

BOARD OF SECONDARY EDUCATION (AP)
SUMMATIVE ASSESSMENT – I

TENTH BIOLOGY MODEL PAPER (PAPER - II)

(ENGLISH VERSION)

Time: 2 hrs. 45 mins.

PART A & B

Maximum Marks: 40

Time: 2 hrs. 15 mins.

PART – A

Marks: 30

INSTRUCTIONS:

- i) 15 minutes allocated to read the question paper. 2.30 hours allocated to write answers.
- ii) PART – A must be answered in a separate answer sheet.
- iii) Students can take PART – A (Question paper) with them.
- iv) Map and PART – B (Bit Paper) should tag to the answer sheet and give them to Invigilator.

SECTION – I

NOTE: i) Answers the following questions.

ii) Each question carries ONE Mark.

$4 \times 1 = 4$

1. Everything we eat comes from plants why don't the plants get used up? What are they using to grow and produce more plants, more seeds?
2. Why alveolus are so small and uncountable in number?
3. Why we compare arteries is rather like tree which divides into smaller and smaller branches.
4. Observe the figure given below.



Bending towards Sun

Observe the plant growing towards light and how auxins acts on bending of stem to show a response to the Sunlight.

Give reasons for this type of growth.

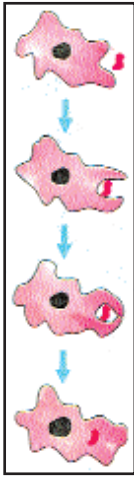
SECTION – II

NOTE: 1) Answer the following questions.

2) Each question carries TWO Marks.

5 × 2 = 10

5. See the picture below and write about it.



- i) What is the organism you see here?
- ii) What is the process that is taking place? Explain.

- 6. What questions would you ask a scientist about the aeration of roots, if you happen to visit a science center?
- 7. On what factors does the rate of heart depend on?
- 8. A discussion on the metabolic activities occurring in human body was going on in a classroom. Swapna said that Homeostasis is a process where the liquid level in different parts of the body is kept constant. Teja said Homeostasis is a part of excretion. Whom will you support? Give reasons.
- 9. Find out the reasons for floods in a city or big town and suggest measures to check it.

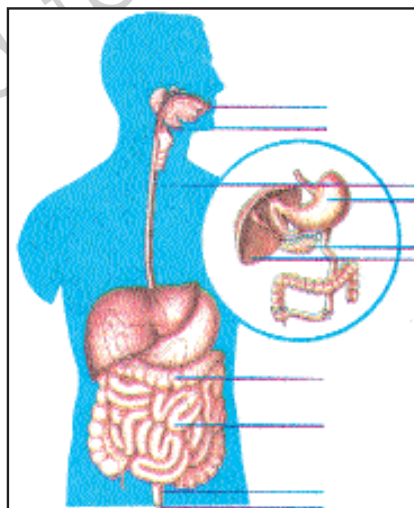
SECTION – III

NOTE: 1) Answer the following questions.

2) Each question carries FOUR Marks.

4 × 4 = 16

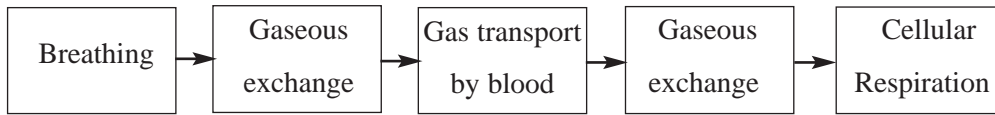
10. Observe the figure given below. Label the parts of the human alimentary canal and explain the process of digestion in each part.



Human Digestive System

(OR)

Observe the stages or steps in respiration. Now, answer the questions gives below.



i) Where does the exchange of gases take place?

ii) For what purpose is the energy released in the process of respiration used?

c) What is inhaling and exhaling?

11. Did you perform the lab activity of the observation of the internal structure of the mammalian heart? Which mammal did you observe? Write the experiment details and your inference in detail.

(OR)

Do you know the accessory excretory organs in the human body? Explain about them in detail.

12. Think of any action and try to make a sketch of the reflex arc.

(OR)

Sudhakar could not understand what is the significance of Mohl's half leaf experiment. He wrote about the hydrilla experiment and lost marks. Do you know what is this experiment? Write this experiment and its significance too.

13. Now, these days, many regions suffer from Dengue and Malaria. Government is trying to eradicate the mosquitoes through different health programs.

According to WHO reports, people are spending more money on the diseases that are transmitted by mosquitoes.

Give the information of the types of mosquitoes you have studied in the table given below:

S.No.	Mosquito	Disease	Carrier	Symptoms

Answer the questions given below:

i) What are the breeding grounds of mosquitoes?

ii) Find out what measures you should take to protect yourself from these diseases and write here.

(OR)

Vanaja told to her friend Charita that she enacted skits/street plays in her school area, to spread awareness about ways of practicing the 3 R's? and their benefits.

Charita told to Vanaja about how she organized an exhibition on how to make the best use of waste. So, what are these 3 R's? Write the benefits of practicing them.

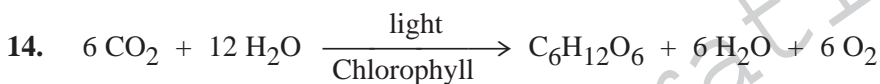
Describe the activity you have taken up just like Charita or Vanaja in creating awareness about 3 R's.

INSTRUCTIONS:

- i) Answer ALL the questions.
- ii) Each question carries $\frac{1}{2}$ mark.
- iii) Marks will not be awarded in any case of over-writing, rewritten or erased answers.
- iv) Write the CAPITAL LETTER (A, B, C, D) showing the correct answer for the following questions in the brackets provided against them.

$$20 \times \frac{1}{2} = 10$$

SECTION – IV



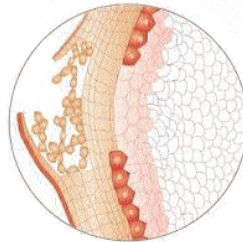
What does this equation denote? ()

- A) Respiration
- B) Photosynthesis
- C) Glucose Reaction
- D) Carbon compound

15. A plant is kept in dark cupboard for about forty eight hours before conducting any experiment on Photosynthesis in order to ()

- A) Remove Chlorophyll from leaves
- B) Remove Starch from leaves
- C) Ensure that no photosynthesis occurred
- D) Ensure that leaves are free from the Starch

16. Observe the given picture and state the name of them. ()




- A) roots of the plant
- B) stem
- C) lenticels on the stem
- D) vegetative reproduction

17. Energy is stored in ()

- A) nucleus
- B) mitochondria
- C) ribosomes
- D) cell wall

18. Normally the blood that oozes from a wound clots in 3 – 6 minutes. But in some people due to vitamin K deficiency it takes more time. Due to genetic defect the blood may not coagulate. This type of defect is called ()

- A) Haemophilia
- B) leukemia
- C) Malaria
- D) Tuberculosis

19. Blood on which side of the human heart is low in Oxygen? ()
A) left ventricle B) right ventricle
C) left atrium D) right atrium
20. Cardiac is a word that refers to a specific organ and its function. Can you name the organ? ()
A) lung B) kidney C) heart D) brain
21. What causes peristalsis? ()
A) Contraction of longitudinal muscles.
B) Contraction of circular muscles.
C) Under control of autonomous nervous system
D) digestive secretions
22. What is the digestive juice that does not contain enzyme? ()
A) Bile B) Gastric Juice
C) Pancreatic Juice D) Saliva
23. Respiration is catabolic process because of ()
A) breakdown of complex food molecules
B) conversion of light energy
C) synthesis of chemical energy
D) energy storage
24. The region in brain portion that control hunger signals ()
A) medulla B) diencephalon
C) cerebrum D) mid brain
25. special excretory organs are absent in ()
A) birds B) amoeba
C) sponges D) birds, amoeba
26.  This is symbol for ()
A) reuse B) recycle
C) reduce D) usage
27. The digestion of fats by converting them into small globule like forms by the help of bile juice secreted from liver is ... ()
A) reflex action
B) digestive reaction
C) emulsification
D) metabolic activity

28. What happens if diaphragm is not there in the body? ()
A) We would not be able to breath and all breathing movements would stop
B) It will be easy to breath
C) One lung will stop working
D) The lung space will increase
29. Can you identify the functions of blood capillaries? ()
A) Transports blood away from the heart, Transports only oxygenated blood.
B) Supplies components to tissues
C) Transports blood towards the heart
D) It supplies blood to only few parts of the body.
30. This carries waste from the kidney to the bladder ()
A) external opening
B) urethra
C) urinary bladder
D) ureter
31. Suresh burnt household wastes. Ramesh explained the harm he can cause to the atmosphere. What is that harm? ()
A) It increases air pollution.
B) The carbon dioxide and chlorofluorocarbons pollute the air.
C) The percentage of green house gases in atmosphere increases.
D) All the above
32. Which one of the following is the best and ever green resource? ()
A) fossil fuel
B) solar energy
C) wind energy
D) electricity
33. Why do people migrate from villages to cities? ()
A) for want of education, treatment and for earning as they are lacking in villages.
B) they are attracted towards city life
C) to travel in cars
D) to do hereditary occupational work

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