

OBJECTIVE

DQK-42-11-18

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.

QUESTION NO. 1

- 1 The branch of Biology which deals with the study of environmental relations of organisms is called
(A) Morphology (B) Ecology (C) Evolution (D) Zoogeography
- 2 The percentage by weight of RNA in a bacterial cell is
(A) 0.25 % (B) 2 % (C) 3 % (D) 6 %
- 3 An enzyme with its co-enzyme or prosthetic group removed is designated as
(A) Holoenzyme (B) Apoenzyme (C) Co-enzyme (D) Activator
- 4 Palade was first person to study
(A) Nucleus (B) Peroxisome (C) Ribosomes (D) Mitochondria
- 5 In five kingdom system ,Eukaryotic multicellular reducers are placed in kingdom
(A) Monera (B) Protista (C) Fungi (D) Animalia
- 6 A condition when tuft of flagella at each of two poles of bacteria is present is called
(A) Atrichous (B) Lophotrichous (C) Amphitrichous (D) Peritrichous
- 7 Which one belongs to Actinopodes
(A) Trypanosoma (B) Plasmodium (C) Verticella (D) Radiolarians
- 8 Which one is an example of foliose lichens
(A) Ramalina (B) Bacidia (C) Lecanora (D) Parmelia
- 9 Vascular plants belonging to subdivision sphenopsida are commonly called
(A) Whisk ferns (B) Club mosses (C) Horsetails (D) Ferns
- 10 Which one is not example of phylum Mollusca
(A) Loligo (B) Sepia (C) Octopus (D) Asterias
- 11 Which one does not belong to sub class Eutheria
(A) Bat (B) Mice (C) Kangaroo (D) Dolphin
- 12 Calvin cycle is also known as
(A) C₃ Pathway (B) C₄ Pathway (C) C₅ Pathway (D) C₆ Pathway
- 13 The first step in the Krebs cycle is the union of Acetyl CoA with Oxaloacetate to form
(A) Citrate (B) Fumarate (C) Succinate (D) Acetate
- 14 Parietal cells of linings of human stomach secrete
(A) Mucus (B) Hydrochloric acid (C) Pepsinogen (D) Gastrin
- 15 100 ml of arterial blood of human being contains CO₂ (Carbon dioxide)
(A) 50 ml (B) 54 ml (C) 56 ml (D) 58 ml
- 16 Roots bear a dense cluster of tiny hair like structures which are extensions of
(A) Epidermal cells (B) Pericycle cells (C) Endodermal cells (D) Cortical cells
- 17 Which of the following vertebrates posses single circuit heart
(A) Reptiles (B) Birds (C) Mammals (D) Fishes

SECTION-I**QUESTION NO. 2 Write short answers any Eight (8) questions of the following**

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- (1) What are Phylatic lineage and biodiversity?
- (2) Define: a) Theory b) Law
- (3) Define species with an example
- (4) Differentiate between reversible and irreversible inhibitor
- (5) What is induced fit model of enzyme action ? Who proposed it ?
- (6) What is an activator ? Give examples.
- (7) Differentiate between radial symmetry and bilateral symmetry.
- (8) How spiral cleavage is different from radial cleavage?
- (9) What are pseudocoelomates and coelomates?
- (10) Define diploblastic and triploblastic organization.
- (11) What is economic importance of yeasts ?
- (12) Differentiate between sporangia and conidia.

QUESTION NO. 3 Write short answers any Eight (8) questions of the following

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- (1) Differentiate between flagellum and flagellin.
- (2) Differentiate between Oomycetes and Myxomycota.
- (3) What is Chlorella? Give it's an economic importance.
- (4) What are Rhodophyta? Give examples and their pigments
- (5) What is Plasmodium? Give names of its hosts.
- (6) Differentiate between monocotyledonous and dicotyledonous
- (7) Give botanical names of following plants ,Potato, Tobacco, Tomato and red pepper
- (8) What is compensation point? Give its timings.
- (9) Differentiate between Chlorophyll 'a' and chlorophyll 'b'. (formulae)
- (10) What is meant by fluid and macrophagous feeders with examples?
- (11) Differentiate between ingestion and egestion.
- (12) Write down functions of nematocysts.

QUESTION NO. 4 Write short answers any Six (6) questions of the following

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- (1) Write the functions of glyoxisomes.
- (2) Differentiate between phagocytosis and pinocytosis..
- (3) Define specific heat capacity of water.
- (4) What is cell mediated response?
- (5) What is bursa of fabricius?
- (6) What are the products that are produced during photorespiration?
- (7) Write down the disadvantages of gas exchange in water environment?
- (8) State the effects of change in temperature on transport of oxygen in blood.
- (9) How much carbon dioxide is present in venous blood? How CO₂ affects oxygen carrying capacity of haemoglobin?

SECTION-II**Note: Attempt any three (3) questions from this section**

8 x 3 = 24

- 5.(a) What is the role of Biology in protection and conservation of environment?
- (b) Write a note on lymphatic system of man.
- 6.(a) Write a note on Ascomycota.
- (b) Explain Primary and Secondary structure of protein.
- 7.(a) Write a note on Lysosomes.
- (b) Describe absorption of food in small intestine.
- 8.(a) Define virus. Write a note on the characteristics of viruses.
- (b) Sketch only Krebs cycle.
- 9.(a) What are different types of bacteria with respect to the presence of flagella.
- (b) Write down characteristics of class gymnospermae.

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