



Roll No. 76245 (To be filled in by candidate)

Inter (Part I)-A-2019

(For all sessions)

Paper Code	6	4	6	1
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**Biology** (Objective Type)

RWP-11-19

Marks: 17

Time: 20 Minutes

NOTE: Write answers to the questions on the objective answer sheet provided. Four possible answers A, B, C and D to each question are given. Which answer you consider correct, fill the corresponding circle A, B, C or D given in front of each question with Marker or pen ink on the answer sheet provided.

- 1.1. The most recent era is:
 

(A) Proterozoic	(B) Paleozoic	(C) Cenozoic	(D) Mesozoic
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2. The specific heat of vaporization of water in Kcal/kg is:
 

(A) 580	(B) 574	(C) 597	(D) 602
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3. Optimum pH for Arginase enzyme is:
 

(A) 4.50	(B) 5.50	(C) 9.70	(D) 7.60
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4. Cisternae are associated with:
 

(A) ER	(B) Mitochondria	(C) Nucleus	(D) Chloroplast
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5. Madcow infection is caused by:
 

(A) Bacteria	(B) Prions	(C) Virions	(D) Protozoans
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6. Reserve food material in cyanobacteria is:
 

(A) Starch	(B) Glucose	(C) Glycogen	(D) Cellulose
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7. *Pelomyxa palustris* is an example of:
 

(A) Bacterium	(B) Ciliate	(C) Algae	(D) Amoeba
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8. *Aspergillus* belongs to Phylum:
 

(A) Zygomycota	(B) Deuteromycota	(C) Ascomycota	(D) Basidiomycota
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9. Fern Prothallus is:
 

(A) Sporophyte	(B) Saprophyte	(C) Gametophyte	(D) Seed
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10. Kangaroo belongs to sub-class:
 

(A) Eutheria	(B) Metatheria	(C) Prototheria	(D) Megatheria
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11. Sea urchin belongs to phylum:
 

(A) Arthropoda	(B) Echinodermata	(C) Annelida	(D) Protozoa
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12. The number of chloroplast in each mesophyll cell is about:
 

(A) 10-100	(B) 10-200	(C) 20-100	(D) 20-200
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13. The breaking of terminal bond of ATP releases energy of about:
 

(A) 4.5Kcal	(B) 3.7Kcal	(C) 6.8Kcal	(D) 7.3Kcal
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14. Casparian strips are present in cells of root:
 

(A) Cortex	(B) Epidermis	(C) Endodermis	(D) Xylem
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15. The valves present in the veins are called:
 

(A) Bicuspid	(B) Semi-lunar	(C) Tricuspid	(D) Aortic
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16. Excess gastric secretions is an important factor of:
 

(A) Peptic ulcer	(B) Obesity	(C) piles	(D) Food poisoning
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17. Respiratory system is most efficient in:
 

(A) Fish	(B) Man	(C) Snake	(D) Bird
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825-011-A-☆

Roll No. \_\_\_\_\_ (to be filled in by the candidate)

(For all sessions)

RWP-11-19

**Biology** (Essay Type)

Time: 2:40 Hours

Marks: 68

**Section - I**

2x22=44

**2. Write short answers of any eight parts from the following.**

2x8=16

- i. What are Dikaryotic hyphae?
- ii. Differentiate between radiotherapy and gene therapy?
- iii. Draw labelled diagram of HIV.
- iv. Differentiate between pepsin and pepsinogen.
- v. How pH affects the rate of enzyme action?
- vi. How temperature affects the rate of enzyme action?
- vii. Give two important characteristics of mammals.
- viii. Give some affinities of Echinoderms with hemichordates.
- ix. What is the agricultural importance of Earthworms.
- x. Differentiate between infestation and disinfestation.
- xi. Define Biodiversity? Give its percentage of different groups of organisms discovered so far?
- xii. Differentiate between septate and non-septate hyphae?

**3. Write short answers of any eight parts from the following.**

2x8=16

- i. Write down main physical methods to control bacteria.
- ii. Write down two important characteristics of diatoms.
- iii. How algae differ from plants?
- iv. What is Trypanosoma? What disease does it cause?
- v. Give two examples each of Red algae and Green algae.
- vi. Name the classes of division bryophyte.
- vii. Differentiate between homosporous and heterosporous.
- viii. What is biological oxidation?
- ix. Differentiate between absorption and assimilation.
- x. Differentiate between aerobic and anaerobic respiration.
- xi. What is botulism?
- xii. Differentiate between carnivores and omnivores.

**4. Write short answers of any six parts from the following.**

2x6=12

- i. What is glycogenosis type-II disease?
- ii. What is differentially permeable membrane?
- iii. Differentiate between amylose and amylopectin starches.
- iv. What do you know about blue babies?
- v. Compare guttation with transpiration.
- vi. Write four properties of respiratory surface in animals.
- vii. What is respiratory distress syndrome?
- viii. Define photorespiration.
- ix. Differentiate between breathing and cellular respiration.

**Section - II****NOTE: Answer any three questions from the following.**

8x3=24

5. (a) What is Biological Method? Describe its various steps. 4
- (b) Give four differences between arteries and veins. 4
6. (a) Describe polysaccharides in detail. 4
- (b) Fungi are well adapted to live on land. Give reasons. 4
7. (a) What are plastids? Describe structure and function of chloroplast. 4
- (b) Explain the process of digestion in cockroach. 4
8. (a) Give characteristics of viruses. 4
- (b) Draw glycolysis. Give its energy balance. 4
9. (a) Discuss bacteria under the given headings: (i) Ecological importance (ii) Economic importance. 4
- (b) Define alternative of generation. Explain significance of Alternation of generation. 4

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