SUMMATIVE ASSESSMENT - I (A.P) 10A

CCE MODEL

SYLLABUS

1. Nutrition-Food Supplying System
2. Respiration -The Energy Producing System
3. Transportation - The Circulatory System
4. Excretion-The Wastage Disposing System

BIOLOGY

Class - 10

Time : 2.45 Hrs. **Marks : 50**

Instructions :

1. Answer all the questions in a separate answer booklet.
2. The question paper consists of 4 sections and 33 questions.
3. There is an internal choice in section - IV.
4. Write answers neatly and legibly.

SECTION - I

Note : i) Answer all the questions.

ii) Each question carries ½ mark. **12 × ½ = 6 M**

1. In Autotrophs the energy is stored as .....
2. The energy stored in ATP is .....
3. Fibrinogen $\xrightarrow{\text{Thrombin}}$ Fibrin. This equation indicates .....
4. The bunch of blood capillaries in nephron is called .....
5. **Choose the correct order from the following :** ( )

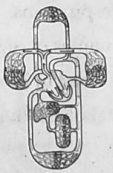
   A) Renal tubule →Distal convoluted tubule → Collecting tube → Pelvis →Ureter

   B) Ureter →Pelvis → Collecting tubule → Renal tubule →Distal convoluted tubule

   C) Distal convoluted tubule → Collecting tube → Pelvis →Ureter →Renal tubule

   D) Pelvis → Ureter → Collecting tube → Renal tubule → Distal convoluted tubule

6. **The given picture explains** ( )



   A) Single circulatory system

   B) Multi circulatory system

   C) Double circulatory system

   D) Tri circulatory system

7.

Gas	% in inhaled air	% in exhaled air
Oxygen	21	16
Carbondioxide	0.04	4
Nitrogen	79	79

Observe the above table and identify the gas which does not have any role in respiration. ( )

A) O_2 B) N_2 C) CO_2 D) All the above

8. **Thoroughly masticating food enables easy .....** ( )

A) constipation B) digestion C) circulation D) A and B

9. In alimentary canal, where do the proteins get digested at first ?
10. Name the person who told "Respiration is similar to combustion"
11. Which blood vessels carry blood for oxygenation ?
12. Fill the flow chart of urine formation.

Glomerular filtration → **Tubular reabsorption** → **?** → **Formation of hypertonic urine**

SECTION - II

Note : *i) Answer all the questions.*

ii) Each question carries 1 mark. $8 \times 1 = 8$ M

13. "Organ donation" is appreciable. Write your comment.
14. The given picture conveys you an important biological process in plants. What is it ?

15. Name some animals existing along with us that perform cutaneous, branchial and pulmonary respirations.
16. Mention the names of digestive glands in human body.
17. Why is KOH used in Mohl's half leaf experiment ?
18. What are metabolic activities ?
19. Define Serum.
20. Write the symptoms of uremia.

SECTION - III

Note : i) Answer all the questions.

ii) Each question carries 2 marks. **8 × 2 = 16 M**

21. Write differences between ingestion - digestion
22. Raju said "Stem also respires along with the leaves in plants". Can you support this statement ? Give your reasons.
23. What would happen if cell sap of root hair cells contain high concentration of ions ?
24. Prepare four questions to find the reasons for obstructions in excretory system.
25. What are the differences between primary metabolities and secondary metabolites ?
26. How do you feel about transportation of water in huge trees ?
27. Why is yeast added to flour for making bread in bakery ?
28. What would happen if the entire food enters the small intestine at once ?

SECTION - IV

Note : i) Answer all the questions.

ii) Each question carries 4 marks.

iii) There is an internal choice for each question. **5 × 4 = 20 M**

29. A) What is the difference in nutrition between Amoeba and Paramoecium ?

(OR)

B) Why does the rate of breathing increase while walking uphill at a normal pace on the mountains ? Give two reasons.

30. A) Life without photosynthesis is impossible. Appreciate the role of plants in preparing food by photosynthesis.

(OR)

B) Appreciate the concept of organ donation that gives new lives to needy.

31. A) Write the materials required and the procedure to prove that light is essential for Photosynthesis.

(OR)

B) Write the procedure you have followed to observe "heat is evolved during respiration" in your laboratory. What precautions did you take during the activity?

32. A) **Analyse the following information and answer the questions.**

Alkaloid	*Part of the plant*	*Uses*
Quinine	bark	Anti malarial drug
Nicotine	leaves	Insecticide
Morphine	fruits	Pain killer, sedative
Caffeine	seeds	Central Nervous System stimulant
Pyrethroids	flowers	Insecticides
Scopolamine	fruits, flowers	Sedative

i) Which parts of the plants are used as alkaloids ?

ii) What are the alkaloids which are used to control the diseases that occur in plants?

iii) Name the parts of the plant from which we get alkaloids and are used as sedatives.

iv) Name the alkaloid which is used to prevent malaria.

(OR)

B) **Read the table and answer the following questions.**

S.No.	*Name of the Phylum*	*Type of transport system*
1.	Cnidarians	Gastro vascular cavity
2.	Platyhelminthes	Digestive system
3.	Nemathelminthes	Pseudo-coelom
4.	Annelida	Blood vessels
5.	Arthropoda	Open circulatory system

i) In which phylum, blood vessels are first formed ?

ii) In which phylum, organisms have haemoglobin in their blood ?

iii) In which phylum, digestive system helps in transportation ?

iv) Why do Arthropods have open circulatory system ?

33. A) Draw the diagram of L.S. of root showing relationship of root hair to root water.

(OR)

B) Draw a neat labelled diagram of internal structure of kidney. Write the function of Renal artery and Renal vein.