

1119 Warning:- Please write your Roll No. in the space provided and sign.  
(Inter Part – I) (Session 2015-17 to 2018-20)

Roll No-----  
Sig. of Student

**SAR**

Biology (Objective)

Paper (I)

Time Allowed:- 20 minutes

**PAPER CODE 2467**

Maximum Marks:- 17

Note:- You have four choices for each objective type question as A, B, C and D. The choice which you think is correct; fill that circle in front of that question number. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero mark in that question. Write **PAPER CODE**, which is printed on this question paper, on the both sides of the Answer Sheet and fill bubbles accordingly, otherwise the student will be responsible for the situation. Use of Ink Remover or white correcting fluid is not allowed.

Q. 1

- 1) During breathing no stale of air remains in the lungs of  
(A) Mammals (B) Amphibian (C) Birds (D) Reptiles
- 2) Lenticels are aerating pores formed in the  
(A) Bark (B) Epidermis (C) Endodermis (D) Pericycle
- 3) Open circulatory system is present in  
(A) Man (B) Cockroach (C) Earthworm (D) Leach
- 4) Internal morphology is also called.  
(A) Physiology (B) Anatomy (C) Histology (D) Palaeontology
- 5) How much is energy used for synthesis of 10 g glucose  
(A) 517.6 Kcal (B) 617.6 Kcal (C) 717.6 Kcal (D) 817.6 Kcal
- 6) The enzymes which are involved in protein synthesis are integral part of  
(A) Chromosomes (B) Peroxisomes (C) Lysosomes (D) Ribosomes
- 7) Harmful substances are detoxified in the liver cells by  
(A) Mitochondria (B) Endoplasmic reticulum (C) Golgi complex (D) Nucleolus
- 8) Capsomers are subunits which form capsid of a virion. These capsomeres are chemically  
(A) Lipids (B) Nucleic acids (C) Carbohydrates (D) Proteins
- 9) When cocci divide in three planes and form cube of '8' then they are called  
(A) Sarcina (B) Tetrad (C) Diplococci (D) Streptococci
- 10) Pelomyxa Palustris is commonly called  
(A) Entamoeba (B) Trypanosoma (C) Trichonympha (D) Giant amoeba
- 11) Some fungi are used to control environmental pollution, the process is called  
(A) Biological control (B) Fungal culture (C) Bioremediation (D) Hydroponic
- 12) After fertilization ovule is changed into  
(A) Ovary (B) Seed (C) Fruit (D) Flower
- 13) Dugesia is a free-living flatworm with a ciliated outer surface. It is commonly called.  
(A) Tape worm (B) Liver fluke (C) Blood fluke (D) Planaria
- 14) Ancient fish that have developed lungs are called  
(A) Dipnoi (B) Asterias (C) Thaliacea (D) Leptocardii
- 15) Dark reactions of photosynthesis occur in which part of chloroplast?  
(A) Inner membrane (B) Grana (C) Intergrana (D) Stroma
- 16) In the absence of oxygen, yeast cells obtain energy by fermentation, producing  $CO_2$ , ATP and  
(A) Acetyl.Co-A (B) Ethanol (C) Lactate (D) Pyruvate
- 17) Which of the following is a parasitic plant?  
(A) Drosera (B) Dionaea (C) Cuscuta (D) Sarracenia

**1195 -- 1119 -- 16500 (4)**



1119

Biology (Subjective)

(Session 2015-17 to 2018-20)

Paper (I)

Maximum Marks: 68

Time Allowed: 2.40 hours

(Inter Part - I)

Section ----- I

8 × 2 = 16

2. Answer briefly any Eight parts from the followings:-

- (i) Differentiate between amyloses and amylopectins.
- (ii) How prosthetic group is different from co-enzyme. (iii) Define co-factor and activator.
- (iv) What is lock and key model of enzyme?
- (v) What is hypha? How unseptate hyphae are advantageous?
- (vi) How composition of fungus cell wall is advantageous to fungi?
- (vii) Define radial symmetry and bilateral symmetry. (viii) Give two characters of deuterostomes.
- (ix) Define mesoglea and spongocoel. (x) Differentiate between infestation and disinfestation.
- (xi) Mention two differences between photosynthesis and respiration.
- (xii) How chlorophyll 'a' is different from chlorophyll 'b'?

8 × 2 = 16

3. Answer briefly any Eight parts from the followings:-

- (i) Define parasitology. (ii) What is community. Give two interactions among organisms of a community.
- (iii) Define cell theory. Give its salient features. (iv) Write function of cytoplasm.
- (v) Differentiate between Actinopods and Foraminiferans.
- (vi) Why it is generally accepted that plants arose from ancestral green algae.
- (vii) Write symptoms of Malaria and their cause.
- (viii) Name one Zooflagellate that lives as symbiont and other as parasite causing disease.
- (ix) Differentiate between microphyll and megaphyll.
- (x) What are arthropytes. Why they are called so.
- (xi) What are Platelets. Give their functions. (xii) How heart sound is produced.

6 × 2 = 12

4. Answer briefly any Six parts from the followings:-

- (i) Define virology. (ii) Differentiate between Lag and Log phase. (iii) What is peristalsis?
- (iv) What is bolus? (v) What is botulism, give its cause and symptoms.
- (vi) What are the causes of asthma.
- (vii) Give carbon dioxide concentration in arterial and venous blood.
- (viii) What is myoglobin? Give its role. (ix) What are bronchi and bronchioles.

Section ----- II

(8 × 3 = 24)

Note: Attempt any three questions.

5. (a) Discuss importance of Biology in the field of food production.  
(b) Define immunity? What are its various types?
6. (a) Describe importance of carbon in the skeleton of life.  
(b) Write a note on Ascomycota.
7. (a) Describe growth and reproduction in bacteria.  
(b) Give economic importance of family Poaceae.
8. (a) Write a detailed note on different types of hepatitis.  
(b) Describe the non-cyclic photophosphorylation.
9. (a) Give structure and function of nucleus.  
(b) Describe ingestion, digestion absorption and egestion in hydra.

1196- 1119 -- 16500