2018

M.Sc. 2nd Semester Examination

ZOOLOGY

PAPER—ZOO-204

Subject Code—35

Full Marks : 40

Time : 2 Hours

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

(CBCS)

Group–A

(Wildlife diversity and Environmental Management)

1. Answer any *two* questions of the following : 2×2

(a) What are the criteria for designating a place as a "Hot-spot" ?

(b) Differentiate Text Book knowledge from traditional one.

(c) What do you mean by 'Ecological Services'?

(d) Mention the reasons of the declining of the density and diversity of wild life from South West Bengal.

2. Answer any *two* questions of the following : 2×4

(a) Explain the statement — "Wild vs. Domesticated" with present situation.

(b) Distinguish between Conservation Reserves and Community Reserves.

(c) Briefly discuss on the Wild Life Protection Act (1976) with its different schedules.

(d) Explain territorial defense streategy in respect of tiger.

3. Answer *one* question of the following : 1×8

(a) Briefly discuss on the classical idea about wild life conservation and its changing trend. Elaborate the concept of SLOSS. 6+2

(b) Differentiate pollution from ecodegradation. What are the different components of Environmental Management? Add a note on mitigation strategy against global warming. 2+3+3

Group–B

(Bioinformatics)

4. Answer any *two* questions of the following : 2×2

(a) Distinguish between Local Allignment and Global Allignment.

(b) How is Bioinformatics different from computational biology ?

(c) When was GenBank established and who developed FASTA ?

(d) Write down the implications of Bioinfomatics in recent era.

5. Answer any *two* questions of the following : 2×4

(a) Justify — 'BLAST is a tool for homology searching'. Give examples of Primary nuclic acid databases. 2+2

(b) Illustrate the functional anatomy of a Digital Computer. 4

(c) Define Entity, Attributes and Data Items. Give examples from any biological database displaying its 'Features page'. 1½+2½

(d) Schematically represent the various subfields of Bioinformatics. 4

6. Answer *one* question of the following : 1×8

(a) (i) Write down the full forms of :
CDD ; ncbi ; SQL ; DBMS.

(ii) Name the types of Database structures currently used by Biological databases. Elaborate the categories of Biological databases based on their contents with proper examples. 2+1+3+2

(b) (i) Convert 10100 from binary to Decimal value.

(ii) Distinguish between system and Application software.

(iii) Elaborate the different kinds of web search tools. 2+3+3

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