

Maharashtra State Board

Class VII Science

Sample Paper – 1

Time: 2 hrs

Max. Marks: 60

General Instructions:

1. All questions are compulsory.
2. The marks related to the question are given in brackets.

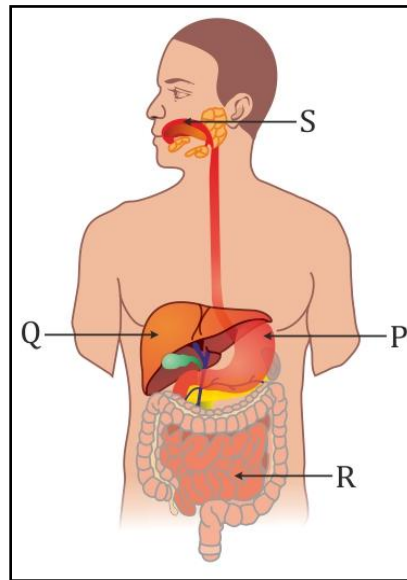
I. Choose the correct alternative:

[15]

1. The molecular formula of ammonium chloride is
 - (a) KOH
 - (b) NH_4Cl
 - (c) CuSO_4
 - (d) FeCl_2
2. The Ministry for Renewable Energy of the Government of India observes 20th August as
 - (a) Van Mahotsav Day
 - (b) Environment Day
 - (c) Youth Day
 - (d) Akshayya Urja Din
3. The dark black region of the shadow is called
 - (a) Umbra
 - (b) Penumbra
 - (c) Rainbow
 - (d) Eclipse
4. The density of water is
 - (a) 10 g/cc
 - (b) 100 g/cc
 - (c) 1 g/cc
 - (d) 1000 g/cc
5. A group of cells performing the same function is called
 - (a) Organ
 - (b) Organ system
 - (c) Population
 - (d) Tissue

- 6.** The falling of pollen grains on the stigma is called
- (a) Pollination
 - (b) Fertilisation
 - (c) Germination
 - (d) Budding
- 7.** Human blood is of _____ types.
- (a) Three
 - (b) Four
 - (c) Two
 - (d) Five
- 8.** Convection takes place only in
- (a) Solids
 - (b) Gases
 - (c) Liquids
 - (d) Both b and c
- 9.** Carbohydrates are broken down into _____ after digestion.
- (a) Fatty acids
 - (b) Amino acids
 - (c) Glucose
 - (d) Proteins
- 10.** Deficiency of vitamin C causes
- (a) Rickets
 - (b) Scurvy
 - (c) Anaemia
 - (d) Goitre
- 11.** Which of the following is the correct order for the stages in the process of growth?
- (a) Production → Growth → Differentiation
 - (b) Growth → Production → Differentiation
 - (c) Production → Differentiation → Growth
 - (d) Differentiation → Production → Growth

- 12.** Which of the following represents the correct labelling for the parts (P, Q, R, S) of the human digestive system?



- (a) Stomach, Liver, Mouth, Small intestine
(b) Stomach, Mouth, Liver, Small intestine
(c) Mouth Stomach, Liver, Small intestine
(d) Stomach, Liver, Small intestine, Mouth
- 13.** When the temperature increases, the speed of sound
- (a) Increases
(b) Decreases
(c) Remains constant
(d) Does not get affected
- 14.** When glass and silk are rubbed against each other, the glass develops a charge and the silk develops a charge.
- (a) Negative, positive
(b) Positive, negative
(c) Positive, neutral
(d) Negative, neutral
- 15.** Which substance is sprayed to prevent the evaporation of water from lakes?
- (a) Ethyl alcohol
(b) Kerosene
(c) Butanol
(d) Cetyl alcohol

II. Answer the following:**[10]**

16. Explain the differences between acids and bases.
17. Draw a neat labelled diagram of a gold leaf electroscope.
18. Match the following:

Column A	Column B
Cell division	Yeast
Budding	<i>Mucor</i>
Fragmentation	<i>Amoeba</i>
Sporogenesis	<i>Spirogyra</i>

19. Classify the following as 'right' or 'wrong'.

- (a) Use of chemical fertilisers
- (b) Planting trees along the roadside
- (c) Use of drip irrigation
- (d) Throwing away stored water

20. Define:

- (a) Calorie
- (b) Specific heat

III. Answer the following:**[15]**

21. Give reasons: Even when the water at the surface of a lake freezes to form a sheet of ice, aquatic animals continue to live below.
22. What are the ill-effects of taking intoxicating substances?
23. State the functions of the circulatory system.
24. Why is mercury used in thermometers?
25. What are the characteristics of propagation of sound?

IV. Answer the following in brief:**[20]**

26. (a) Why is steel preferred for making various items instead of iron?
(b) Explain and give balanced chemical equations for
 - i. Action of water on sulphur dioxide
 - ii. Burning of magnesium ribbon in air
27. What are the various methods of preserving food?
28. Describe how sexual reproduction takes place in flowering plants.
29. Write a short note on rainwater harvesting.
30. Describe the construction of a calorimeter.