

Objective
Paper Code
8467

Intermediate Part Second (New Scheme)
BIOLOGY (Objective) GROUP - I
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	Structure of human brain that controls hunger is:	Amygdala	Hippocampus	Thalamus	Hypo-thalamus
2	Cancer is mainly caused by mutations in:	Malignant cells	Somatic cells	Sex cells	Reproductive cells
3	Synapsis takes place during:	Leptotene	Zygotene	Pachytene	Diplotene
4	Release of egg from follicle is called as:	Ovulation	Menstruation	Follicle atresia	Fertilization
5	The first convoluted part of vas deferens is:	Epididymis	Seminiferous tubule	Urethra	Germinal epithelium
6	Turgor pressure is generated by high osmotic pressure of cell:	Cytoplasm	Vacuole	Cell wall	Cell membrane
7	The joint that allows movement in two directions only:	Cartilaginous joint	Fibrous joint	Hinge joint	Ball & socket joint
8	The incidence of uric acid kidney stones is:		15%	20%	70%
9	Fresh water protozoans pump out excess water by:	Food vacuole	Contractile vacuole	Pinocytosis	Phagocytosis
10	The decline in thickness of ozone layer is due to increasing level of:	CO ₂	CFCs	Hydrogen	Hydrocarbons
11	Northern coniferous forests are called as:	Boreal	Taiga	Alpine	Deciduous
12	Once nitrate enters the plant cell it is reduced to:	Nitrite	Ammonia	Proteins	Carbohydrate
13	Biogeography, is the geographical distribution of:	Phylum	Class	Species	Genus
14	Which enzyme acts as molecular scissors?	DNA polymerase	RNA polymerase	Restriction endonuclease	DNA gyrase
15	Blood serum containing antibodies is called as:	Plasma	Antigen	Immuno-globulin	Antiserum
16	The particular array of chromosomes that an individual possesses is:	Kinetochore	Centromere	Karyotype	Kinesis
17	In ascidian fertilized egg, yellow cytoplasm gives rise to:	Muscle cells	Larval epidermis	Notochord & neural tube	Gut

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SECTION - I

Write short answers to any EIGHT parts.

16

- (i) Write at least two characters of xerophytes.
- (ii) What is lithotripsy? How it takes place?
- (iii) What are heat-shock proteins? Give their role.
- (iv) Define cartilage. Give its types.
- (v) What is osteoporosis? Why it occurs in aged women?
- (vi) Differentiate between passive and active flight.
- (vii) What is plasmid? Give an example.
- (viii) What is cystic fibrosis?
- (ix) Define climate and weather.
- (x) How the productivity of aquatic ecosystem is determined?
- (xi) Enlist at least two ways to conserve energy.
- (xii) Differentiate between reforestation and afforestation.

16

Write short answers to any EIGHT parts.

- (i) Differentiate between chemoreceptors and mechanoreceptors.
- (ii) Define reflex arc and give its components.
- (iii) Which hormones are secreted by posterior lobe of pituitary gland?
- (iv) Define seed dormancy. Give its importance.
- (v) What is ovoviviparity? Give its example.
- (vi) Describe the process of cloning.
- (vii) What is a test cross? Give its significance.
- (viii) What are multiple alleles? Give one example.
- (ix) Explain testicular feminization syndrome.
- (x) Define succession. Name its types.
- (xi) Differentiate between habitat and niche.
- (xii) Differentiate between predation and parasitism.

12

Write short answers to any SIX parts.

- (i) What is Hensen's node?
- (ii) What is discoidal cleavage?
- (iii) Differentiate between karyokinesis and cytokinesis.
- (iv) What changes occur in a cell during G₁-phase of interphase?
- (v) What are vestigial organs? Give two examples.
- (vi) Define genetic drift. Give its effect on a population.
- (vii) Name three types of RNA's. Give function of each RNA.
- (viii) What are Okazaki fragments?
- (ix) Differentiate between transcription and translation.

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

5. (a) Define osmoregulation. Describe the various categories of plants on the basis of osmoregulation. 04
(b) Define an ecosystem. Write a note on biotic components of an ecosystem. 04
6. (a) What are paratonic movements? Discuss its various types. 04
(b) Discuss Meselson and Stahl experiment to show semi-conservative replication. 04
7. (a) Explain gonadotrophic hormones. 04
(b) What do you know about wild life? Explain it. 04
8. (a) Describe the process of birth in human female. 04
(b) Describe the different patterns of sex determination. 04
9. (a) Explain signs and process of aging. 04
(b) How did evolution proceed from prokaryotes to eukaryotes. 04

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