

Model Question Paper
Life Processes (B) - Part II
 10th Standard

Science

Reg.No. :

--	--	--	--	--	--

I. Answer all the questions.
 II. Use Blue pen only.

Time : 01:15:00 Hrs

Total Marks : 45

4 x 1 = 4

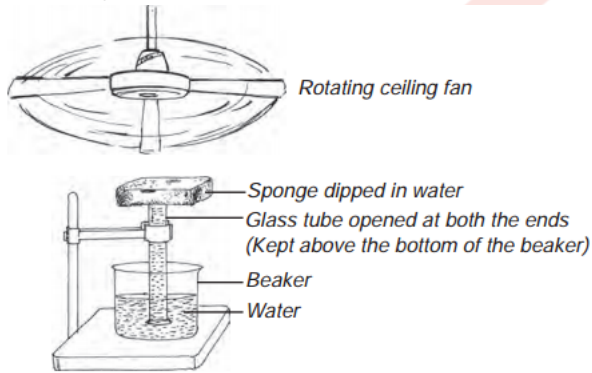
Section-A

- 1) Leaf pores/stomata help in
 (a) Intake of CO₂ during photosynthesis (b) Release of O₂ during photosynthesis (c) Release of water vapour during transpiration (d) All of these
- 2) of green plants are called factories of food production.
 (a) Mitochondria (b) Chloroplasts (c) Endoplasmic reticulum (d) Nucleus
- 3) The special root-like structure of plant parasites in cuscuta and viscum are called
 (a) Rhizoids (b) Haustoria (c) Hyphae (d) Stolons
- 4) Pick out the odd one: The parts of the alimentary canal are
 (a) Pharynx (b) Mouth (c) Buccal cavity (d) Pancreas

Section-B

6 x 2 = 12

- 5) What is the length of the alimentary canal in human beings? List out the parts of the gastro-intestinal tract in the correct sequential order based on the passage of food.
- 6) What is respiration? Give a balanced equation for aerobic respiration.
- 7) A fish taken out of water can not survive for a long time. Why?
- 8) What are ammoniatelic and ureotelic animals? Give examples.
- 9) Describe the change that occurs in a touch-me-not plant when it is touched?
- 10) Study the following model with which the transpiration mechanism in plants can be demonstrated



With which structure of the plant do you compare each of the following?

- i) Sponge ii) Glass tube filled with water.

Section-C

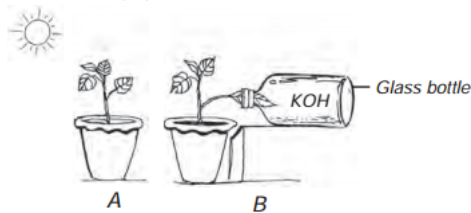
6 x 5 = 30

- 11) Differentiate aerobic respiration from anaerobic respiration. Mention the event that is common to both
- 12) Observe the given model that can be used to demonstrate the breathing mechanism in human beings.



Name the structures which can be compared to: i) Lungs ii) Diaphragm iii) Trachea iv) Nostrils (Nose)

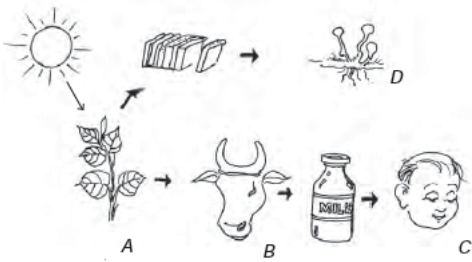
- 13) Observe the following figures:



Both the plants A and B were kept in sunlight after watering. The part of the leaf of plant B which was inserted in the glass bottle containing KOH (potassium hydroxide) did not turn blue in the iodine test/starch test, indicating the absence of starch. The part of the leaf outside the bottle turns blue in the said test. Photosynthesis didn't occur in that part of the leaf due to the non-availability of _____. a) Sunlight b) Chlorophyll c) CO₂ d) Water i) List out the factors which are available to the part of the leaf outside the bottle.

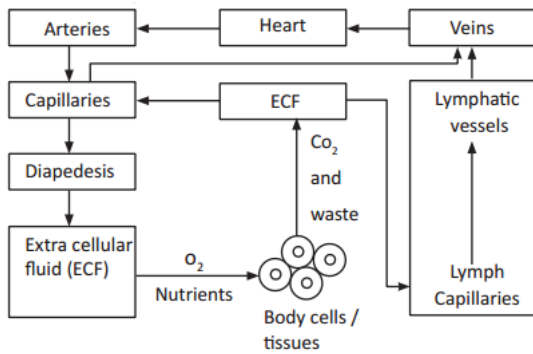
14) Look the illustration depicting the food chain: a. The correct explanation of the organism is:

A	B	C	D
Saprophyte	Heterotrophs	Autotrophs	Heterotrophs
Heterotrophs	Autotrophs	Saprophyte	Saprophyte
Autotrophs	Saprophyte	Autotrophs	Heterotrophs
Autotrophs	Heterotrophs	Heterotrophs	Saprophyte



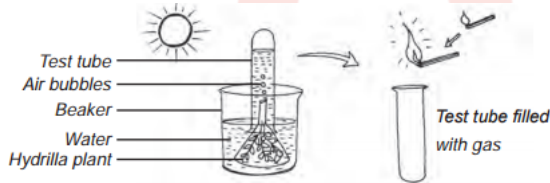
b. Why is 'A' called an autotroph?

15) Observe the following flow-chart:



a) What is 'X' in this figure denote? b) In what way is it different from blood?

16) Observe the following experiment:



i) Name the phenomenon it depicts and the gas that is released. a) Respiration, CO₂ b) Photosynthesis, O₂ c) Transpiration, H₂O d) Excretion, N₂ ii) What is photosynthesis?

Write a balanced equation for this bio-chemical reaction.
