

2010

M.Sc.

3rd Semester Examination

ZOOLOGY

PAPER—Z-303

Full Marks : 40

Time : 2 Hours

*The figures in the right-hand margin indicate full marks.
Candidates are required to give their answers in their
own words as far as practicable.*

Illustrate the answers wherever necessary.

Group—A

(Environmental Management and Biodiversity)

1. Answer any two questions : 2×2
- (a) Differentiate between resource and wealth. Give example.
 - (b) What is sustainable use of resource ?
 - (c) What is Environment Kuznets Curve ?
 - (d) What is CBD ?

2. Answer any *two* of the following : 4×2
- (a) What do you understand by 'Ecological-Societal' Gaps ?
 - (b) Draw the model of two contrasting scenarios of human survival as suggested by V.R. Potter (1988).
 - (c) What is a 'Biodiversity Hotspot' ? Name 4 Biodiversity Hotspots of India.
 - (d) Name one Act pertaining protection of air, water, forest and biodiversity and state in which year these were enacted in India.
3. Answer any *one* of the following : 8×1
- (a) Define Environmental Impact Assessment (EIA). Give a brief account of the 12 steps followed in EIA process as has been suggested by UNEP (1996).
2+6
 - (b) Give a brief account of the types and causes of species extinction. What is extirpation? Give example.
6+2

Group—B*(Environmental Resource and Pollution)*

1. Answer any *two* of the following : 2×2
- (a) Distinguish between Inexhaustible and exhaustible resource.
 - (b) Enlist different sources of fossil fuels.
 - (c) Differentiate between point pollution and non point pollution.
 - (d) What are oxygen demanding wastes?
 - (e) Differentiate between London type and Los-Angeles type of smog.
2. Answer any *two* of the following : 4×2
- (a) Mention different steps to be undertaken for sustainable use of mineral resource.
 - (b) State different zones of atmosphere alongwith their environmental characteristics.
 - (c) Briefly state the impact of chemical fertilizers on environment.
 - (d) Citing a suitable example explain the phenomenon of biomagnification.

3. Answer any one of the following :

8x1

- (a) Briefly state the chemical processes leading to the formation of photochemical smog. Mention the role of meteorological parameters in the development of photochemical smog.
- (b) What is acid rain? State the chemical reactions leading to the formation of acid rain. Distinguish between wet and dry acid precipitation.
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