

Class: VII
Mid Term Examination 2022-2023
Science
Set – A1

MT: 3 hr

MM:80

For question number 1 write the correct option out of 4 choices. (write only correct answer with correct serial number, no need to write the words)

1.

$$(1) \times 6 = (6)$$

(i) The plant which traps and feeds on insects is:

- (a) cuscuta
- (b) china rose
- (c) pitcher plant
- (d) rose

(ii) Calamine solution is

- (a) acidic in nature
- (b) basic in nature
- (c) both acidic and basic in nature
- (d) an indicator solution.

(iii) An iron ball at 65°C is dropped in a mug containing water at 65°C. The heat will

- (a) flow from iron ball to water.
- (b) not flow from iron ball to water or from water to iron ball.
- (c) flow from water to iron ball.
- (d) increase the temperature of both.

(iv) Fat is completely digested in the

- (a) stomach
- (b) mouth
- (c) small intestine
- (d) large intestine

(v) Micro-organisms act upon the dead plants to produce

- (a) sand
- (b) mushrooms
- (c) humus
- (d) wood

- (vi) In cockroaches, air enters the body through
- (a) lungs
 - (b) gills
 - (c) spiracles
 - (d) skin

For question number 2, fill up the blanks with correct word (s)/ scientific expression. (write only correct answer with correct serial number, no need to write the words)

2. (1) × 12 = (12)

- (a) In photosynthesis solar energy is captured by the pigment called _____.
- (b) Bases are _____ in touch.
- (c) Temperature of boiling water cannot be measured by a _____ thermometer.
- (d) The largest gland in the human body is _____.
- (e) The insects, butterflies, honeybees and birds help flowering plants in _____.
- (f) The number of times a person breathes in a minute is termed as the _____.
- (g) The gas absorbed by green plants during photosynthesis is _____.
- (h) Factory waste is _____ before disposing it into the water bodies.
- (i) Air gets heated up by _____ method.
- (j) Amoeba digests its food in the _____.
- (k) A forest is a purifier of air and _____.
- (l) We often _____ when we inhale a lot of dust-laden air.

For question number 3 write True or False (write only correct answer with correct serial number, no need to write the words, only “T” and “F” can be written in front of the correct serial number.)

(1) × 12 = (12)

3.

- (a) The product of photosynthesis is not a protein.
- (b) Solar energy is converted into chemical energy during photosynthesis.
- (c) Nitric acid turns red litmus blue.

- (d) Tooth decay is caused by the presence of a base.
- (e) Sea breeze blows from sea to land.
- (f) Heat and temperature are exactly the same physical quantities.
- (g) Digestion of starch starts in the stomach.
- (h) The gall bladder temporarily stores bile.
- (i) Kerosene is a forest product.
- (j) Forests influence the climate and water cycle.
- (k) Frogs breathe through their skins as well as their lungs.
- (l) During heavy exercise the breathing rate of a person slows down.

For question 4, give one word answer. (write only correct answer with correct serial number, no need to write the whole sentence again)

4. (1) × 6 = (6)
- (a) A plant that is partially autotrophic.
 - (b) Any one product of neutralization reaction.
 - (c) Name the mode/ process of transfer of heat in which there is no need of any material medium/ body.
 - (d) The organ where water from the undigested food is absorbed in human body.
 - (e) Forests can also be called as.
 - (f) Carbon dioxide gas turns/ changes, this chemical from transparent to milky..
5. Write down the word equation of photosynthesis. (2)
6. Define an indicator. Name any one natural indicator. (2)

For question number **7** and **8** two statements are given- one labelled **Assertion (A)** and the other labelled **Reason (R)**. Select the correct answer to these questions from the codes (a), (b), (c) and (d) as given below:

- (a) Both A and R are true, and R is the correct explanation of the assertion.
- (b) Both A and R are true, but R is not the correct explanation of the assertion.
- (c) A is true, but R is false.

(d) A is false, but R is true.

7.

Assertion (A): Black or dark coloured clothes are very good for us in summer season.

Reason (R): Black or dark coloured clothes are very good absorbers of heat. (2)

8.

Assertion (A): Thousands of minute finger-like projections or outgrowths found in the inner wall of small intestine are called villi to help in absorption of food nutrient.

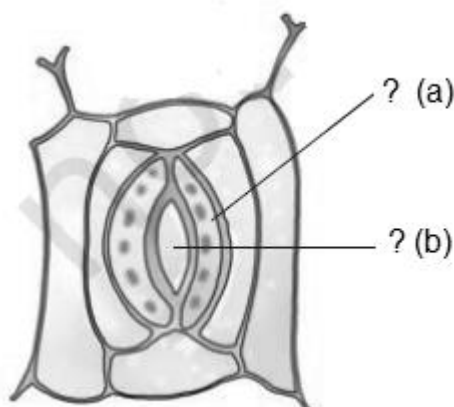
Reason (R): These villi increase the surface area for maximum and quick absorption of digested food from small intestine into the blood stream. (2)

9. Explain how forests prevent floods. (2)

10. Write down word chemical equation for “Aerobic respiration happening in our cells”. (2)

11. Like all other living cells of the plants, the root cells also need oxygen to generate energy. Where do roots get air from? (2)

12. Name the part of leaf shown in the following picture and **label (a) and (b)** on your answer sheet.(No need to draw the picture on your answer sheet) (3)



13. Draw the following table on your answer sheet and, **write the actual name of the acid or base** found in the following substances. (Do not write only the words acid or base in column 2) (3)

Column 1	Column 2
(a) Soap	

(b) Curd	
(c) Spinach	

14. Read the following passage and answer the questions followed.

Bhoojo was very happy and excited as his father was taking him on a tracking trip to snow mountains of great Himalayas in Uttarakhand state of India. This was his (Bhoojo's) first experience to go to see snow mountains after long tracking trip. His father asked him to pack lot of thin sweaters and jackets so that he could wear many such layers on each other for better protection from extreme cold weather in deep and high Himalayas. Bhoojo was surprised and asked his father why many thin sweaters were being packed. He (Bhoojo) further added that it would be more convenient to carry one or two thick jackets instead of many thin jackets and sweaters. His knowledgeable father explained him great concepts of Science related to carrying many thin sweaters instead of thick ones.

- (a) What explanation Bhoojo's father must have given to him to explain the importance of thin layers of sweaters for better effective protection from severe cold? (2)
- (b) Would you like to call "air" a good conductor of heat or a good convector of heat for transferring heat through it? (1)

15. Why do we get instant energy from glucose? (3)

16. Write **any three** uses/ benefits of forests for us. (3)

For question number 17, either do 17 (a) fully OR do 17 (b) fully. (any one only out of two). Write clear and correct serial number of the one you are attempting. Do not do/touch both of them.

- 17. (a)
 - (i) Write any one points of difference between lab and clinical thermometer. (2)
 - (ii) Draw a lab thermometer and label any two parts of it. (3)

OR

17(b) Write down activity to show convection in liquids. Make labelled diagram also. (5)

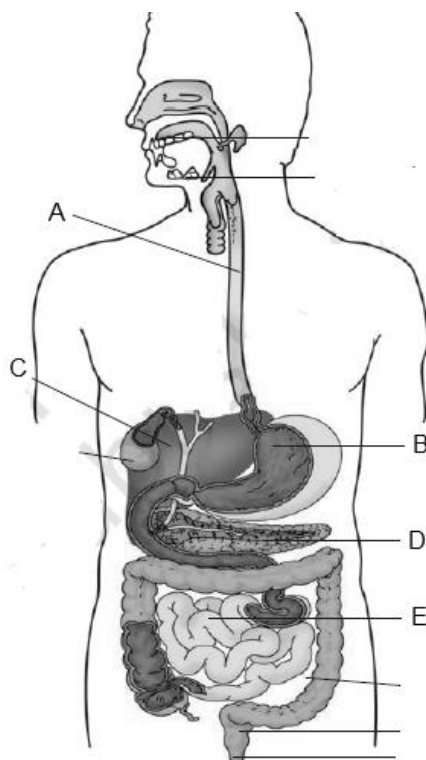
For question number 18, either do 18 (a) fully OR do 18 (b) fully. (any one only out of two). Write clear and correct serial number of the one you are attempting. Do not do/touch both of them.

- 18. (a)
 - (i) Write any one difference between the nutrition in amoeba and human beings. (2)
 - (ii) Which part of the digestive canal is involved in: (3)
 - (a) absorption of food _____.

- (b) chewing of food _____.
- (c) killing of bacteria _____.

OR

18. (b) Label the parts (A), (B), (C), (D), (E) in the following diagram. (No need to draw the diagram on answer sheet) (5)



For question number 19, either do 19 (a) fully OR do 19 (b) fully. (anyone only out of two). Write clear and correct serial number of the one you are attempting. Do not do/touch both of them.

19. (a)

Explain the activity shown in the following picture, in your own simple words. Also write word chemical equation for the same.



OR

19 (b)

- (i) Why do we get cramps sometimes?
- (ii) Explain with word chemical equation.
- (iii) What should be done to get relief?

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