

FBD-12-18

Roll No. : _____

Objective
Paper Code
8461

Intermediate Part Second (New Scheme)
BIOLOGY (Objective)
Time: 20 Minutes Marks: 17



Q.No.1 You have four choices for each objective type question as A, B, C and D. The choice which you think is correct, fill the relevant circle in front of that question number on computerized answer sheet. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero marks in that question. Attempt as many questions as given in objective type question paper and leave other circles blank.

| S.# | Questions | A | B | C | D |
|-----|--|----------------|-------------------|-----------------|-----------------------|
| 1 | The excretory product which require minimum water for its removal: | Urea | Uric acid | Creatinine | Ammonia |
| 2 | Meta nephridia are the excretory structure present in: | Hydra | Planaria | Cockroach | Earthworms |
| 3 | A condition in which palatine processes of maxilla and palatine fail to fuse is called: | Cleft palate | Microcephaly | Cretinism | Myxedema |
| 4 | The fusion of four posterior vertebrae in pelvic region form: | Sacrum | Lumbar | Coccyx | Chest Cage |
| 5 | The corpuscles situated quite deep in the body and are in form of encapsulated neurons ending, receive deep pressure stimulus are: | Meissner's | Pacinian | Nissal's | White blood cells |
| 6 | Fruit ripening is often accompanied by a burst of respiratory activity, called: | Fertilization | Photoperiod | Climacteric | Vernalization |
| 7 | The condition in which biennial and perennial plants are stimulated to flower by expoux to low temperature is called: | Photoperiodism | Vernalization | Parthenogenesis | Apomixis |
| 8 | The negative physiological changes in our body is called: | Teratology | Degeneration | Aging | Abnormalities |
| 9 | The number of chromosomes in mouse is: | 40 | 26 | 20 | 16 |
| 10 | The stage of meiosis that last for days, weeks or even year is called: | Leptotene | Zygotene | Pachytene | Diplotene |
| 11 | The tumor which is localized and not transferred to the other body parts: | Malignant | Benign | Apoptosis | Necrosis |
| 12 | A single gene with multiple phenotypic effect is describe as: | Co-dominance | Epistasis | Pleiotropy | Gene linkage |
| 13 | The first restriction enzyme was isolated by: | Kary Mulis | Hamilton O. Smith | Sanger | Maxam Gilbert |
| 14 | Darwin "Origin of species" was published in: | 1840 | 1859 | 1865 | 1890 |
| 15 | Study of different communities with relation to environment is called: | Synecology | Autecology | Embryology | Zoology |
| 16 | The scientific name for rhesus monkey is : | Macaca mullata | Taxus baccata | Felis catus | Solenorctor tibetanus |
| 17 | Water present in form of frozen ice caps is: | 1% | 2% | 3% | 4% |

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FBD-12-18

BIOLOGY (Subjective)

Time: 02:40 Hours

Marks: 68

SECTION – I

2. Write short answers to any EIGHT parts.

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- (i) What is pyrexia?
- (ii) What are excretophores and why?
- (iii) Differentiate between protonephridia and metanephridia.
- (iv) Differentiate between heart wood and sap wood.
- (v) What is moulting? Write its stages.
- (vi) What is cramp? Write its causes.
- (vii) What is apomixis?
- (viii) Define seed dormancy, write its significance.
- (ix) What is eutrophication?
- (x) Write the consumers of grassland.
- (xi) Write four methods of energy conservation.
- (xii) What is deforestation, and write its two harmful effects.

3. Write short answers to any EIGHT parts.

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- (i) Differentiate between mechanoreceptors and thermo receptors.
- (ii) What are effectors? Give examples.
- (iii) What are neurotransmitters? Quote an example.
- (iv) Differentiate between population and gene pool.
- (v) What is law of segregation?
- (vi) What are multiple alleles? Give an example.
- (vii) Define biotechnology.
- (viii) Write three possible ways, how to get a gene?
- (ix) Differentiate between hydrosere and xerosere.
- (x) What is foliage lichen stage? Give an example.
- (xi) What is cloning of a gene?
- (xii) Define commensalism. Give an example.

4. Write short answers to any SIX parts.

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- (i) What is blastoderm?
- (ii) What are teratogens? Give an example.
- (iii) What is mutation? Give its name of two classes.
- (iv) What is phenylketonuria?
- (v) Differentiate between euchromatin and heterochromatin.
- (vi) Differentiate between necrosis and apoptosis.
- (vii) Define theory of special creation.
- (viii) Define metastasis.
- (ix) Differentiate between homologous and analogous organs.

SECTION – II Attempt any THREE questions. Each question carries 08 marks.

5. (a) Describe adaptations in plants to low and high temperature. 04
 (b) Describe the phenomenon of grazing. 04

6. (a) Describe paratonic movements in plants. 04
 (b) Write a note on chemical composition of chromosomes. 04

7. (a) Describe the functions and commercial application of cytokinins. 04
 (b) Write a note on degradation and depletion of resources. 04

8. (a) Write a note on identical twins. 04
 (b) Write a note on diabetes mellitus. 04

9. (a) Write a note on growth correlations. 04
 (b) Describe comparative anatomy and biogeography as an evidence of evolution. 04