

Time Allowed : 20 Minutes

Maximum Marks : 17

Signature of Deputy Supdt. _____

Note : Use this paper to write the answers to the objective questions. No mark will be awarded for cutting, over-writing or using a pencil. This paper must be tagged with the answer-book.

1. Some possible answers to each statement are given below. Tick (✓) mark the correct answer : 17

(i) The reasoning from the general to specific is :

(Deductive. Inductive. Scientific. Theoretical.)

(ii) The specific heat of vaporization of water is ---- Kcal / kg. :

(374 , 474 , 574 , 674)

(iii) If non-protein part is loosely attached to the protein part, it is known as :

(Co-factor. Co-enzyme. Holo enzyme. Prosthetic group.)

(iv) Endocytosis, which involves ingestion of solid material is :

(Pinocytosis. Phagocytosis. Solidocytosis. Phagocytosis and Solidocytosis.)

(v) Which of the following diseases is not caused by virus :

(Cholera. Hepatitis. Influenza. Polio.)

(vi) A bacteria with single polar flagellum is :

(Atrichous. Lophotrichous. Amphitrichous. Monotrichous.)

(vii) Which of the following causes sleeping sickness :

(Trichonymphas. Trypanosoma. Choanoflagellae. None of these.)

(viii) Histoplasmosis is a :

(Heart disease. Kidney disease. Lung disease. None of these.)

(ix) The vascular plants are :

(Bryophytes. Embryophytes. Tracheophytes. None of these.)

(x) The biological name of Amaltas is :

(Cassia senna. Bauhinia variegata. Cassia fistula. None of these.)

(xi) The excretory system of arthropods is composed of :

(Malapighian tubules. Flame cells. Nephridia. Nephron.)

(xii) The pouched mammals are :

(Prototheria. Metatheria. Eutheria. None of these.)

(Turn Over)

(2)

1. (xiii) The quantitative study of energy relationship in the biological system is :

(Biochemistry. Biotechnology. Bioenergetics. Biophysics.)

(xiv) The animals which feed on plants are :

(Detritivores. Herbivores. Carnivores. Omnivores.)

(xv) The respiratory organs in Fish are :

(Lungs. Air sacs. Gills. Tracheae.)

(xvi) Which of the following artery supplies blood to heart muscles :

(Pulmonary. Coronary. Systemic. None of these.)

(xvii) The shrinkage of protoplast due to exosmosis is :

(Ascent of sap. Guttation. Plasmolysis. Deplasmolysis.)

43-208-(Objective Type)-155 00

Roll No _____ (To be filled in by the candidate)

(Academic Sessions 2006 – 2008 & 2007 – 2009)

BIOLOGY
PAPER – I (Essay Type)

208-(INTER PART – I)

Time Allowed : 2.40 hours
Maximum Marks : 68

Note : All questions are to be attempted on the answer book.

SECTION – I

2. Write any TWENTY TWO short answers of the following questions :

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- (i) What do you mean by integrated disease management?
- (ii) What is biotechnology?
- (iii) What are anabolic and catabolic reactions?
- (iv) What is general formula for the amino acid?
- (v) What do you mean by optimum pH for an enzyme?
- (vi) What is Lysosome? Give its function.
- (vii) Write the chemical composition of primary and secondary cell wall.
- (viii) Write the number of capsomeres in capsid of Herpes Virus.
- (ix) What is binomial nomenclature?
- (x) What are pili? Write their functions.
- (xi) Write the difference between saprophytic and parasitic bacteria.
- (xii) What are limestone deposits? How are they formed?
- (xiii) Write the two characteristics of ciliates.
- (xiv) Differentiate between plasmogamy and karyogamy.
- (xv) Name sexual and asexual spores of ascomycetes.
- (xvi) What is the significance of alternation of generation in plants?
- (xvii) Differentiate between microphylls and megaphylls.
- (xviii) Write the biological name of shisham and sweet pea.
- (xix) What are diploblastic animals?
- (xx) Write the four names of harmful insects.
- (xxi) Define placenta. What is its function?
- (xxii) Differentiate between cold blooded and warm blooded animals.
- (xxiii) What is an action spectrum?
- (xxiv) What do you know about Rubisco?
- (xxv) Define photophosphorylation.
- (xxvi) What is pyrosis?
- (xxvii) Give the features of saprophyte.
- (xxviii) What is pleura?
- (xxix) What is diving reflex?
- (xxx) State pressure flow theory.
- (xxxi) Define imbibition.
- (xxxii) What is pulmonary circulation?
- (xxxiii) Give the role of platelets.

SECTION – II

Note : Attempt any THREE questions.

3. Write an essay on Lipids. 8
4. Describe life cycle of bacteriophage. 8
5. (a) Explain the floral characters of family Solanaceae. 5
(b) Give at least three medicinal benefits of fungi. 3
6. Explain Kreb's cycle and sketch its various steps. 8
7. Define transpiration. Describe the mechanism of opening and closing of stomata. 8