Course time **Course Name** LTP Code CA **Total** (in Hours) L BVPL-Radio Journalism and 4-0-0 50 3311 Programme Format 40 10 3 BVPL-Event Management 4-0-0 S 4 50 40 10 3 3312 BVPL-Basics of Camera light 4-0-0 4 3 50 40 10 3313 and Sound BVPL-Cyber Journalism 4-0-0 75 60 15 3 3314 3 BVPP-Radio Lab 0-0-4 50 40 10 3315 BVPP-Event Management Lab 0-0-4 3316 3 50 40 10 BVPP-Cyber lab 0-0-4 3 50 40 10 3317 BVPI-3318 Project 0-0-2 2 50 50 2 25 SECF-³Foundation Course 2-0-0 20 5

1492							
	Total			30	425		

SCHEME AND CURRICULUM OF EXAMINATIONS OF THREE YEAR DEGREE

PROGRAMME

Bachelor of Vocation (Photography and Journalism) Session (2020-21)

Semester-IV

Course	Course Title	Course	Credits	Marks				Examination
Code		Туре		Total	L	Р	CA	Time (in Hours)
BVPL- 4311	Introduction of Camera Operations	С	3	50	40	-	10	3
BVPM- 4312	Brand Management	С	3	50	25	15	10	3
BVPM- 4314	Broadcasting Techniques	S	4	75	30	30	15	3+3
BVPM- 4314	Lighting Techniques	S	4	75	30	30	15	3+3
BVMD- 4315	Minor Project	S	4	50	-	40	10	3
BVPI- 4316	Compulsory Training	S	6	100	-	100	-	3
AECE- 4221	Environmental Studies(Compulsory)*	AC	4	100	60	20 (Project work)	20	3
SECS- 4552	Social Outreach*	AC	2	25	20	-	5	1
	Total			400				

^{*}Marks of these papers will not be added in total marks and only grades

will be provided.

C-Compulsory (General)

S-Skill

AC- Audit Course

Bachelor of Vocation (Photography and Journalism)

PROGRAMME OUTCOMES

- **PO 1**: Students will be introduced to the basic aspects of Radio and Television journalism and its programme formats. They will come to know about the basic concepts and fundamental elements of Radio and Television production. They will also be familiarized with the broadcasting equipments and their proper uses.
- **PO 2**: Through this course they will learn basic component of camera, lighting and sound. They will learn the techniques of Still Photography and Videography.
- **PO 3:** This course will impart the knowledge about various types of creative techniques among students & make them inform regarding how to gather information & write news stories for T.V, Radio and other media.
- **PO4:** The course will develop the basic understanding of Camera and its uses. During the course students will be able to evaluate all aspects of photography and journalism.
- **PO5:** Students will develop creative behaviour that will help them to engage with the world in productive ways. Students will be able to work independently or collaboratively to achieve stated goals.

(Semester-III)

(Course Code: BVPL-3311)

Radio Journalism and Programme Format

Course outcomes:

- **CO1**. Students will understand the basics of radio journalism and news reporting.
- **CO2**. They will know about the news structure, interview skills and news values etc.
- **CO3**. Students will learn about the basic concepts and fundamental elements of Radio programme production.
- **CO4**. This subject will make students familiar with broadcasting equipments and their proper uses.

(Semester-III)

(Course Code: BVPL-3311)

Radio Journalism and Programme Format

L-T-P Max. Marks 50

4-0-0 Theory: 40

CA:10

Max. Time: 3 Hrs

Instructions for the Paper Setters

The question paper will have 4 units, namely unit I, II, III and IV.

Question paper shall consist of four Units. Candidates shall attempt 5 questions in all, by at least selecting one question from each Unit and the 5th question may be attempted from any of the four units. Each question will carry 8 marks.

Unit-1

Understanding of Radio: Radio as a medium of mass communication, Characteristics and Objectives of radio, Explain principles of Broadcasting, History of Radio in India

Unit-II

Principles For Formatting: Variety is the password, Menu for everybody, Music has the priority, Programme objectivity, Information, Entertainment & Education, Fixed point & Flexible point, Intimacy with listener, Knowing the target, Channel Identity, Special audience.

Unit-IV

Writing for Radio: Writing for the ear, Spoken word, RadioTalk, News, Slogans, Interview & Discussion, Feature & Documentary, Drama & Serial, Music Programmes, Outside Broadcast (OB), Commentary, Voice Cast, Vox Pop, Phone In, Radio Bridge, Chat Show, Radio Commercial-Types, Copy Writing.

Unit-IV

Concept of Good Presentation: Link Announcement & Continuity Presentation, News Reading, Pronunciation, Use of silence, Voice Culture, Keeping Rapport with the Listener, Presenting Music Programmes, Forming a personality for the programme/station.

Suggested Readings:

- 1. T.V Journalism KM Srivastva
- 2. Radio Production-Robert Macleish
- 3. Broadcast Journalism- PC Chatterjee

(Semester-III)

(Course Code: BVPL-3312)

EVENT MANAGEMENT

Course outcomes:

CO1: Students will learn about the Event Management skills.

CO2: Students will understand the key elements of a conference and the processes involved in venue selection, registration, catering, accommodation, transport, security and entertainment.

CO3: Students will come to know about the various dimensions of event management.

CO4: They will learn the techniques of event planning, marketing, producing and promotion technique

(Semester-III)

(Course Code: BVPL-3312)

EVENT MANAGEMENT

L-T-P Max. Marks 50
4-0-0 Theory: 40

CA:10

Max. Time: 3 Hrs

Instructions for the Paper Setters

The question paper will have 4 units, namely unit I, II, III and IV.

Question paper shall consist of four Units. Candidates shall attempt 5 questions in all, by at least selecting one question from each Unit and the 5^{th} question may be attempted from any of the four units. Each question will carry 8 marks.

Unit-1

Event management- definition, concept and principles

Organizing an event and its promotion

Marketing- definition, marketing mix, marketing tools

Unit-II

Concepts of sponsorship and role of sponsor

Seven point formula for writing a report

Media tools- press conferences, press release, Junkets, Communique

Unit-III

Exhibitions – meaning, types and importance

Importance of budget and buffer

Role & importance of exhibitions

Objectives of the exhibitions

Advantage of exhibition over other devices

Unit-IV

Understanding Various events: Conferences, Trade Fair, Wedding, Fashion Shows, Corporate Meeting etc

References:

- 1. Event management by Swarup K Goyal, Adhyayan publisher
- 2. Event Management and PR by Savita Mohan, Enkay Publishing House

(Semester-III)

(Course Code: BVPL-3313)

BASICS OF CAMERA LIGHTS AND SOUND

Course outcomes:

CO1: This subject will develop basic understanding of Camera.

CO2: Students will understand different types of lights, use of filters and reflectors.

CO3: Students will come to know about the different types of lenses and their applications.

CO4: Students will understand the functions of microphone , use of audio mixer for recording & Editing of sound.

CO5: This subject will throw a light on the basic principles of light and sound.

(Semester-III)

(Course Code: BVPL-3313)

BASICS OF CAMERA LIGHTS AND SOUND

L-T-P Max. Marks 50

4-0-0 Theory: 40

CA:10

Max. Time: 3 Hrs

Instructions for the Paper Setters

The question paper will have 4 units, namely unit I, II, III and IV.

Question paper shall consist of four Units. Candidates shall attempt 5 questions in all, by at least selecting one question from each Unit and the 5^{th} question may be attempted from any of the four units. Each question will carry 8 marks.

Unit-I

Camera: Introduction to Camera , Parts of Video Camera and their Functions ,Types of Cameras, Depth of field, aperture control,.

Unit-II

Different types of film formats, Different types of shots, camera movements, Tilt, Track, Crane movements etc, Lenses: Different types of lenses and their application

Unit-III

Lighting: Basics of lighting, Techniques, Different types of lights used in videography, Use of filters & reflectors, Lights and lighting

Unit-IV

Sound: What is sound? Unit of sound, Voicing ,Types of microphones, use of audio mixers for recording & editing of sound, Different audio equipments for studio and Location Recording

Suggested Readings:

1. Single Camera Video: Michael H. Adams

2. Modern Radio Production: Carl Hansman

3. Broadcast Technology: Srivastava

(Semester-III)

(Course Code:BVPL-3314)

CYBER JOURNALISM

Course outcomes:

CO1: This subject will make students understand about the basic concepts of Cyber Journalism and its fundamental concepts.

CO2: Students will come to know about the writings for Web Media.

CO3: Students will be able to analyse the various web news portals and their style of writing.

(Semester-III)

(Course Code.BVPL-3314)

CYBER JOURNALISM

L-T-P Max. Marks: 75

4-0-0 Theory: 60

CA:15

Max. Time: 3 Hrs

Instructions for the Paper Setters

The question paper will have 4 units, namely unit I, II, III and IV.

Question paper shall consist of four Units. Candidates shall attempt 5 questions in all, by at least selecting one question from each Unit and the 5^{th} question may be attempted from any of the four units. Each question will carry 8 marks.

Unit-I

Cyber Journalism: Introduction to Cyber Space. Information Super Highway, Internet and Information Revolution, Fundamentals of Cyber Media, Comparison of Cyber Media with Print, TV, Radio mediums, Advantages & Disadvantages of Cyber Journalism.

Unit-II

Writing for Web Media: Basic rules, Do's & Don'ts, Writing News stories, Features & Articles on the Web, Interviewing on the Web, Impact of Web Journalism, Recent Trends.

Unit-III

Presentation & Layout of Web Newspapers & Magazines, Advertising on the Web, Circulation of Web Newspapers, Future of Web Journalism Analysis of important Indian News-Based Web-sites, Trends in Cyber Reporting & Editing, Impact of globalization on Web Journalism, Cyber Laws

Unit-IV

E-Paper, Online Newspaper, M-paper, Blogs, Citizen Journalism

MOJO, virtual Reality, Information, Misinformation & Disinformation through New Media

Suggested Readings

- 1 . Cyberspace aur Media: Sudhir Pachauri
- 2. Fundamentals of Information Technology: Deepak Bharihoke
- 3. Multimedia System: Ramesh Agarwal & Bharat Bhushan Tiwari
- 4. IT in the New Millenium: V.D. Dudeja
- 5. Electronic Media & the Internet: Y K D'souza

B.Voc Photography and Journalism (Semester-III)

(Course Code: BVPP-3315)

RADIO LAB

Course outcomes:

CO1: Students will come to know about the writing styles for different radio formats.

CO2: Students will learn the basic functions of audio equipment and software. CO3: Students will develop understanding for Professional radio procedures

and practices.

B.Voc Photography and Journalism (Semester-III)

(Course Code: BVPP-3315)

RADIO LAB

L-T-P Max. Marks 50

0-0-4 Practical: 40

CA:10

- 1. Identifying & Working with equipment: Microphones, its type & usage, Recording equipment & handling Recording, Dubbing & Editing in Studio Working with Computer.
- 2. Production Techniques of Programme: Recording of voice Selection & use of Effects & Music Dubbing & Editing Preparation of Final Programme.
- 3. Production of Commercial/Drama, Feature/News Reel/Music
- 4. Writing for different formats of Radio

(Semester-III)

(Course Code: BVPP-3316)

EVENT MANAGEMENT LAB

Course outcomes:

CO1: Students will understand the essentials of planning of event.

CO2: They will get knowledge of legal and ethical issues involved in event management.

CO3: They will come to know about the practical aspects of organizing events of various forms.

(Semester-III)

(Course Code: BVPP-3316)

EVENT MANAGEMENT LAB

L-T-P Max. Marks 50

4-0-0 Practical: 40

CA:10

Instructions to the Examiners/Paper Setters: Practical will be taken on the basis of Assignments and File Work

- 1. Assignments and File Work on organization of an event in campus or outside campus by the students,
- 2. Organize or attend press conference
- 3. Viva Voce
- 4. Visit-press conferences, event management office

(Semester-III)

(Course Code: BVPP-3317)

CYBER LAB

Course outcomes:

CO1: This subject will develop an understanding of legal and ethical issues for online media.

CO2: Students will understand the digital work environment for journalists.

CO3: They will learn regarding how to search on Internet to gather Information.

(Semester-III)

(Course Code: BVPP-3317)

CYBER LAB

L-T-P Max. Marks 50
0-0-4 Practical: 40
CA:10

- Understanding different social networking sites and their relevance in media
- Surfing different e-papers and online newspaper
- Writing content for e-paper / online newspaper
- Creating blogs, Micro blogs and contents
- Understanding M-paper, difference between M-paper, e-paper and online editions
- Creating account on twitter and understanding Media
- Creating online pages with the help of HTTP, HTML
- Designing a page for online newspaper

(Semester-III)

(Course Code:BVPI-3318)

PROJECT

Course outcomes:

CO1: Students will practically use the camera, light and sound system.

CO2: Students will be able to shoot their own program.

CO3: They will learn different steps of production of radio programmes.

(Semester-III)

(Course Code:BVPI-3318)

PROJECT

L-T-P Max. Marks 50

0-0-2 Practical: 40

CA:10

Students will submit a project at the end of the semester on two different radio formats. It can be based on interview programme, discussion, debate, anchoring a show, feature story, documentary etc.

Bachelor of Vocation (Photography & Journalism) Semester-IV

Course Code: BVPL-4311

INTRODUCTION OF CAMERA OPERATIONS

Course Outcomes

On the completion of this course, the student will be able to: **CO1**: To identify the different working styles of camera.

CO2: To enhance the shooting skills.

CO3: To develop the role and function of cameraman.

INTRODUCTION OF CAMERA OPERATIONS

L-T-P 3-0-0

Time: 3Hrs. Max. Marks: 50

Theory: 40 CA: 10

Instructions for the Paper setters:

The question paper will have 4 units, namely unit I,II,III & IV

Question paper shall consist of four units. Candidates shall attempt 5 questions in all, by at least selecting one question from each unit and the 5^{th} question may be attempted from any of the four units. Each question will carry 8 marks.

UNIT-I

Introduction to Camera Operations, Principles of cinematography, Understanding the optical theory, Principles of camera composition and continuity, Focus Distance, Camera Placement: Movement and Shots and Angles .

UNIT-II

The Aspect Ratio: Camera and Post Production, focus length, Shot framing and composition.

UNIT-III

Types of cameras, lenses and equipment Required for camera operations. Set Designing: Indoor and Outdoor, Props and Equipment.

UNIT-IV

Creative and Visual requirements of the shot with the DOP. ND Filters, Flags, Reflectors & their applications.

Suggested Readings:

Long, John, Ethics in the Age of Digital Photography, September, 1999, Macrumors, Video iPod Fake, 26 February, 2006, The Media History Project, 20th Century: Last Decade

BRAND MANAGEMENT

Course Outcomes

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

CO1: To identify the different styles of Branding.

CO2: To enhance the management skills.

CO3: To develop the role and function of Brand Manager.

BRAND MANAGEMENT Theory

L-T-P 2-0-1

Time: 3Hrs. Max. Marks: 50

Theory: 25 Practical: 15 CA: 10

Instructions for the Paper setters: The question paper will have 4 units, namely unit I,II,III & IV

Question paper shall consist of four units. Candidates shall attempt 5 questions in all, by at least selecting one question from each unit and the 5th question may be attempted from any of the four units. Each question will carry 8 marks.

UNIT-I

Understanding Brand, Brand vs Products, Benefits of Branding, Advertising- definition, meaning & types.

UNIT-II

Advertising Agencies: Meaning, Importance and Types, Branding Attributes, Significance of Branding to Consumers and Firms.

UNIT-III

Image Building, Brand Equity, Brand Ambassadors- Meaning and Importance, Role of Media in Brand Management.

UNIT-IV

Public relations: Meaning and Importance, PR Officer and his functions & Importance, Role of PR in Brand Management.

References:

- 1. Strategic brand management, Keller, 3 rd edition, Prentice Hall
- 2. Best practices cases in branding, , Keller, 3 rd edition, Prentice Hall
- 3. Urban, hauser and Dholakia, , N. Essentials of new product management
- 4. Donald Lehman, Product Management. Tata Mac Graw Hill

BRAND MANAGEMENT Practical

Practical Marks: 15

Instructions for Practical Examiners:

Question paper to be set on the spot by Internal & External examiners

Practical exercises involving:

Advertising Campaigns, Themes and Promotions Newspaper Brands Television Ad: Writing Script, Shooting and Editing Understanding different Types of Advertising

BROADCASTING TECHNIQUES

Course Outcomes

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

CO1: To make students clear about the importance of broadcasting its applications.

CO2: To develop the practical knowledge of broadcasting techniques.

CO3: To enhance the knowledge of broadcasting equipments.

BROADCASTING TECHNIQUESTheory

L-T-P 2-0-2

Time: 3Hrs. Max. Marks: 75

Theory: 30 Practical: 30 CA: 15

Instructions for the Paper setters:
The question paper will have 4 units, namely unit I,II,III & IV

Question paper shall consist of four units. Candidates shall attempt 5 questions in all, by at least selecting one question from each unit and the 5^{th} question may be attempted from any of the four units. Each question will carry 8 marks.

UNIT-I

Broadcasting Techniques: Definition, Scope & Objectives, Goals of the Technical Departments, Fundamentals of broadcasting and broadcast technologies.

UNIT-II

Fundamentals of Information technology. Broadcast Technologies and Equipment across content gathering, Media Management, Production and Post-production.

UNIT-III

The Technical Equipment and Infrastructure in broadcasting: personal computers, cables, switchers, converters, routers, systems, servers, WAN, LAN, MPLS lease lines, recovery systems and networks, Types of audio cables and Connectors.

UNIT-IV

To Diagnose and Resolve Operational Issues using Tools root cause analysis, Process Improvement Techniques etc. Legal and Regulatory Norms of Broadcasting.

Suggested Readings:

1. Kennedy, Dan, A Tabloid's New Low, 22 October, 2004, The Boston Phoenix,

- 2. Kobre, Kenneth. 2004. Photojournalism, the Professionals' Approach. Burlington, MA: Focal Press.

 3. Kobré, Kenneth, Positive/Negative: The Long Tradition of Doctoring Ph

Bachelor of Vocation (Photography & Journalism) Semester-IV Course Code: BVPM-4313

BROADCASTING TECHNIQUES Practical

Practical Marks: 30

Instructions for Practical Examiners:

Question paper to be set on the spot by Internal & External examiners

Practical exercises involving:

Broadcasting Equipments

Demonstration of Audio cables & connectors

Technical aspect of Information Technology

Bachelor of Vocation (Photography & Journalism) Semester-IV

Course Code: BVPM-4314

LIGHTING TECHNIQUES

Course Outcomes

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

CO1: To make students clear about the importance of lighting and its application.

CO2: To develop the practical knowledge of lighting techniques.

CO3: To enhance the knowledge of different lighting equipments.

CO4: To understand and apply various composition techniques of lighting

Bachelor of Vocation (Photography & Journalism) Semester-IV Course Code: BVPM-4314

LIGHTING TECHNIQUES Theory

L-T-P 2-0-2

Time: 3Hrs. Max. Marks: 75

Theory: 30 Practical: 30 CA: 15

Instructions for the Paper setters:

The question paper will have 4 units, namely unit I,II,III & IV

Question paper shall consist of four units. Candidates shall attempt 5 questions in all, by at least selecting one question from each unit and the 5th question may be attempted from any of the four units. Each question will carry 8 marks.

UNIT-I

Operating the lights and lighting, Console for a shoot at a Media Houses, Different Types of lights (spot, broad, flood, soft, dimmer, etc.). Types of bulbs (HMI, Fluorescent, LED.)

UNIT-II

White Balance and Colours, Adjusting the changes in lighting, controlling out of sight lighting operations, and maintaining communications with programme staff.

UNIT-III

Coordinating activities within the lighting team during shooting, safety instructions, handling lighting equipment.

UNIT-IV

Understanding the different aspects of lighting. Identify important members of the production team and their roles & responsibilities for Lighting, film-making/photography process, light levels and mood of the production.

Suggested Readings:

- 1. Dunleavy, Dennis, Camera Phones Prevail: Citizen Shutterbugs and the London Bombings, 9 July, 2005,
- 2. Faas, Horst et. al. (ed.). Requiem: By The Photographers Who Died In Vietnam

And Indochina. London: Jonathan Cape.

Bachelor of Vocation (Photography & Journalism) Semester-IV Course Code: BVPM-4314

LIGHTING TECHNIQUES Practical

Practical Marks: 30

Instructions for Practical Examiners:

Question paper to be set on the spot by Internal & External examiners

Practical exercises involving:

Demonstration of Lighting equipments
Understanding the different techniques of lighting
Understand the lighting balance for different programmes
Understanding the studio lights & reflectors

Bachelor of Vocation (Photography & Journalism) Semester-IV Course Code: BVMD-4315

MINOR PROJECT

Course Outcomes:

CO1: Students will practically use the light system.
CO2: Students will be able to shoot with different lights.
CO3: Students will learn the different lighting techniques.

Bachelor of Vocation (Photography & Journalism) Semester-IV Course Code: BVMD-4315

MINOR PROJECT

L-T-P 0-0-4

Time: 3Hrs. Max. Marks: 50

Practical: 40 CA: 10

Students will submit a project at the end of the semester on different lighting techniques. It can be based on studio interview program, anchoring and facing the camera with studio lights & outdoor shooting etc.

Following points should be taken care of while working on project:

- 1. Students can choose themselves the subject matter and scenes
- 2. A project can be done jointly by maximum of two students
- 3. Minimum of 3 minutes duration
- 4. Effective use of lights, focus on viewers' attention
- 5. Project report showcasing the stages of the project

Bachelor of Vocation (Photography & Journalism) Semester-IV Course Code: BVPI-4316

COMPULSORY TRAINING

Course Outcomes:

CO1: Students will get a chance to enhance their skill by working in the field.

CO2: Students will be able to understand the challenges of working in media organization.

CO3: Students will learn the art & craft of team work while working in the field.

Bachelor of Vocation (Photography & Journalism) Semester-IV Course Code: BVPI-4316

COMPULSORY TRAINING

L-T-P 0-0-6

Time: 3Hrs. Max. Marks: 100
Practical:100

The student will have to attend one month compulsory training after completion of 4_{th} semester of course in a reputed institute related to Media Industry. On the completion of the training, each student will submit his performance report and the certificate from where he has done his compulsory training.

Bachelor of Vocation (Photography & Journalism) Semester-IV Course Code: AECE: 4221

ENVIRONMENTAL STUDIES (Compulsory)

Course Outcomes:

CO1: Reflect upon the concept and need of environmental education.

- CO2. Define major eco-systems and their conservation.
- CO3. Understand the role of different agencies in the protection of environment.
- CO4. Develop desirable attitude, values and respect for protection of environment.

Bachelor of Vocation (Photography & Journalism) Semester-IV

Course Code: AECE: 4221

ENVIRONMENTAL STUDIES (Compulsory)

Time: 3 Hrs Max. Marks: 100 **Credit: 4-0-0** Theory: 60

Project report: 20

CA: 20

Instructions for the Paper Setter

The question paper should carry 60 marks. The structure of the question paper being:

Part-A, Short answer pattern – 20 marks

Attempt any five questions out of seven. Each question carries 4 marks. Answer to each question should not exceed 2 pages

Part-B, Essay type with inbuilt choice – 40 marks

Attempt any five questions out of eight. Each question carries 8 marks. Answer to each question

should not exceed 5 pages.

Unit 1

The multidisciplinary nature of environmental studies

Definition, scope and importance, Need for public awareness

Unit 2

Natural Resources: Renewable and non-renewable resources:

Natural resources and associated problems.

- (a) Forest resources: Use and over-exploitation, deforestation, case studies. Timber extraction,
- mining, dams and their effects on forests and tribal people.
- (b) Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams-benefits and problems.
- (c) Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources, case studies.
- (d) Food resources: World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity, case studies.
- (e) Energy resources: Growing energy needs, renewable and non-renewable energy sources, use of alternate energy sources, case studies.
- (f) Land resources: Land as a resource, land degradation, man induced landslides, soil erosion and desertification.
- Role of an individual in conservation of natural resources.
- Equitable use of resources for sustainable lifestyles.

Unit 3

Ecosystems

- Concept of an ecosystem
- Structure and function of an ecosystem
- Producers, consumers and decomposers
- Energy flow in the ecosystem
- Ecological succession
- Food chains, food webs and ecological pyramids
- Introduction, types, characteristic features, structure and function of the following ecosystem: Forest ecosystem, Grassland ecosystem, Desert ecosystem, Aquatic ecosystems (ponds, streams, lakes, rivers, ocean estuaries)

Unit 4

Biodiversity and its conservation

- Introduction Definition: genetic, species and ecosystem diversity
- Biogeographical classification of India
- Value of biodiversity: consumptive use, productive use, social, ethical aesthetic and option values
- Biodiversity at global, national and local levels
- India as a mega-diversity nation
- Hot-spots of biodiversity
- Threats to biodiversity: habitat loss, poaching of wildlife, man wildlife conflicts
- Endangered and endemic species of India
- Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity

Unit 5

Environmental Pollution

Definition

- Causes, effects and control measures of Air pollution, Water pollution, Soil pollution, Marine pollution, Noise pollution, Thermal pollution, Nuclear pollution
- Solid waste management: Causes, effects and control measures of urban and industrial wastes.
- Role of an individual in prevention of pollution
- Pollution case studies
- Disaster management: floods, earthquake, cyclone and landslides.

Unit 6

Social Issues and the Environment

- From unsustainable to sustainable development
- Urban problems and related to energy
- Water conservation, rain water harvesting, watershed management
- Resettlement and rehabilitation of people; its problems and concerns. Case studies.
- Environmental ethics: Issues and possible solutions
- Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust. Case studies.
- Wasteland reclamation
- Consumerism and waste products

- Environmental Protection Act, 1986
- Air (Prevention and Control of Pollution) Act, 1981
- Water (Prevention and control of Pollution) Act, 1974
- Wildlife Protection Act
- Forest Conservation Act

Issues involved in enforcement of environmental legislation Public awareness

Unit 7

Human Population and the Environment

- Population growth, variation among nations
- Population explosion Family Welfare Programmes
- Environment and human health
- Human Rights
- Value Education
- HIV / AIDS
- Women and Child Welfare
- Role of Information Technology in Environment and Human Health
- Case Studies

Unit 8

Field Work

- Visit to a local area to document environmental assets river/forest/grassland/hill/mountain
- Visit to a local polluted site Urban / Rural / Industrial / Agricultural
- Study of common plants, insects, birds
- Study of simple ecosystems-pond, river, hill slopes, etc

References:

- 1. Bharucha, E. 2005. Textbook of Environmental Studies, Universities Press, Hyderabad.
- 2. Down to Earth, Centre for Science and Environment, New Delhi.
- 3. Heywood, V.H. & Waston, R.T. 1995. Global Biodiversity Assessment, Cambridge House, Delhi.
- 4. Joseph, K. & Nagendran, R. 2004. Essentials of Environmental Studies, Pearson Education (Singapore) Pte. Ltd., Delhi.
- 5. Kaushik, A. & Kaushik, C.P. 2004. Perspective in Environmental Studies, New Age International (P) Ltd, New Delhi.
- 6. Rajagopalan, R. 2011. Environmental Studies from Crisis to Cure. Oxford University Press,

New Delhi.

- 7. Sharma, J. P., Sharma. N.K. & Yadav, N.S. 2005. Comprehensive Environmental Studies, Laxmi Publications, New Delhi.
- 8. Sharma, P. D. 2009. Ecology and Environment, Rastogi Publications, Meerut.
- 9. State of India's Environment 2018 by Centre for Sciences and Environment, New Delhi

10. Subramanian, V. 2002. A Text Book in Environmental Sciences, Narosa Publishing House, New Delhi