

Total No. of Printed Pages—4

HS/XII/SC/Bio-Zoo/OC/20

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BIO-ZOOLOGY

(Old Course)

(**Theory**)

Full Marks : 35

Time : 1½ hours

General Instructions :

- (i) Write all the answers in the Answer Script.
- (ii) Attempt all parts of a Group serially in one place.
- (iii) All questions are compulsory.
- (iv) This question paper consists of 5 (five) Groups—A, B, C, D and E.

Group—A consists of 4 questions (multiple-choice type). Each question (Q. Nos. **1–4**) carries 1 mark.

Group—B consists of 4 questions (very short-answer type). Each question (Q. Nos. **5–8**) carries 1 mark and to be answered in one sentence.

Group—C consists of 4 questions (short-answer type—I). Each question (Q. Nos. **9–12**) carries 2 marks and to be answered in 20-30 words.

Group—D consists of 3 questions (short-answer type—II). Each question (Q. Nos. **13–15**) carries 3 marks and to be answered in 30-40 words.

Group—E consists of 2 questions (long-answer type). Each question (Q. Nos. **16** and **17**) carries 5 marks with alternatives to be answered in 60-80 words.

(2)

GROUP—A

Choose and write the correct answer of the following :

1. Manas Wildlife Sanctuary is located in 1
 - (a) Meghalaya
 - (b) Assam
 - (c) West Bengal
 - (d) Rajasthan

2. What causes the loss of biodiversity? 1
 - (a) Habitat degradation
 - (b) Invasion of non-native species
 - (c) Pollution
 - (d) All of the above

3. Which of the following is a terminal method of contraception? 1
 - (a) IUDS
 - (b) Contraceptive pills
 - (c) Lactational amenorrhea
 - (d) Tubectomy

(3)

4. Antibodies are produced by 1
- (a) leucocytes
- (b) lymphocytes
- (c) erythrocytes
- (d) platelets

GROUP—B

5. What is the full form of AIDS? 1
6. What is colostrum? 1
7. What is the role of plasmid in genetic engineering? 1
8. What is genome? 1

GROUP—C

9. What is capacitation with reference to sperm? 2
10. What is meant by 'ontogeny repeats phylogeny'? 2
11. State Mendel's law of independent assortment. 2
12. What is greenhouse effect? Name any greenhouse gas. 2

(4)

GROUP—D

- 13.** Define parturition. Name the hormones involved in the process and their sources. 3
- 14.** Briefly describe DNA fingerprinting. 3
- 15.** Differentiate between benign and malignant tumours. 3

GROUP—E

- 16.** What is fertilization? Where does it take place in the human female? What are the significances of this developmental process? 5

Or

Define cleavage. Describe the process of cleavage in humans with well-labelled diagrams. 5

- 17.** What are the main postulates of the 'theory of natural selection' proposed by Charles Darwin? 5

Or

What are the possible blood groups of children born from a man with blood group AB and a woman with blood group O? Illustrate with the help of a cross. 5

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