विद्या सर्वार्थि साधिका

ANANDALAYA
ANNUAL EXAMINATION
Class: VII

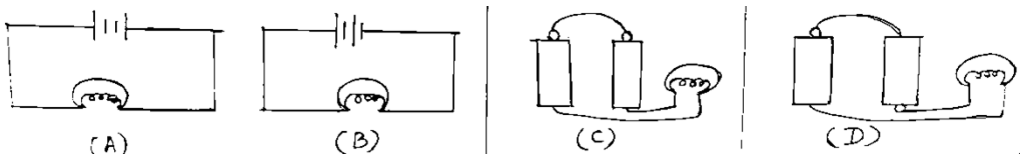
Subject: Science MM: 80
Date : 07-03-2023 Time: 3 hours

General Instructions:
(i) There are four sections with 36 questions in this question paper. All questions are compulsory.
(ii) Section A consists of 16 objective type questions carrying 1 mark each.
(iii) Section B consists of 8 very short answer questions carrying 2 marks each.
(iv) Section C consists of 6 short answer questions carrying 3 marks each.
(v) Section D consists of 6 long answer questions carrying 5 marks each.

SECTION A

1. The kink present in the _____ thermometer prevents mercury level from _____. (1)
(A) clinical, falling on its own (B) clinical, increasing on its own
(C) laboratory, falling on its own (D) laboratory, increasing on its own

2. Out of four circuit diagrams, the components are connected wrong in two of the diagrams. Identify them. (1)



(A) B & C (B) A & C
(C) A & D (D) B & D

3. Magnifying glass is a _____. (1)
(A) Concave mirror (B) Convex mirror (C) Concave lens (D) Convex lens

4. Observe the data in the following table. (1)

x) Ammonium Chloride	p) a salt of weak acid and strong base
y) Hydrochloric acid	q) a strong acid
z) Sodium acetate	r) a weak acid
w) Acetic acid	s) a salt of strong acid and weak base

Which one of the followings is the correct match of the above table?
(A) x-s, y-q, z-p, w-r (B) x-s, y-r, z-q, w-r
(C) x-p, y-q, z-s, w-r (D) x-q, y-s, z-p, w-r

5. The rearing of silkworms for obtaining silk is called: (1)
(A) Apiculture (B) Pisciculture (C) Sericulture (D) Silviculture

6. Arya wanted to buy a gift made of animal fibre obtained without killing the animal. Which of the following would be the right gift for her to buy? (1)
(A) Woollen shawl (B) Silk scarf (C) Animal fur cap (D) Leather jacket

7. Among the list of the given seeds, which one is dispersed by animals? (1)
(A) Maple (B) Drumstick (C) Xanthium (D) Madar

8. The instrument used to amplify the heart sound is _____. (1)
(A) microscope (B) periscope (C) Telescope (D) Stethoscope

9. The vertical section through different layers of soil is called _____. (1)
(A) soil profile (B) A horizon (C) Bedrock (D) B horizon

10. What colour do you see when Newton's disc is rotated fast ? What does that indicate? (1)

11. Define average speed. (1)

12. Wastewater released by houses is called _____. (1)

13. How the following impurities are removed from the sewage in WWTP? (1)
(i) Plastics and Twigs
(ii) Pebbles

14. Write the chemical name and formula of rust. (1)

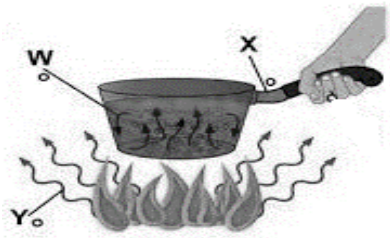
15. What do you mean by unisexual flower? Give an example. (1)

16. Differentiate between canopy and crown. (1)

SECTION B

17. (a) Write type of heat transfer takes place at these points (i) X (ii) Y and (iii) W? (2)

(b) Which type of transfer of heat helps in blowing wind?



18. (2)

(A) (B)

(a) Which picture shows a virtual image? Give reason for your answer.
(b) Which picture shows a real image? Give reason for your answer.

19. Write two advantages of electromagnets over permanent magnets. (2)

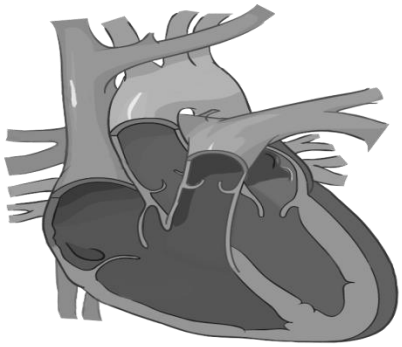
20. (a) Name two chemicals used to disinfect water. (2)
(b) Define: Cocoon

21. (a) Neutralization reaction can be considered as a chemical change. Justify the given statement. (2)
(b) Write down the observations which concludes the chemical change during the reaction between iron nail and copper sulphate solution.

22. Briefly explain the process of respiration that occurs in the following organisms: (2)
(A) Fish (B) Earthworm

23. The figure of the human heart is given below. Identify the wrongly labelled parts and write their function. (2)

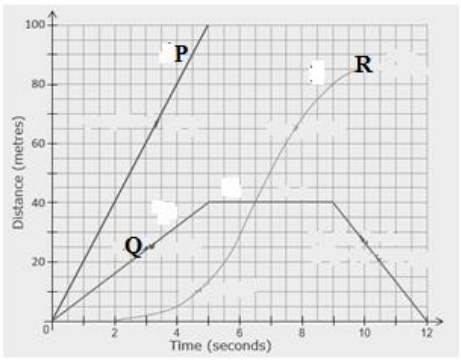
(2)



24. Bima was working with some soil samples in the science activity room. He took some soil sample and added 150ml of water into it. It took 15 minutes for the water to percolate. Calculate the rate of percolation of water in that soil sample. (2)

SECTION C

25. Write any three precautions to be observed while reading a laboratory thermometer. (3)

26. 

Distance-Time graphs of three objects P, Q and R are given here. Answer the following question from the graphs given. (3)
(a) Which object moves faster among three?
(b) Identify the object which is at rest in its motion and mention the time duration of it.
(c) Which object shows non-uniform motion?
(d) Write the scale for this graph.

27. (a) Explain the relationship between sanitation and disease. (Any one point) (3)
(b) What is activated sludge?
(c) Name two inorganic impurities present in sewage.

28. (a) What health problems do workers in the silk industry suffer from? (3)
(b) Mention the steps in wool production.

29. List the components of blood. What is the function of each of the component? (3)

30. (a) Which are the major types of soil? (3)
(b) What is the basis of this grouping?
(c) Suggest one plant that could be grown in each soil type.

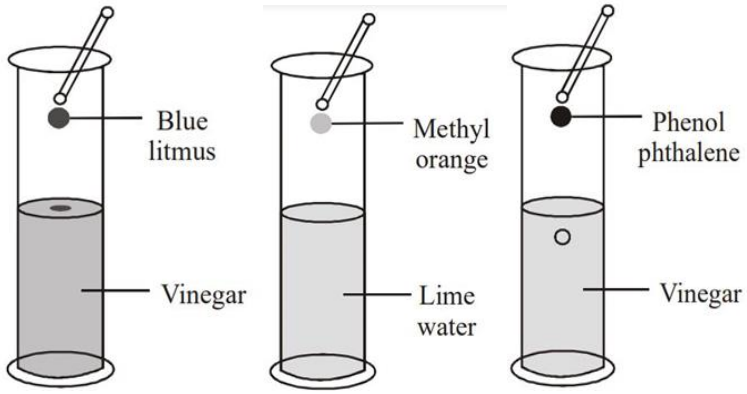
SECTION D

31. Explain the construction and working of the electric bell with the help of a labelled diagram. (5)

32. Suresh is standing in front of a huge plane mirror at a distance of 4 m and his height is 2 m. (5)
(a) What type of image is formed by the above mirror?
(b) Name the mirror and the lens to form a similar image.
(c) What is the height of his image?

(d) What is the distance between Suresh and his image?
(e) What will be the distance between him and his image, if he walks 1 m towards the mirror?
(f) What is lateral inversion?

33. (a) Observe the following figures X, Y and Z. The different solutions are being tested with the help of the indicators. (5)



X **Y** **Z**

Predict the change in colour of the indicators in each of the above figures.
(b) Discuss the application of acid-base concept in Soil treatment.

34. (a) Justify the statement: Depletion in ozone layer can be considered as a chemical change. (5)
(b) Name two metals which are used for galvanisation of iron.
(c) Write down the observations which conclude the chemical change during the burning of Magnesium ribbon.

35. (a) Differentiate between pollination and seed dispersal. (5)
(b) Why are agents required for both?
(c) What are the advantages of having agents for both the processes?

36. (a) Explain how forests maintain balance of oxygen and carbon dioxide in the atmosphere? (5)
(b) Why is it said that there is no waste in a forest?
(c) Differentiate between deforestation and afforestation.