

BOARD OF SECONDARY EDUCATION (AP)

SUMMATIVE ASSESSMENT – I

TENTH CLASS 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) Answer the following questions.

ii) Each question carries ONE Mark.

4 × 1 = 4

1. Why is it better to call the dark phase of photosynthesis as a light independent phase?
2. Give an example to show how hormones can influence visible changes in your body.
3. What is the job of the amniotic sac?
4. What are the characters, Mendel selected for his experiments on Pea plant?

SECTION – II

NOTE: 1) Answer the following questions.

2) Each question carries TWO Marks.

5 × 2 = 10

5. Draw a block diagram showing the path way of excretory system in human being.
6. You are walking in the traffic, suddenly you heard a loud sound. How coordination takes place in this situation among respected organs? Draw a block diagram to explain this situation.
7. What would be the consequences if there is no meiosis seen in all organisms?
8. What is mastication? Explain the role of different teeth in this process.
9. Identify the situations where wastes are produced at your home or school. What measures are you going to follow to reduce this problem?

SECTION – III

NOTE: 1) Answer the following questions.

2) Each question carries FOUR Marks.

4 × 4 = 16

10. Explain the way how plants get water by osmosis through root hair.

(OR)

In a mango garden, a farmer saw one mango tree with full of mango fruits but with full of pests/disease, and saw another mango tree without pests but with less mango fruits. but the farmer wants the mango tree with full of mango fruits and pest free. Is it possible to create new mango tree with one the farmer wanted? Can you explain how it is possible?

11. Distinguish between
- Stimulus and Response
 - Afferent and Efferent nerves
 - Central nervous system and peripheral nervous system
 - Receptor and Effector

(OR)

Explain the process to understand monohybrid cross of Mendel experiment with Checker board.

12. Write differences between
- mitosis - meiosis
 - male gametophyte - female gametophyte

(OR)

Give reasons

- If we press tongue against the palate we can recognise taste easily.
 - We can't identify taste when food is hot.
 - In mouth food forms into a slurry mass.
 - Small intestine is similar to a coiled pipe.
13. How does Phototropism occur in plants?

(OR)

What is your understanding about survival of fittest? Give some situations or examples that you observed in your surroundings.

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

- 14. Which of the following is a Parasite? ()
A) Yeast B) Mushroom C) Cuscuta D) Leech
- 15. We will find vocal cords in ()
A) Larynx B) Pharynx C) Nasal cavity D) trachea
- 16. The term cardiac refers to which organ in the body? ()
A) heart B) vein C) lymph D) capillary
- 17. The excretory unit in the human excretory system is called ()
A) Neuron B) Nephron C) Nephridia D) flame cell
- 18. One of the following is an environmentalist. Who is it? ()
A) Sundarlal bahuguna B) Chacha Nehru
C) Amit mishra D) Bimal Jalan
- 19. Which mosquito causes Malaria? ()
A) Culex B) Anopheles C) Adis D) None
- 20. Leaf movement if Mimosa helps to ()
A) Reduced photosynthesis
B) Protect from greazers
C) Releasing phyto hormones
D) Regulate its growth
- 21. Diabetes is related to this gland ()
A) Thyroid B) Pancreas C) Adrenal D) Pituitary
- 22. A person loss of control on emotions, which part of brain stops its function? ()
A) cerebrum B) diencephalon
C) mid brain D) cerebellum
- 23. The part of the female reproductive system produces the eggs ()
A) Ovum B) Epididymis
C) Cervix D) Fallopian tube
- 24. Which part of the male reproductive system produces the sperm cells? ()
A) Vas deferens B) Epididymis C) Bladder D) Scrotum

25. Why are egg cells larger than sperm cells? Choose the option you think it is right ()
A) Egg cells have more cells in them
B) Have food store to help growth after fertilisation
C) Have thicker cell membranes
D) Have larger nuclei
26. Which of the following situation you can taste quickly? ()
A) put sugar crystals on tongue
B) put sugar solution on tongue
C) press the tongue slowly against palate
D) swallow directly without grained and shred.
27. Glucose and amino acids are absorbed through the following part of villas. ()
A) Epithelial cells
B) Blood capillary
C) Lymphatic vessel
D) All
28. Human organism is an internal combustion machine because of ()
A) Assimilation of energy from food
B) Liberate CO₂ during respiration
C) Expel waste food at the end state digestion
D) Secret powerful digestive juices
29. Which of the following is not a variation in rose plant? ()
A) Coloured petals
B) Spines
C) Tendrils
D) Leaf margin
30. Natural selection means ()
A) Nature select desirable characters
B) Nature rejects undesirable characters
C) Nature recent with organism
D) A, B
31. Paleontologist dealing with ()
A) Embryological evidences
B) Fossil evidences
C) Vestigious organ evidences
D) Heredity variations
32. Which type of good do you prefer to buy? ()
A) Environment friendly, though costly but durable
B) Cheap goods
C) Goods that have more colours
D) Goods that destroy the environment
33. What type of development do we need? ()
A) Development with more factories
B) Development with best transport facilities
C) Sustainable development
D) Development that destroys the environment