

**RWP**

Inter (Part-I)-A-2018

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

Paper Code	2	4	6	1
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**Sessions; 2015-2017, 2016-2018 & 2017-2019****Biology (Objective Type)****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. Which one is a trace element?  
 (A) Calcium (B) Chlorine (C) Zinc (D) Phosphorus
2. Keratin is an example of Fibrous protein present in:  
 (A) Blood (B) Muscle (C) Bones (D) Nail and Hair
3. The detachable co-factor of an enzyme is known as:  
 (A) Activator (B) Prosthetic group (C) Co-enzyme (D) Apo-enzyme
4. Tay-sach's disease results due to accumulation of:  
 (A) Proteins (B) Lipids (C) Glucose (D) DNA
5. The infectious proteins are:  
 (A) Viruses (B) Virions (C) Prions (D) Peptones
6. Reserve food material in cyanobacteria is:  
 (A) Starch (B) Glycogen (C) Fats (D) Glycerol
7. The feeding stage of slime mold is called:  
 (A) Plasmodium (B) Pseudopodium (C) Endocytosis (D) Seizing
8. The most common rust fungi are:  
 (A) Ustilago (B) Puccinia (C) Yeast (D) Penicillium
9. Living genus of psilopsida is:  
 (A) Cooksonia (B) Psilophyton (C) Horneophyton (D) Psilotum
10. Portuguese man of war is the name used for:  
 (A) Physalia (B) Obelia (C) Hydra (D) Aurelia
11. The largest invertebrate animal is:  
 (A) Dogfish (B) Cuttle fish (C) Giant Squid (D) Octopus
12. The first step in Krebs cycle is the union of acetyl COA with oxaloacetate to form:  
 (A) Isocitrate (B)  $\alpha$ -Ketoglutarate (C) Citrate (D) Malate
13. Plastocyanin protein contains:  
 (A) Iron (B) Copper (C) Magnesium (D) Potassium
14. Hepatic and pancreatic secretions are stimulated by a hormone called:  
 (A) Secretin (B) Gastrin (C) Zymogen (D) Parietal
15. The number of air sacs in most birds are:  
 (A) 06 (B) 07 (C) 08 (D) 09
16. Guttation occurs in plants through:  
 (A) Cuticle (B) Hydathodes (C) Lenticels (D) Stomata
17. Discharge of Blood from blood vessel is called as:  
 (A) Stroke (B) Heart attack (C) Thrombosis (D) Haemorrhage

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Sessions: 2015-2017, 2016-2018 &amp; 2017-2019

**Biology** (Essay Type)

Time: 2:40 Hours

Marks: 68

**Section - I**

2x22=44

2x8=16

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

- i. Differentiate between amylose and amylopectin starches.
- ii. Define activators. Give examples.
- iii. Define active site and also mention its sites.
- iv. What are competitive inhibitors?
- v. Define aflatoxins.
- vi. What are toad stools? Give examples.
- vii. What is madreporite? Give its function.
- viii. Write down four harmful effects of insects.
- ix. Differentiate between polyps and medusae.
- x. Write down economic importance of sharks.
- xi. What are the products of light reaction of photosynthesis?
- xii. Define calvin cycle. Where does it occur.

2x8=16

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

- i. What is meant by integrated disease management?
- ii. Differentiate between population and community.
- iii. Differentiate between microtubules and microfilaments.
- iv. What is Tay-sach's disease?
- v. Write two characters of zooflagellates.
- vi. What are choanoflagellates?
- vii. What is the evolutionary significance of euglenoids?
- viii. Write two characters of water molds.
- ix. Write two scientific names of plants belonging to family solanaceae.
- x. Define double fertilization.
- xi. What is meant by systemic circulation?
- xii. What do you mean by blue babies?

2x6=12

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

- i. What are chemosynthetic bacteria? Give their function.
- ii. What are the rules of binomial nomenclature?
- iii. What is chlorosis? Give their causes.
- iv. What are fluid feeders? Give their example.
- v. What are nematocytes? Give their function.
- vi. Differentiate between diaphragm and pleura.
- vii. What is composition of exhaled air and inhaled air?
- viii. What is emphysema? Write their causes.
- ix. How pH and temperature effect capacity of haemoglobin to combine with oxygen?

**Section - II**

8x3=24

**NOTE: Answer any three questions from the following.**

5. (a) Explain organ and system and individual level of biological organization. 4
- (b) Transpiration is a necessary evil. Comment. 4
6. (a) What is RNA? Discuss its types. 4+4=8
- (b) Discuss the role of large intestine in human digestion. 4+4=8
7. (a) Write a note on mitochondria. 4+4=8
- (b) What is the role of water in photosynthesis? 4+4=8
8. (a) Describe the life cycle of bacteriophage. 4+4=8
- (b) Write down the economic importance of family rosaceae. 4+4=8
9. (a) Give the economic losses due to fungi. 4+4=8
- (b) Write physical and chemical methods to control bacteria. 4+4=8