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**PRESIDENCY UNIVERSITY
BENGALURU**

SCHOOL OF COMMERCE

TEST 1

Sem AY: Odd Sem 2019-20

Course Code: EVS107

Course Name: ENVIRONMENTAL STUDIES

Program & Sem: B.Com/B.Com (Hons)/BBA/BBA - Aviation

Date: 28.09.19

Time: 9:30AM to 10:30AM

Max Marks: 30

Weightage: 15%

Instructions:

1. No Student will be allowed to go from the examination hall before the end of examination. Should not wear smart watch, not to carry mobile phones or any other electronic gadgets into the examination hall which are strictly prohibited

Part A [Memory Recall Questions]

Answer all the Question. Each Question carries one mark.

(1Qx5M=5M)

1. Who introduced the word "Environment" to Ecology? (C.O.NO.1)[Knowledge]
A. Jacob Van Uerkal B. Van Jacob Uerkat
C. Woodbury D. Arthur Tansley
2. Economic Sustainability happens in _____ level (C.O.NO.1)[Knowledge]
A. Individual Level B. Organization Level
C. Society Level D. Interpersonal Level
2. Which of the following is an example of Terrestrial Biome (C.O.NO. 2) [Knowledge]
A. Tropical rain forest B. Rivers
C. Streams D. All of the above
3. The following is an example of lotic biome (C.O.NO.2)[Knowledge]
A. Rivers B. Lakes
C. Oceans D. All of the above
4. Who is considered as the Father of Ecology? (C.O.NO 2) [Knowledge]
A. Arthur Tansley B. Alexander Von Humboldt
C. Ernst Haeckel D. Woodbury

Part B [Thought Provoking Questions]

Answer both the Questions. Each Questions carries five marks. (2Qx5M=10M)

5. Write a short note on sustainability and pillars of sustainability. (C.O.NO.1) [Knowledge]
6. Describe the structure of an Ecosystem. (C.O.NO.2) [Knowledge]

Part C [Problem Solving Questions]

7. Case Study (1Qx15M=15M)

According to the Forest Department report, there are over 1,500 spotted deer in and around Chennai. Out of which, a total of 41 deer were found roaming inside a sprawling government property which is leased to a private builder now. When the builder took over the premises, all the vegetation in the area is cleared which left the deer with no means of sustenance.

On seeing the emaciated state of deer, members of public began to feed them. Once this was reported in the media, wildlife officials began a rescue and rehabilitation operation and shifted the spotted deer to a National Park and nearby forests.

But 9 out these rescued deer which have been shifted to National Park have died over the last one month. The crude methods adopted to trap the deer during the rescue operations had come in for criticism, with some activists saying this could put the deer under severe stress. However, the reason for the death is not clear.

Forest officials and National Park authorities claim that if the reason of the death of deer is due to trapping methods, then they would have died soon after the capture.

Wildlife officials say that the deer were moving freely before being rehabilitated and may have consumed non-biodegradable material and other waste which could have led to the deaths.

Questions: (C.O.NO.2) [Comprehension]

- a. Identify the problem in the case. (5M)
- b. What according to you has caused the death of the deer? (5M)
- c. Do you think the deer could have survived if they are left free in a forest instead of a National Park? (5M)



SCHOOL OF COMMERCE

Semester: 1
Course Code: EVS107
Course Name: Environmental Studies

Date: 28-09-19
Time: 9:30 to 10:30 AM
Max Marks: 30
Weightage: 15%

Extract of question distribution [outcome wise & level wise]

| Q.NO | C.O.NO | Unit/Module Number/Unit /Module Title | Memory recall type | | | Thought provoking type | | | Problem Solving type | | | Total Marks |
|------|--------|--|--------------------|----------------|--|------------------------|----------------|--|----------------------|---|---|-------------|
| | | | [Marks allotted] | Bloom's Levels | | [Marks allotted] | Bloom's Levels | | [Marks allotted] | | | |
| | | | | K | | | C | | | A | | |
| 1 | CO 1 | Unit 1/ Introduction to Environmental studies | | K | | | | | | | 1 | |
| 2 | CO 1 | Unit 1/ Introduction to Environmental studies | | K | | | | | | | 1 | |
| 3 | CO 2 | Unit 2/ Ecosystems | | K | | | | | | | 1 | |
| 4 | CO 2 | Unit 2/ Ecosystems | | K | | | | | | | 1 | |
| 5 | CO 2 | Unit 2/ Ecosystems | | K | | | | | | | 1 | |
| 6 | CO1 | Unit 1/ Introduction to | | K | | | | | | | 5 | |

| | | Environmental studies5 | | | | | | | | | |
|-----|----------------|------------------------|--|----|--|----|--|--|--|--|----|
| 7 | CO 2 | Unit 2/ Ecosystems | | K | | | | | | | 5 |
| 8.A | CO 2 | Unit 2/ Ecosystems | | | | C | | | | | 5 |
| 8.B | CO 2 | Unit 2/ Ecosystems | | | | C | | | | | 5 |
| 8.C | CO 2 | Unit 2/ Ecosystems | | | | C | | | | | 5 |
| | Total Marks | | | 15 | | 15 | | | | | 30 |

K =Knowledge Level C = Comprehension Level, A = Application Level

Note: While setting all types of questions the general guideline is that about 60%

Of the questions must be such that even a below average students must be able to attempt, About 20% of the questions must be such that only above average students must be able to attempt and finally 20% of the questions must be such that only the bright students must be able to attempt.

{I hereby with certify that all the questions are set as per the above guidelines . Dr. Mounica }

Reviewer's Comments,

BALU ✓
B
25/9/19

| | | | |
|--|---|--|--|
| | <ul style="list-style-type: none"> • secondary • Tertiary • Decomposers or Reducers & Transformers | | |
| | <ul style="list-style-type: none"> • Abiotic | | |

Part C

(1 x 15 = 15 Marks)

| Q No | Solution | Scheme of Marking | Max. Time required for each Question |
|------|---|---|--------------------------------------|
| 8 A | Loss of Natural Habitat is the problem | If the issue is identified- 5 marks | 5 minutes |
| 8 B | Various Probabilities are: <ul style="list-style-type: none"> • Excessive stress in the new environment • Consumption of Biodegradable material • Stress caused due to crude methods of trapping the deer. | Identification of Cause- 2 marks Explanation 3 marks | 10 minutes |
| 8 C | The deer could not survive even in the forest as they lack the survival skills and are vulnerable to poachers and ill equipped for wildlife. | 5 Marks | 10 minutes |

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**RESIDENCY UNIVERSITY
BENGALURU**

SCHOOL OF COMMERCE

TEST – 2

Sem & AY: Odd Sem 2019-20

Course Code: EVS 107

Course Name: Environmental Studies

Program & Sem: B.Com/B.Com (H.)/B.B.A/B.B.A Aviation/ B.C.A & I Sem

Date: 16.11.2019

Time: 1:00 PM to 2:00 PM

Max Marks: 30

Weightage: 15%

Instructions:

(i) *All questions are compulsory.*

Part A [Memory Recall Questions]

Answer all the Questions. Each Question carries one marks.

(5Qx1M=5M)

1. Which of the following is NOT a natural resource? (C.O.NO.3)[Knowledge]
 - a. Soil
 - b. Rock
 - c. Trees
 - d. Plastic
2. The layer that covers the Earth like a blanket is called _____. (C.O.NO.3)[Knowledge]
 - a. Lithosphere
 - b. Atmosphere
 - c. Biosphere
 - d. Hydrosphere
3. Which of the following is NOT a renewable resource? (C.O.NO.3)[Knowledge]
 - a. Biomass
 - b. Geothermal energy
 - c. Coal
 - d. Solar energy
4. Water used for domestic purpose is (C.O.NO.3)[Knowledge]
 - a. Consumptive Use
 - b. Non-consumption Use
 - c. Cumulative Use
 - d. Routine use

5. Water seeping into the ground without any definite channel is called (C.O.NO.3)[Knowledge]
- a. Precipitation
 - b. Perspiration
 - c. Percolation
 - d. Precoation

Part B [Thought Provoking Questions]

Answer both the Questions. Each question carries five marks. (2Qx5M=10M)

6. Write a short note on causes of land degradation. (C.O.NO.3)[Knowledge]
7. Discuss the causes and consequences of LULCC. (C.O.NO.3)[Knowledge]

Part C [Problem Solving Questions]

Answer the Questions. The Question carry five marks.

1 ⊗ x 15 M = 15 M

(2Qx5M=10M)

8. Describe the types of land degradation and preventive measures. (C.O.NO.3)[Knowledge]

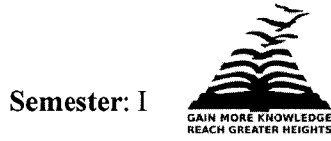
| | | | | | | | | | | | | |
|---|-------------|---|--|----|--|--|--|--|--|--|--|----------|
| | | Nonrenewable Resources | | | | | | | | | | |
| 4 | CO. NO 3 | Unit 3/ Natural Resources- Renewable and Nonrenewable Resources | | 1 | | | | | | | | 1 |
| 5 | CO. NO 3 | Unit 3/ Natural Resources- Renewable and Nonrenewable Resources | | 1 | | | | | | | | 1 |
| 6 | CO. NO 3 | Unit 3/ Natural Resources- Renewable and Nonrenewable Resources | | 5 | | | | | | | | 5 |
| 7 | CO. NO 3 | Unit 3/ Natural Resources- Renewable and Nonrenewable Resources | | 5 | | | | | | | | 5 |
| 8 | CO. NO 3 | Unit 3/ Natural Resources- Renewable and Nonrenewable Resources | | 15 | | | | | | | | 15 |
| | Total Marks | | | 30 | | | | | | | | 30 Marks |

K =Knowledge Level C = Comprehension Level, A = Application Level

Note: While setting all types of questions the general guideline is that about 60%

Of the questions must be such that even a below average students must be able to attempt, About 20% of the questions must be such that only above average students must be able to attempt and finally 20% of the questions must be such that only the bright students must be able to attempt.

Annexure- II: Format of Answer Scheme



SCHOOL OF COMMERCE

Semester: I

SOLUTION

Date: 16-11-19

Course Code: EVS107

Time: 1:00 to 2:00 PM

Course Name: Environmental Studies

Max Marks: 30

Program & Sem: B.Com/B.Com Honors/B.B.A/B.B.A Aviation/ B.C.A

Weightage: 15%

Part A

(Q x M = Marks)

| Q No | Solution | Scheme of Marking | Max. Time required for each Question |
|------|--------------------|-------------------|--------------------------------------|
| 1 | D. Plastic | 1 | 1 minute |
| 2 | B. Atmosphere | 1 | 1 minute |
| 3 | C. Coal | 1 | 1 minute |
| 4 | A. Consumptive Use | 1 | 1 minute |
| 5 | C. Percolation | 1 | 1 minute |

Part B

(Q x M = Marks)

| Q No | Solution | Scheme of Marking | Max. Time required for each Question |
|------|---|--|--------------------------------------|
| 6 | <p>Write a short note on causes of land degradation.</p> <ul style="list-style-type: none"> • Deforestation: Deforestation is taking place at a faster rate due to increasing demands of timber, fuel and forest products which results into degradation of land resources. • Overgrazing: Overgrazing refers to excessive eating of grasses and other green plants by cattle. It results into reduced growth of vegetation, reduced diversity of plant species, excessive growth of unwanted plant species, soil erosion, and degradation of land due to cattle movement. • Agricultural practices: The modern agricultural practices, excessive use of fertilizers and pesticides has | <p>Listing of the causes- 2 Marks Explanation- 3 marks</p> | 5-7 minutes |

| | | | |
|---|---|--|-------------|
| | <p>adversely degraded the natural quality and fertility of the cultivation land.</p> <ul style="list-style-type: none"> • Industrialization: Development of industries for the economic growth of the country leads to excessive deforestation and utilization of land in such a way that it has lost its natural up gradation quality. • Urbanization: Increasing growth of population and demand for more residential areas and commercial sectors is also one of the reasons for land degradation. | | |
| 7 | <p>Discuss the causes and consequences of LULCC.</p> <ul style="list-style-type: none"> • Biodiversity Loss: Biodiversity is often reduced dramatically by LULCC. When land is transformed from a primary forest to a farm, the loss of forest species within deforested areas is immediate and complete. • Climate Change: At global scale, LULCC is responsible for releasing greenhouse gases (Carbon-dioxide and chlorofluorocarbons) to the atmosphere, thereby driving global warming. • Pollution: Changes in land use and land cover are important drivers of water, soil and air pollution. • Other impacts: Other environmental impacts of LULCC include the destruction of stratospheric ozone by nitrous oxide (while using synthetic fertilizers) released from agricultural land and altered regional and local hydrology (dam construction, wetland drainage, irrigation projects).. | <p>Listing of the causes- 2 Marks Explanation- 3 marks</p> | 5-7 minutes |

Part C

(Q x M = Marks)

| Q No | Solution | Scheme of Marking | Max. Time required for each Question |
|------|--|---|--------------------------------------|
| 8. | <p>Describe the types of land degradation and preventive measures.</p> <p>Types of Land degradation: Soil erosion by water Soil erosion by wind Soil fertility decline Water logging: No drainage of rainwater and groundwater appearing on the surface. Increase in salts: Salinization and Sodication. Soil burial.</p> <p>Preventive measures: Strip farming Crop rotation Ridge and furrow formation Construction of dams Contour farming</p> | <p>Type of Land degradation – 7 Marks Preventive measures- 8 marks</p> | 20-25 minutes |



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**PRESIDENCY UNIVERSITY
BENGALURU**

SCHOOL OF COMMERCE

END TERM FINAL EXAMINATION

Semester : Odd Semester: 2019 - 20

Course Code: EVS 107

Course Name: Environmental Studies

Program & Sem: BBA/BBA Aviation/ BCom/ BCom Honors/ BCA - I

Date: 31st Dec 2019

Time: 1:00 – 4:00PM

Max Marks: 100

Weightage: 50 %

Instructions:

(i) Read the all questions carefully and answer accordingly.

Part A [Memory Recall Questions]

Answer all the Questions. Each Question carries 2 marks.

(10Q x 2 M = 20 M)

1. Define Environment. (C.O.No. 1) [Knowledge]
2. List down the pillars of sustainability. (C.O.No. 1) [Knowledge]
3. Give an example of a food chain in grassland ecosystem. (C.O.No. 2) [Knowledge]
4. What is artificial ecosystem? (C.O.No. 2) [Knowledge]
5. What are the examples of renewable resources? (C.O.No. 3) [Knowledge]
6. Enumerate consumptive and non-consumptive uses of water. (C.O.No. 3) [Knowledge]
7. Why tropical region is rich in biodiversity? (C.O.No. 4) [Knowledge]
8. What is ex situ conservation? Give examples. (C.O.No. 4) [Knowledge]
9. Examine the word "Over population". (C.O.No. 5) [Knowledge]
10. List down the impacts of overpopulation on environment. (C.O.No. 5) [Knowledge]

Part B [Thought provoking Questions]

Answer all the Questions. Each Question carries 5 marks.

(8Q x 5 M = 40 M)

11. Discuss the importance of environmental studies. (C.O.No. 1) [Knowledge]
12. Examine the main objectives of sustainable development. (C.O.No. 1) [Knowledge]
13. Identify various types of food chains. (C.O.No. 2) [Knowledge]
14. Discuss various spheres of earth. (C.O.No. 3) [Knowledge]
15. Write a note on hydrologic cycle. (C.O.No. 3) [Knowledge]
16. List down at least 10 mega biodiversity countries. (C.O.No. 4) [Knowledge]
17. List down biogeographic zones of India. (C.O.No. 4) [Knowledge]
18. Write a short note on Bishnois movement. (C.O.No. 5) [Knowledge]

Part C [Problem solving Questions]

Answer both the Questions. Each Question carries 20 marks. (2Q x 20 M = 40 M)

19. Discuss various types of land degradation and its preventive measures
(C.O.No. 3) [Knowledge]
20. Describe man-wildlife conflict and various mitigation strategies.
(C.O.No. 4) [Knowledge]

| | | | | | | | | | | | | |
|----|-------------|----------|--|---|--|--|--|--|--|--|--|-----|
| 18 | CO 5 | Module 5 | | K | | | | | | | | 5 |
| 19 | CO 3 | Module 3 | | K | | | | | | | | 20 |
| 20 | CO 4 | Module 4 | | K | | | | | | | | 20 |
| | Total Marks | | | K | | | | | | | | 100 |

K = Knowledge Level C = Comprehension Level, A = Application Level

Note: While setting all types of questions the general guideline is that about 60%

Of the questions must be such that even a below average students must be able to attempt, About 20% of the questions must be such that only above average students must be able to attempt and finally 20% of the questions must be such that only the bright students must be able to attempt.

Annexure- II: Format of Answer Scheme



SCHOOL OF MANAGEMENT

SOLUTION

Semester: 1

Course Code: EVS 107

Course Name: Environmental Studies

Branch & Sem: BBA/BBA Aviation/BCom/BCom Honors/BCA

Date: 31st Dec, 2019

Time: 3 Hours

Max Marks: 100

Weightage: 50%

Part A

(10 x 2 = 20 Marks)

| Q No | Solution | Scheme of Marking | Max. Time required for each Question |
|------|---|--|--------------------------------------|
| 1 | As given by Environment Protection Act 1986, "Environment is the sum total of land, water, air, interrelationships among themselves and also with the human beings and other living organisms." | Definition 1 Mark Mentioning Act 1 Mark | 3 minutes |
| 2 | To achieve true sustainability one need to balance environment "Three Pillars of Sustainability" a. Environment Sustainability b. Economic Sustainability c. Social sustainability | Listing all three pillars 2 Marks | 3 minutes |

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| 3 | A food chain in a grassland ecosystem may consist of grasses and other plants, grasshoppers, frogs, snakes and hawks | Drawing of the food chain | 3 minutes |
| 4 | An artificial ecosystem is a human made system of plants, animals, and people living in an area together with their surroundings via e.g. farms, gardens, villages, cities, dams, zoo, aquarium etc., | Meaning 1 mark Examples 1 Mark | 3 minutes |
| 5 | Renewable resources are replenished naturally and over relatively short periods of time. The five major renewable energy resources are solar, wind, water (hydro), biomass (organic material that comes from plants and animals), and geothermal (heat from the Earth). | Meaning 1 mark Examples 1 Mark | 3 minutes |
| 6 | Consumptive use: In such uses, water is completely utilized and cannot be reused. Ex: Domestic, industrial and irrigation Non-consumptive use: In such uses, water is not completely utilized and is reused Ex: Hydropower plant | 2 uses – 2 marks | 3 minutes |
| 7 | Tropical regions are rich in biodiversity because they are especially fertile grounds for the formation of new species. Such climatic conditions supports life-forms quite well compared to other regions such Temperate and frigid zones where life-forms don't have much diversity. | Mentioning reason- 2 marks | 3 minutes |
| 8 | Ex situ conservation is the technique of conservation of all levels of biological diversity outside their natural habitats through different techniques like zoo, captive breeding, aquarium, botanical garden etc., | Meaning 1 mark Examples 1 Mark | 3 minutes |
| 9 | The term overpopulation is used to describe a situation in which the world or area has a population so large that the people there are suffering as a result. | Meaning 2 marks | 3 minutes |
| 10 | Impacts of Over-population on Environment: Farming impacts Deforestation Eutrophication Loss of fresh water Global warming Overexploitation of resources | Listing down at least 4 points – 2marks | 3 minutes |

Part B

(5x 8 = 40 Marks)

| Q No | Solution | Scheme of Marking | Max. Time required for each Question |
|------|---|-----------------------------|--------------------------------------|
| 11 | <p>Importance of Environmental Studies:</p> <ul style="list-style-type: none"> • The study creates awareness about various renewable and non-renewable resources of the region. • It provides the knowledge about ecological systems and cause and effect relationships. • It provides necessary information about biodiversity richness and the potential dangers to the species of plants, animals and microorganisms in the environment. • The study strives to understand the causes and consequences due to natural and man induced disasters (flood, earthquake, landslide, cyclones etc.) and pollutions and measures to minimize the effects. • It enables one to evaluate alternative responses to environmental issues before deciding an alternative course of action. | At least 5 points – 5 marks | 12 Marks |
| 12 | <p>Objectives of Sustainable Development:</p> <ul style="list-style-type: none"> • Social progress which recognizes the needs of everyone: Everyone should share in the benefits of increased prosperity and a clean and safe environment. • Effective protection of the environment: limiting the global environmental threats, such as climate change to protect human health and safety from hazards such as poor air quality and toxic chemicals and protection of wildlife and landscape. • Prudent use of natural resources: To ensure that non-renewable resources are used efficiently and that alternatives are developed to replace them. Renewable resources, such as water, should be used in ways that do not endanger the resource or cause serious damage or pollution. | 4 objectives – 5 marks | 12 Marks |

| | | | |
|----|---|-----------------------------------|----------|
| | <ul style="list-style-type: none"> Maintenance of high and stable levels of economic growth and employment | | |
| 13 | <p>Types of Food chains:</p> <ul style="list-style-type: none"> Grazing or Predator food chain: This food chain starts from green plants (producers), passes through the herbivore (primary consumers) and ends with carnivore (secondary or tertiary consumers). Parasitic food chain: This food chain starts from herbivore but food energy passes from larger to smaller organism without outright killing as in case of predator. Hence, the larger animals are considered to be the hosts and the smaller animals which fulfill their nutritional requirements from the hosts are considered as parasites. Saprophytic or detritus food chain: In this food chain, the dead organic matter or organic wastes (metabolic wastes) of eco-system go to the micro-organisms and finally to detritus/debris feeding organisms known as detrivore. The energy stored in detritus serves as a source of energy for detrivore. | 3 types with examples– 5 marks | 12 Marks |
| 14 | <p>Spheres of Earth</p> <ul style="list-style-type: none"> Lithosphere: It is the solid shell of the planet Earth. That means the crust, plus the part of the upper mantle that behaves elastically on long time scales. Hydrosphere: It is the total amount of water on a planet. It includes water that is on the surface of the planet, underground, and in the air. A planet's hydrosphere can be liquid, vapor, or ice. Atmosphere: The layer that covers the Earth like a Blanket. Earth's atmosphere is 78% nitrogen, 21% oxygen, 0.9% argon, and 0.03% carbon dioxide with very small percentages of other elements. Biosphere: the regions of the surface and atmosphere of the earth or another planet occupied by living organisms. It consists of biotic and abiotic constituents. | 4 spheres – 5 marks | 12 Marks |
| 15 | Hydrologic Cycle: | All stages – 5 marks | 12 Marks |

| | | | |
|----|---|---------------------------------|----------|
| | <ul style="list-style-type: none"> • Evaporation: As water is heated by the sun, surface molecules become sufficiently energized to break free of the attractive force binding them together, and then evaporate and rise as invisible vapour in the atmosphere. • Transpiration: Water vapour is also emitted from plant leaves by a process called transpiration. Every day an actively growing plant transpires 5 to 10 times as much water as it can hold at once. • Condensation: As water vapour rises, it cools and eventually condenses, usually on tiny particles of dust in the air. When it condenses it becomes a liquid again or turns directly into a solid (ice, hail or snow). These water particles then collect and form clouds. • Precipitation: Precipitation in the form of rain, snow and hail comes from clouds. Clouds move around the world, propelled by air currents. • Runoff: Excessive rain or snowmelt can produce overland flow to creeks and ditches. Runoff is visible flow of water in rivers, creeks and lakes. • Percolation: Some of the precipitation and snow melt moves downwards, percolates or infiltrates through cracks, joints and pores in soil and rocks until it reaches the water table where it becomes groundwater. | | |
| 16 | The 17 mega-diversity countries are Australia, Brazil, China, Colombia, Democratic Republic of Congo, Ecuador, India, Indonesia, Madagascar, Malaysia, Mexico, Papua New Guinea, Peru, Philippines, South Africa, US, Venezuela. | At least 10 countries – 5 marks | 12 Marks |
| 17 | Biogeographic zones of India: <ol style="list-style-type: none"> 1. Trans Himalayan 2. Himalayans 3. Desert Zone 4. Semi-arid zone 5. Western Ghats 6. Deccan plateau 7. Coasts | All 10 zones – 5 marks | 12 Marks |

| | | | |
|----|---|-----------------------|----------|
| | 8. Islands 9. Gangetic Plains 10. North east | | |
| 18 | <ul style="list-style-type: none"> • Bishnoi (also known as Vishnoi) is a Hindu religious sect found in the Western Thar Desert and northern states of India. • They follow a set of 29 principles/commandments given by Guru Jambheshwar. • The commandments include a ban on killing animals and felling green trees, and providing protection to all life forms. • In 1700, The maharajah of Jodhpur, Abhay Singh, requiring wood for the construction of a new palace, sent soldiers to cut trees in the village. • Amrita Devi one of the villagers along with Bishnoi villagers in Khejarli and surrounding villages saved sacred trees from being cut down by the king's soldiers. • 363 Bishnoi villagers were killed in this movement. • The king who came to know about these events rushed to the village and apologized, ordering the soldiers to cease logging operations. • Soon afterwards, the maharajah designated the Bishnoi state as a protected area, forbidding harm to trees and animals. • This legislation still exists today in the region. | Explanation – 5 marks | 12 Marks |

Part C

(2 x 20 = 40 Marks)

| Q No | Solution | Scheme of Marking | Max. Time required for |
|------|----------|-------------------|------------------------|
|------|----------|-------------------|------------------------|

| | | | each Question |
|----|---|--|------------------|
| 19 | <p>Various types of land degradation and its preventive measures:</p> <p>Types of Land degradation:</p> <ul style="list-style-type: none"> Soil erosion by water Soil erosion by wind Soil fertility decline Water logging Increase in salt content Sedimentation and soil burial <p>Preventive measures:</p> <ul style="list-style-type: none"> Strip farming Crop rotation Ridge and furrow formation Construction of dams Contour farming | <p>Types – 10 marks</p> <p>Preventive measures – 10 marks</p> | 25 Minutes |
| 20 | <p>Man-wildlife conflict and various mitigation strategies</p> <p>Human-wildlife conflict refers to the interaction between wild animals and humans, and the resultant negative impact on people, animals, resources, and habitats.</p> <p>Mitigation Strategies:</p> <ol style="list-style-type: none"> 1. Translocation of problematic animals: 2. Building of fences or other barriers: 3. Improving community education and perception of animals: 4. Effective land use planning: 5. Compensation: 6. Predator-deterring guard dogs: | <p>Meaning – 5 marks</p> <p>Strategies with explanation – 15 marks</p> | 25 Minutes |
