**(12th CLASS - 12012)**

**BIOLOGY, GROUP SECOND 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. Attempt

as many questions as given in objective type question paper and leave others blank. Write the letter

A , B , C or D in the column (Write correct option) against each question. If there is a contradiction

in the bubble and hand written answer, bubble option will be considered correct

**QUESTION NO.1**

1. Malpighian tubules remove nitrogenous wastes from

(A) Lymph

(B) Haemocoel

(C) Haemolymph

(D) Haemoglobin

2. Animals whose excretory system is associated with digestive tract

(A) Sharks

(B) Cockroaches

(C) Frogs

(D) Lizards

3. Which one is a disease of children

(A) Rickets

(B) Arthritis

(C) Parkinson's disease

(D) Arteriosclerosis

4. Outer most layer of exoskeleton is

(A) Endocuticle

(B) Exocuticle

 (C) Procuticle

 (D) Epicuticle

5. Hormone , antagonistic to parathormone is

(A) Oxytocin

(B) Thyroxine

(C) Calcitonin

(D) Cortisone

6. Learning associated with indifferent situation without reward

(A) Insight learning

(B) Latent learning

(C) Imprinting

(D) Habitation

7. Males of honey bee are

(A) Haploids

(B) Diploids

(C) Triploids

(D) Polyploids

8 .During night , plants contain more phytochromes in the form of

(A) P600

(B) P660

(C) P700

(D) P730

9. Light enhances cell division in plants

(A) Yellow

 (B) Green

(C) Red

(D) Blue

10. Number of chromosomes in penicillium fungus are

(A) 1

(B) 2

(C) 6

(D) 32

11. Phase of extensive metabolic activities in cell cycle , is

(A) GI

(B) G2

(C)S

(D)M

12. Example of sex limited trait in man is

(A) Colour blindness

(B) Baldness

(C) Beard

(D) Long hair

13 .DNA polymerase enzyme is extracted from

(A) Viruses

(B) Fungi

(C) Animals

(D) Bacteria

14. Ultimate source of evolution is

(A) Migration

 (B) Mutation

(C) Random mating

 (D) Selection

15 .Relationship between Rimoras and Sharks , is an example of

(A) commensalisms

(B) Mutualism

(C) Predation

(D) Parasitism

16. Most fragile of all biomes , is

(A) Grassland

 (B) Desert

(C) Tundra

(D) Forest

17. Upper layer of earth's crust , is

(A) Dust

(B) Sand

(C) Soil erosion

(D) Soil

(**12th CLASS - 12012)**

**BIOLOGY, GROUP SECOND TIME: 2.40 hours**

 **MARKS: 68**

**SUBJECTIVE**

**QUESTION N0.2 Write short answers any Eight (8) questions of the following 16**

(1)What is adrenal cortex , give its hormone as well ?

(2)How shivering thermogenesis is caused ?

(3)What do you know about renal failure ?

(4)Differentiate collenchyma from parenchyma

(5)How Epinasty leads to the opening of buds ?

(6)State the role of skeletal system in mineral homeostasin

(7)Define diurnal rhythms with example

(8)Explain briefly haptonastic movements with example

(9)What is cartilage and when is it found?

(10)Give path of nerve impulse through synapse

(11)Describe alternation of generation briefly

(12)Which type of events occur during after birth

**QUESTION NO.3 Write short answers any Eight (8) questions of the following 16**

(1)Explain MODY

(2)What are sex influenced traits?

(3)Define nullo gamete

(4)Define endosymbiont hypothesis

(5)Write about vestigial organs

(6)Write down two measures to preserve endangered species

(7)What are biogeochemical cycle?

(8)Write down briefly about r root nodules

(9)Define biosphere

(10)How nutrient cycle is upset

(11)Explain briefly fossil fuels

(12)Differentiate between A forestation and Reforestation

**QUESTION N0.4 Write short answers any Six (6) questions of the following 12**

(1)diffenciate inhibitory and compensatory effect on growth

(2)Give any for key events in animal development

(3)How nucleosome is formed?

(4)What is okazaki fragment?

(5) How do mutagens cause mutation?

(6)How cancer cells are different from normal cells?

(7)What do you mean by Totipotent?

(8)Differentiate between Alpine and Boreal coniferous forest

(9)Differentiate between climate and weather

**SECTION-II**

**Note: Attempt any Three questions from this section (8x3=24)**

5.(a) Write a note of synapse 4

 (b)Write a note on endangered species 4

6.(a)What is the function of placenta during pregnancy ? 4

 (b) How Morgan experimentally proved the theory of Heredity 4

7.(a) Discuss the thermoregulatory stratagies in mammals including humans 4

 (b) Describe meiotic errors (non-disjunction) with examples 4

8.(a) How Birds adapted for flight 4

 (b) What is concluded by Meselson and Stabl experiment 4

9.(a) Give the importance of Mitosis 4

 (b)Write note on wild-life 4