

CODE NO: 00000

**T.I. MATRICULATION HIGHER SECONDARY SCHOOL, AMBATTUR  
Half Yearly Examination 2018**

MARKS:70

ROLL NO : .....

PART-A

TIME 2hr 30 min

**SCORING KEY**

I Choose the correct answer

5x1=5

1. Ammonia is the chief nitrogenous waste in  
a) **fishes** b) birds c) man d) amoeba
2. Social attachments between animals is called  
a) fostering b) **imprinting** c) imprinting d) out printing
3. The pericarp is fused with the seed coat in  
a) follicle b) capsule c) **caryopsis** d) achene
4. Movements of daughter chromosomes take place during  
a) Prophase I b) Metaphase II  
c) **Anaphase II** d) Telophase I
5. Which one of the following diseases is caused by a protozoan parasite in the large intestine of man?  
a) **Amoebiasis** b) filariasis c) tuberculosis d) influenza

II Answer fifteen of the following questions .

15x2=30

6. Albinism is an inherited disorder of melanin pigment . Write the clinical symptoms of Albinism. **Milky white coloured skin(1), photophobia(1)**
7. What is meant by Glycolysis? Where does it take place?  
**Splitting of glucose into two molecules of pyruvic acid.(1) Cytoplasm(1)**
8. What does the experiment given below demonstrate? Write the overall equation of the process.  
**Anaerobic respiration or fermentation(1)**  
**Glucose→ Pyruvic acid→ethanol+carbon di oxide+energy (1)**

9. Match the columns (Rewrite) 0.5 mark each

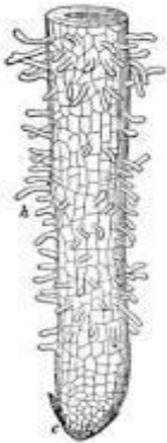
<b>Organism</b>	<b>Organ/structure of digestion</b>
1. Amoeba	a. Cytopharynx(2)
2. Paramecium	b. Digestive glands(4)
3. Sponges	c. Pseudopodia (1)
4. Man	d. Alimentary canal like structure(3)

10. Distinguish between Arteries and veins.

**Arteries-thick walled ,transport oxygenated blood from heart to all parts of the body exception pulmonary artery(1)**

**Veins- thin walled,transport deoxygenated blood from all parts of the body to the Heart(1)**

11. Fig is an example of Syconus. What is the special type of inflorescence in Fig? **Hypanthodium(1)**  
Which is the edible portion of the fruit? **Receptacle(1)**
12. Distinguish between Hydrochory and Hydrophily. **Hydrochory-dispersal of fruits and seeds by water eg coconut, Lotus(1)**  
**Hydrophily- polleination by water eg- Vallisneria, Hydrilla, Zosteria**
13. Pick out the odd one and give reason  
a) **Grave's disease**, Cretinism, Dwarfism, Myxoedema **caused due to hyperthyroidism**  
b) Marasmus, Kwashiorkar, Scurvy, **Down's syndrome. Hereditary or genetic disease**
14. a) Whooping cough is the common name of **Diphtheria** .  
b) Chemically hormones are **Proteins or steroids**
- Assertion and Reason**  
a) If both A and R are true ,R is the correct explanation for A  
b) If both A and R are true but R is not the correct explanation for A  
c) If A is true but R is false.  
d) If both A and R are false
15. Assertion(A)-Fungal cells do not contain chloroplasts. (c)  
Reason( R) - Fungi can prepare their own food.
16. Assertion – All spinal nerves are mixed nerves.  
Reason-Twenty one pairs of spinal nerves arise from the spinal cord.(c)
17. Assertion- Evolution is a gradual development of more complex species from pre-existing ones.  
Reason-It is an extremely slow process and has occurred over millions of years as revealed by fossil evidences. (a)
18. What is meant by r DNA technology? **Modification of genetic information of living organisms by manipulation of DNA(2)**
19. Explain triple fusion. **Fusion between the second male gamete and secondary nucleus in Angiosperms.(2)**
20. Identify the diagram given below and mark the parts A, B and C.



**A- Root cap, B-Meristematic region, C-Root hair zone**

21. Xylem and phloem are conducting tissues in a green plant. How does transport through xylem differ from that of phloem?  
**Transport of water and minerals occurs through xylem. It is unidirectional-against gravity (1). Transport of soluble products of photosynthesis occurs through**

**phloem. It occurs both in the upward and downward directions.(1)**

22. What are nephrons? Mention the parts of a nephron.

**Structural and functional units of kidney(1) Parts- Malpighian capsule and uriniferous tubules(1)**

IV. Answer one of the following questions .

1x5=5

Draw diagrams wherever necessary.

23. Give an account of types of nutrition in plants.

**Autotrophic-explanation and examples(2)**

**Heterotrophic-parasitic,saprophytic-explanation and examples (3)**

24. Give an account on composition of blood.

**Plasma, blood cells(1.5) , plasma proteins and function-(1.5)**

**Expalnation of structure and functions of RBC,WBC, Platelets-(3),diagram-(1)**

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