

2012

M.Sc.

3rd Semester Examination

ZOOLOGY

PAPER—ZOO-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 of the following : 2×2
- (a) What is Human Development Index (HDI) ?
 - (b) What is Demographic Quotient ?
 - (c) Enlist the causes of extinction.
 - (d) How conservation has been defined in World Conservation strategy ?

(Turn Over)

2. Answer any *two* questions of the following : 4×2
- (a) Briefly discuss different steps for Environmental Management.
 - (b) What is PIL (Public Interest Litigation) ?
 - (c) Elaborate the concept of Environmental Kuznets Curve.
 - (d) State the importance of biomonitoring over chemical monitoring.
3. Answer *one* question of the following : 8×1
- (a) Define Biodiversity. Briefly discuss Ex-Situ and In-Situ Biodiversity Conservation with proper examples. Enlist the criteria to assign the status of 'Biodiversity Hotspot'. 2+4+2
 - (b) What is EIA ? Discuss different types and steps in EIA. Mention the criteria for the selection of suitable plant species for Environmental Management. 2+4+2

Group—B

(Environmental Resource and Pollution)

4. Answer any *two* questions of the following : 2×2
- (a) Define Oxygen demanding water.
 - (b) Differentiate point and non-point pollution.
 - (c) Explain the causes of green house effect.
 - (d) Mention different non-conventional sources of energy.

5. Answer any two questions of the following : 4×2
- (a) State the effects of acid rain on terrestrial ecosystem.
 - (b) Mention the environmental impact of chemical fertilizers.
 - (c) Explain the process of 'biomagnification'.
 - (d) State the effects of noise pollution on human health.
6. Answer any one question of the following : 8×1
- (a) Define eutrophication. Differentiate natural eutrophication from cultural one. Add a note on impact of thermal powerplants on adjoining environment. 2+3+3
 - (b) What is photochemical smog? What are the differences between Los-Angeles and London type of smog. Discuss different chemical pathways leading to develop photochemical smog. 2+2+4
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