DGK.

PAPER CODE - 6463

(11th CLASS – 12018)

BIOLOGY (NEW COURSE)
GROUP FIRST
ACADEMIC SESSION: (2015- 17 to 2017- 19)

TIME: 20 MINUTES
MARKS: 17

OBJECTIVE

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 Resolution of human naked eye is
(A) 1.00 mm (B) 2.00 mm (C) 3.00 mm (D) 4.00 mm

2 Number of capsomeres in capsid of adenovirus is
(A) 162 (B) 262 (C) 252 (D) 152

3 Bacteria without any flagella are called
(A) Amphitrichous (B) Monotrichous (C) Lophotrichous (D) Atrichous

4 Length of brown algae range from few centimeters to
(A) 170 meters (B) 75 meters (C) 70 cm (D) 75 cm

5 Reindeer moss used as food for reindeer is
(A) Moss (B) Lichen (C) Mold (D) Club fungi

6 The process of evolution of leaf was completed in more than
(A) 15-16 million year (B) 15-17 million year (C) 15-19 million year (D) 15-20 million year

7 Canines are missing in
(A) Carnivores (B) Herbivores (C) Omnivores (D) Humans

8 Carbon dioxide per 100 ml of venous blood is
(A) 50 ml (B) 54 ml (C) 98 ml (D) 99 ml

9 The pores by which water enters in the body of sponge is called
(A) Osculum (B) Ostia (C) Mouth (D) Spongocoel

10 Polymorphism is the characteristic of members of phylum
(A) Porifera (B) Cnidaria (C) Annelida (D) Arthropoda

11 Glycolysis occurs in
(A) Chloroplast (B) Mitochondria (C) Ribosomes (D) Cytosol

12 The light falling on leaf surface is absorbed about
(A) 1 % (B) 25 % (C) 50 % (D) 100 %

13 Single circuit heart is present in
(A) Mammals (B) Reptiles (C) Amphibians (D) Fishes

14 The structures involved in guttation are
(A) Lenticels (B) Hydathodes (C) Stomata (D) Cuticle

15 A group of similar cells that perform specific function is called
(A) Tissue (B) Organ (C) System (D) Organdles

16 Which of the following is not a fibrous protein
(A) Keratin (B) Myocin (C) Fibrin (D) Hormones

17 The optimum pH for sucrase is
(A) 4.00 (B) 5.00 (C) 4.50 (D) 2.00

(11th CLASS – 12018)

TIME : 2.40 HOURS
MARKS : 68

BIOLOGY (NEW COURSE) **SUBJECTIVE**
GROUP FIRST
ACADEMIC SESSION: (2015-2017 TO 2017 – 2019)

SECTION-I 16

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

(1) What are micromolecules? Give one example
(2) Define Bioremediation.
(3) What is a co-factor of an enzyme?
(4) What is lock and key model of enzyme action?
(5) What is effect of a slight change in pH on enzyme action?
(6) What is HIV?
(7) Differentiate between mycelium and hypha?
(8) What are rusts?
(9) What are triploblastic animals?
(10) Define polymorphism.
(11) Name any two beneficial insects.
(12) What are prototherian animals?

16

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

(1) Write down the role of pili in bacteria.
(2) Write down any two characteristics of protists
(3) What is chlorella?
(4) How are Foraminiferans source of limestone?
(5) Give importance of algae.
(6) Write four characteristics of bryophytes.
(8) What is overtopping?
(7) What is chemiosmosis?
(9) What are carotenoids?
(10) What is saprophytic nutrition?
(11) What do you understand by anti-peristalsis?
(12) What is the location and function of rectum?

12

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

(1) Define cell, who discovered cell?
(2) What is plasma membrane? Give its chemical composition.
(3) What is heat capacity of water?
(4) Differentiate between Active transport and Diffusion.
(5) What do you mean by plasmodesmata?
(6) Define diaphragm and pleura.
(7) What do you mean by respiratory distress syndrome?
(8) How does breathing differ from cellular respiration?
(9) Differentiate between bronchi and bronchioles.

SECTION-II 8 x 3 = 24

Note: Attempt any Three questions from this section

5.(a) What is cloning? Explain its mechanism and write its importance.
(b) What is transpiration? Describe its types.
6.(a) Discuss the importance of Carbon .
(b) Write a note on Economic losses due to fungi.
7.(a) Discuss chloroplast in plants.
(b) Write a note on digestion in oral cavity of man.
8.(a) Sketch infection cycle of HIV.
(b) Sketch the Krebs cycle (No description)
9.(a) Write a note on nutrition in Bacteria.
(b) Differentiate between microphylls and megaphylls and describe evolution of megaphylous leaf

(NEW)

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BIOLOGY (NEW COURSE)
GROUP SECOND
ACADEMIC SESSION : 2015 - 17 TO 2017 -19

TIME: 20 MINUTES
MARKS: 17

OBJECTIVE

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 Which one is not example of phylum Mollusca
(A) Loligo (B) Sepia (C) Octopus (D) Asterias

2 Which one does not belong to sub class Eutheria
(A) Bat (B) Mice (C) Kangroo (D) Dolphin

3 Calvin cycle is also known as
(A) C_3 Pathway (B) C_4 Pathway (C) C_5 Pathway (D) C_6 Pathway

4 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

5 Parietal cells of linings of human stomach secrete
(A) Mucus (B) Hydrochloric acid (C) Pepsinogen (D) Gastrin

6 100 ml of arterial blood of human being contains CO_2 (Carbon dioxide)
(A) 50 ml (B) 54 ml (C) 56 ml (D) 58 ml

7 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

8 Which of the following vertebrates posses single circuit heart
(A) Reptiles (B) Birds (C) Mammals (D) Fishes

9 The branch of Biology which deals with the study of environmental relations of organisms is called
(A) Morphology (B) Ecology (C) Evolution (D) Zoogeography

10 The percentage by weight of RNA in a bacterial cell is
(A) 0.25 % (B) 2 % (C) 3 % (D) 6 %

11 An enzyme with its co-enzyme or prosthetic group removed is designated as
(A) Holoenzyme (B) Apoenzyme (C) Co-enzyme (D) Activator

12 Palade was first person to study
(A) Nucleus (B) Peroxisome (C) Ribosomes (D) Mitochondria

13 In five kingdom system ,Eukaryotic multicellular reducers are placed in kingdom
(A) Monera (B) Protista (C) Fungi (D) Animalia

14 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

15 Which one belongs to Actinopodes
(A) Trypanosoma (B) Plasmodium (C) Verticella (D) Radiolarians

16 Which one is an example of foliose lichens
(A) Ramalina (B) Bacidia (C) Lecanora (D) Permelia

17 Vascular plants belonging to subdivision sphenopsida are commonly called
(A) Whisk ferns (B) Club mosses (C) Horsetails (D) Ferns

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BIOLOGY (NEW COURSE) **TIME : 2.40 HOURS**

GROUP SECOND **SUBJECTIVE** **MARKS : 68**

ACADEMIC SESSION: 2015-2017 TO 2017 - 2019

SECTION-I

QUESTION NO. 2 Write short answers any Eight (8) questions of the following 16

(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 16

(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 12

(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 CO_2 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) Dscribe 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.