

MODEL PAPER-1
SUMMATIVE ASSESSMENT
BIOLOGICAL SCIENCE-PAPER-2

(English Medium)

(Max.Marks:50)

Class: X

Time: 2.45 Hrs.

Instructions:

1. This questions paper contains only ONE part.
2. 15 minutes are allotted for reading the question paper in additions to 2.30 hours for writing the answers.
3. All answers should be written in the separate answer Booklet.
4. There are four sections in the questions.
5. There is internal choice in section-IV
6. Write answers neat and legible.

SECTION-I

12 X $\frac{1}{2}$ = 6 m

- NOTE:
- 1) Answer all questions
 - 2) Each question carries $\frac{1}{2}$ Marks.

1. Which group of organisms together does not constitute a food chain.

Grass, lion, rabbit, wolf

Wolf, grass, snake, tiger

2. Stem cutting is an artificial methods of vegetative propagation. Give another example.
3. I am having tough Fibrous coat, large lumen, thin must layer and values, Who am I?
4. Expand BOD : _____
5. Identify the mismatched one
 1. Protozoa ... Flame cells
 2. Annelida Nephridia
 3. Birds ... Kidneys
6. Expand ICRISAT
7. Name the scientist with the help of this paragraph
He was born in England. He voyaged for five years. Just when he was 22 years. In the world survey ship HMs Beagle. He visited a number of places including Galapa gos Islands. He observed the flora and fauna of these places. He garthered a lot of information any evidences.
8. Arrange the following animal in the correct order (Food chain)

Zooplankton, phytoplankton, Fish, Larvae, man

9. Binary fission is a sexual method of reproduction. Give other examples of a sexual reproduction in animals.
10. The following placards are prepared in your school for conducting a rally can you name the occasion to use these?

A) Plant trees, save the earth

B) Save ozone – Save lives

C) Plant and “protect” trees – they will protect you

Answer 9 and 10 questions with the help of this paragraph.

..... (9) is a membrane bound structure containing of 3 membranes. The third layers forms stacked sac like structures called(10) it is the site for trapping Solar energy.

11. I am responsible for healthy growth of bones and teeth. My deficiency causes improper formation of bones, knock-knees. Swollen wrists and delayed dentition. Who am I?
12. Name the sphincter that helps of opening of Stomach into duodeum

SECTION-II

8x1=8 m

- NOTE: 1) Answer all questions
2) Each question carries 1 Marks.

13. Why more urine is produced during water?
14. How does Ethylene is useful to plants?
15. What will happen if there is no epiglottis in your body?
16. What is bio-magnification? Give examples for chemical substances responsible for it?
17. In your village, the ground water levels are rapidly decreasing in the recent time. What suggestions will you give to the villagers to improve ground water table?
18. What is biofuel? Name the plant is used as biofuel.
19. Draw a pyramid of energy of the give Good chain.
Banyan tree → Herbivorous birds → Carnivorous birds
20. Prepare two slogans on protecting non-renewable resources.

SECTION-III

8x2=16 m

- NOTE:
- 1) Answer all questions
 - 2) Each question carries 2 Marks.

21. Draw the pyramid of number for the following Food Chain

Diotoms → Zooplanktony → Fish → man

22. What procedure do you adopt to see pollen grains with pollen tube?
23. If you have a change to meet a pulmonologist, what questions will you going to ask about respiratory diseases?
24. What is colostrums? What is its importances?
25. Write the procedures of the experiment to show the peristalsis with cycle tube and potato which you have conducted in your school.
26. Write a brief note on homologous and analogous organs.
27. Study the given table and answer the question.

Gas	% in inhaled air	% in exhaled air
Oxygen	21	16
Carbon dioxide	0.03	4.4
Nitrogen	78	78

- 1) Why there is no change in nitrogen percentage in exhaled and inhaled air?
 - 2) Why does exhaled air contain more carbon dioxide?
28. What precautions you have to take in the observations of internal structure of mammalian Kidney?

SECTION-IV

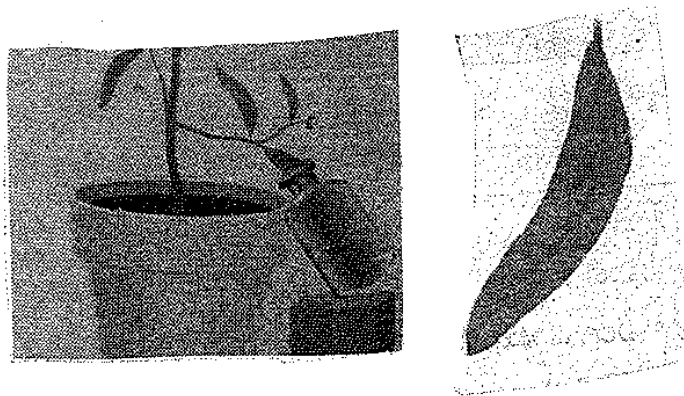
5x4=20 m

- NOTE:
- 1) Answer all questions
 - 2) Answer any one from internal choice of each questions.
 - 3) Each questions carries 4 Marks

29. Explain mono hybrid experiment with an example. Which law of inheritance can be understand? Explain
(or)
30. Write the mechanism of photosynthesis in plants
(or)

Explain the temporary and permanent methods to be adopted for Kidney failure (ESRD) persons.

31. How do you observe internal & external features of mammalian heart?
(or)



Answer the following question by observing the diagram showing the experiment.

- What is the aim of the conducting this experiment?
 - What apparatus do you use in this experiment?
 - Why do we use Kott solutions in this experiment?
 - Why did w study two leaves in this experiments?
32. Observe the following schematic diagram and answer the following questions.
- What do you call the wave like movements shown by the muscles of Desophagus?
 - What is the structure of Oesophayes?
 - How does mucus help in passage of Food?
 - Which part of alimentary canal are connected by the Oesophagus?

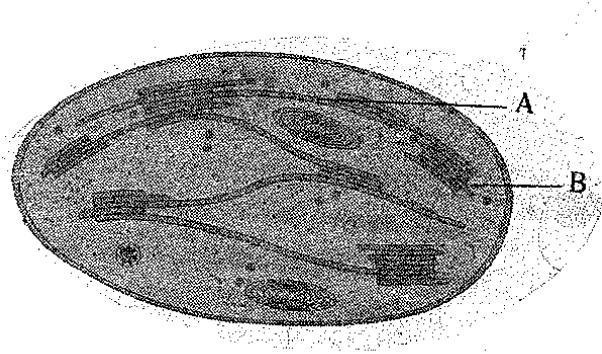
(or)

Observe the below and table and answer the following questions.

Village	Type of Farmer	Income per acre on crops			
		Paddy	Cotton	Mirchi	Maize
A	Small	7500	9300	5200	5000
	Large	267000	38000	16700	12900
B	Small	7200	8750	4900	5100
	Larges	32900	42000	18400	13700

- 1) Which crop is most suitable to cultivate for small farmer in both the villages?
 - 2) If you are a large farmer, which group crop do you select to cultivate?
 - 3) What similarities you have identified in village A and Village B?
 - 4) Which is the lowest income crop?
 - 5) Is there any relationship between production of crop and income? How?
33. Draw a neat and labelled diagram of internal structure of Kidney

(or)



Observe the Figure and answer the following Question.

- 1) To which life process, the above shown picture is associated with?
- 2) Name the labeled parts A and B in the given picture
- 3) Name the reaction that takes place in A
- 4) Name the part in the given picture through which Oxygen is liberated.

MODEL PAPER-2
SUMMATIVE ASSESSMENT
BIOLOGICAL SCIENCE-PAPER-2

(English Medium)

(Max.Marks:50)

Class: X

Time: 2.45 Hrs.

Instructions:

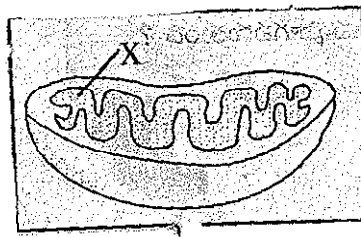
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6. Write answers neat and legible.

SECTION-I

12 X $\frac{1}{2}$ =6 m

- NOTE:
- 1) Answer all questions
 - 2) Each question carries $\frac{1}{2}$ Marks.

1. Which group of organisms together does not constitute a food chain.
2. Read the sentence find the error and rewrite it.
3. Name the scientist with the help of this paragraph.
4. Name the scientist with the help of this paragraph.
He was a monk in a monastery. He did not do this experiments either in a university or in a laboratory, he discovered how variations were passed from generations.
4. **Identify the mismatched pair**
 1. Calciferol -- Deficiency leads to rickets
 2. Phyllogynone -- Deficiency leads to sterility
 3. Ascorbic acid -- Deficiency leads to Scurvy.
5. We are the microscopic vessels made of single layers of cells. We allow diffusion of various substances, we establish continuity between arteries and veins. Who are we?
6. Which of the following group is ecofriendly in nature?
 - A. D.D.T., B.H.C., Heptachlore, Plastic
 - B. Recyled paper, vermi, compost, natural farming, biogas usage
7. I am a secondary metabolite in plants.



8. Expand ESRD
9. Give an example for connecting link between reptiles and aves.
10. The following placards prepared in your school for conducting a rally can you name the occasion to use them?
11. Answer the 6 and 7 questions with the help of the paragraph.
..... (6) is the vital link between blood and tissues by which essential substances pass from blood to cells and excretory substances from cells to blood,. So it is called
.....(7) of our body.
12. Answer 6 and 7 questions with the help of the paragraph.
..... (6) is the vital link between blood and tissues by which essential substances pass from blood to cell and excretory substances from cells to blood. So if is called(7) of our body.

SECTION-II

8x1=8 m

- NOTE:
- 1) Answer all questions
 - 2) Each question carries 1 Marks.

13. Which organelle of the leaf absorbs energy from the Sunlight for photo synthesis?
14. How plants get rid of their waste materials?
15. What will happen, if there is no diaphragm in the human body?
16. State the law of independent assortment.
17. Name the surgical birth control methods in human beings?
18. suggest two micro-irrigations methods to farmer cultivating crops in low water available lands.
19. What happens if both kidneys fail completely?
20. What is a perfect pesticides?

SECTION-III

8x2=16 m

- NOTE:
- 1) Answer all questions
 - 2) Each question carries 2 Marks.

21. Vitamin, A, D, E and K are fat soluble vitamins, write the deficiency diseases and resources of these vitamins in a tabular form.
22. What steps do you takes to conserve fossil fuel resources.
23. A persons reached a specific distance once on foot and once by running in which situations his legs pain? Why?

24. Look at the following table and answer the following questions.

Sl.No.	Name of the Plant	Name of the Secondary metabolite
1.	Pinus	Resins
2.	Hevea braziller sis	Latex

- b) What is the use of resins in our daily life?
 c) What is the importance of latex of Hevea braziliensis?
25. Study the given paragraph and answer the questions?
 A rare and magnificent Fossil of the dinosaurs, Ketosaures belonging to the lower. Jurassic age going back to about 160 million years as collected from Yamanapalli of Adilabad district.
26. Write the difference between hormone and enzymes
27. Your friend is suffering from consistipation. What suggestions do you give to your friend to avoid it?
28. What do you think will happen if we do not take care of the sources of water?

SECTION-IV

5x4=20 m

- NOTE:
- 1) Answer all questions
 - 2) Answer any one from internal choice of each questions.
 - 3) Each questions carries 4 Marks

29. What are the differences between aerobic and amaerobic respiration?

(OR)

Explain the temporary and permanent methods to be adopted for kidney failure (ESRD) persons.

30. What are the different modes of asexual reproduction? Cite them with examples?

(OR)

What are the reasons for selecting pea plant by mendal to conduct his experiments.

31. How can you prove that stomach is protected from damage being caused by secretion of its own aid?

(or)

Answer the following questions by observing the experimental setup

- 1) What will you prove by this experiments?
 - 2) What apparatus do you use in this experiments?
 - 3) What would be the result if the experiments is done in shadow?
 - 4) Ho will you infer the result from the experiments.
32. Observe the following table and answer the questions.

S.No.	Name of the Phylum	Type of transport system
1.	Cnidarians	Gastro vascular cavity
2.	Platyhelminthes	Digestive system
3.	Nematy helminthes	Pseudocoelom
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 help in transportation?
- iv) Why do Arthropods, have open circulatory system?

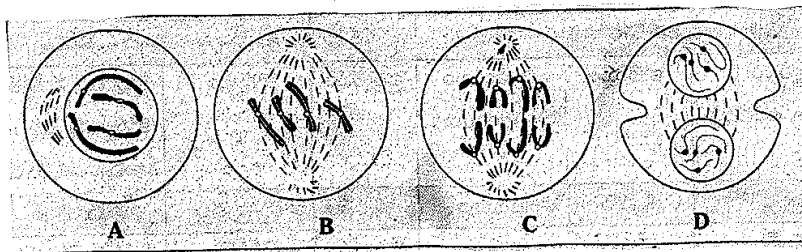
(or)

Observe the following pyramic of biomass and answer the following questions.

- 1) The pyramid shows as a decrease in the biomass as we move up.
Why the biomars is decreasing?
- 2) Give some examples for producers and primary consumer.
- 3) What is the only energy sources of entire ecosystem?
- 4) How much biomass is transferred from one trophic level to the next as we move up?

33. Draw a neat and labeled diagram showing reflex arc.

(or)



Observe the pictures and answer the questions.

- 1) What type of cell division do your observe in the above pictures?
- 2) What does the labelled stage D represent?
- 3) In which phase do you observe the splitting of centrome Res and separating of Choomatids?
- 4) In which phase, you can observe the movement of chromosomes to spindle equator?

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SUMMATIVE ASSESSMENT
BIOLOGICAL SCIENCE-PAPER-3
(English Medium)
(Max.Marks:50)

Class: X

Time: 2.45 Hrs.

Introductions:

1. This questions paper contains only ONE part.
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4. There are four sections in the questions.
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6. Write answers neat and legible.

SECTION-I

12 X $\frac{1}{2}$ = 6 m

- NOTE:
- 1) Answer all questions
 - 2) Each question carries $\frac{1}{2}$ Marks.

1. Expand A.T.P
2. Observe the following chart and complete the box.
3. Name of the scientist with the help of this paragraph.
In 1661, four years after Harvey's death. He studies the wings of bats. He could see that blood vessels in their thin membrane and under the microscope. He could see that the smallest arteries and veins connected by very fine Blood vessels.
4. Identify the mismatched pair
 1. Fossils - Embryology
 2. HMS Beagle - Lamarck
 3. Population theory - A.R. Mathus
5. Can you name the response shown by tendrils in the below figure?
6. Name the Scientist with the help of this paragraph. He tested the theory of inheritance of acquired characters on rats. He proved that the bodily changes are not inherited.
7. Answer 10, 11 questions with the helop of the paragraph. In our body blood carries oxygen to tissues different parts of the body in colour due to the presence of (10), it contain(11) element in it. Give an examples for connecting link between reptiles and aves.

8. Answer 10,11 questions with the help of the paragraph. In our body blood carries Oxygen to tissues different parts of the body. It is red in colour due to the presence of (1 It containing (11). Element in it.
9. Name the plant that is used in waste land plantation to make the soil nitrogen rich.
10. Name the gland that secrete testosterone hormone
11. Name the vitamin that causes night blindness.
12. Expand U.N.D.P.

SECTION-II

8x1=8 m

- NOTE:
- 1) Answer all questions
 - 2) Each question carries 1 Marks.

13. Which blood vessels carries blood for oxidation?
14. The drunken man does not walk properly, which part of the brain might have not functioning properly?
15. What is the apparatus used in your class, while performing the demonstration of peristaltic movements in Oesophagus?
16. What happens if decomposers are removed from the food web?
17. Sunny said, human being is an internal combustion machine?
18. Write two slogans to popularize the awareness on "Organ Donation".
19. Suggest any two practices, suitable to farmers with less water resources.
20. "We can't imagine the world without insects and birds". Suggest two methods to conserve them.

SECTION-III

8x2=16 m

- NOTE:
- 1) Answer all questions
 - 2) Each question carries 2 Marks.

21. Why do we use fossil fuels judiciously?
22. How does the embryological evidences support that evolution has taken place?
23. Write two precautions you take while observing Rhizopus in the Laboratory?

24. Abhijith participated in a 100 mtr. Running race get more muscle pains. But the sports man who participates in 5 KMs race get less muscle pains, What is the reasons?
25. What are the benefits of water harvesting?
26. Give a reason to explain why adrenaline helps in dealing emergency situation.
- 27.

Sl.No.	Type of food	End products
O1	Carbohydrates	Glucose
O2	ProteinS	Amino-acids
O3	Fats	Fatty acids and

28. What is fluorosis? How does it affect the body?

SECTION-IV

5x4=20 m

- NOTE:
- 1) Answer all questions
 - 2) Answer any following one from internal choice of each questions.
 - 3) Each questions carries 4 Marks

29. What is malnutrition ? Explain some nutrition deficiency diseases

(or)

One student (researcher) wants to cross pure tall plant (TT) with pure dwarf (tt) plant, what would be the F₁ and F₂ generation? Explain?

30. How is using of toxic materials affecting the ecosystem? Write a short note on bioaccumulation and bio Maynifications.

(or)

Double fertilization is wonderful phenomenon in flowering plants. Explain double fertilization in flowering plant with the help of a diagram.

31. John prepared stethoscope with paper cup and plastic tube. Write down the procedure of preparations.

(or)

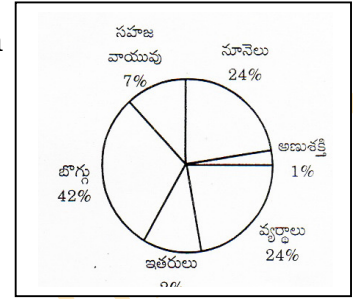
Study the graph and answer the following questions. Graph showing effects of vigorous exercise on the concentration of lactic acid in blood.

- What was the concentration of lactic acid in blood to start with
- What was the greatest concentration of lactic acid reached during the experiments?
- What is the concentration of lactic acid after 25 minutes of exercise?

32. Observe the pie diagram and answer the following questions.

(165-166)

- Identify the fossil fuels from the above diagram
- Why wastes should be considered as primary energy sources in future?
- Why can't we depend on fossil fuels forever?
- What are the alternatives for Fossil fuels?



(or)

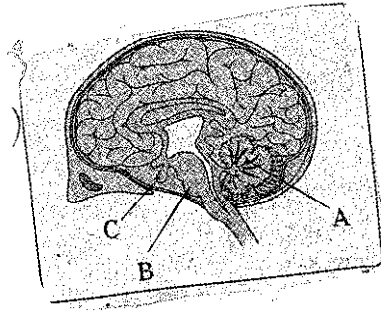
Study the given paragraph and fill the table with the given information.

In the heart, superior vena cava and inferior vena cava opened into right atrium. The pulmonary veins bring blood from the lungs and open into left atrium. The valve present between the right atrium and right ventricle is referred as 'Tricuspid valve'. The valve present between the left atrium and left Ventricle is Pulmonary. Aorta are called systemic values.

Name of the value	Location	Way of blood blow	Nature of the blood Oxygenated deoxgenerated
a. Tricuspid value			
b. Bicuspid value			
c. Pulmonry value			
d. Systemic values			

33. Draw the labeled diagram of human digestive system. List our the parts where perisfasis take places.

(Or)



Observe the below diagram and answer the

- i) This diagram belongs to which system of the body?
- ii) Name the parts A and B
- iii) The part 'C' is endocrinal gland. This is called master gland. What is the name of this gland?
- iv) Which parts in this diagram are useful to solve problems and puzzles?

The end