CBSE Board
Class VII Science
Term 2
Sample Paper - 3

Time: 3 hrs Total Marks: 100

General Instructions:

1. The question paper consists of 44 questions and is divided into four sections, A, B, C and D
2. All questions are compulsory.
3. Section A comprises of question numbers 1 to 20. These are multiple choice questions carrying one mark each. You are to select one most appropriate response out of the four provided options.
4. Section B comprises of question numbers 21 to 30. These are SAQ's carrying two marks each.
5. Section C comprises of question numbers 31 to 40. These are SAQ's carrying four marks each.
6. Section D comprises of question numbers 41 to 44. These are SAQ's carrying five marks each.

SECTION-A

Attempt all questions from this section.

Q1. Which plant produces winged seeds?

A. Moringa
B. Calotropis
C. Xanthium
D. Urena

Q2. Which chemical is added during the sedimentation step to allow settling of floating particles in water?

A. Alum
B. Charcoal
C. Iron
D. Lime

Q3. Where does the urine gets stored before it gets eliminated out of the body?

A. Kidneys
B. Ureters
C. Urethera
D. Urinary bladder

Q4. Which blood cell forms the clot?

A. Plasma
B. Platelet
C. RBC
D. WBC

Q5. Which gas increases the earth's temperature?

A. Carbon dioxide
B. Oxygen
C. Nitrogen
D. Helium

Q6. What is the process called when the rain water seeps through the soil?

A. Distillation
B. Infiltration
C. Filtration
D. Centrifugation

Q7. Which of the following statements is incorrect about physical changes?

A. No new substance is formed
B. They are easily reversible
C. They are sometimes permanent
D. Very little energy is absorbed or given out

Q8. Name the change involved in the burning of coal in blast furnace.

A. Irreversible physical change
B. Reversible physical change
C. Chemical change
D. Physical at low temperatures and chemical at high temperatures

Q9. Which of the following exhibits physical change?

A. Melting of silver
B. Water absorbed in a paper towel
C. Mixing chalk powder in water
D. All the above

Q10. The appearance of rust is like _____ flaky substance.

A. Reddish brown
B. Bluish black
C. Yellowish green
D. Black

Q11. You want to eat pop-corn. You heat corn seeds in a pan. What type of change is this?

A. Chemical change
B. Physical change
C. Crystallisation
D. No change

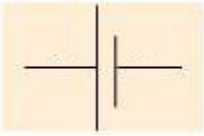
Q12. Name the change as seen in image:

A. Physical change
B. Chemical change
C. Incomplete chemical change
D. Both physical and chemical change

Q13. Name the change involved in boiling water to make pasta.

A. Chemical change
B. Physical change
C. Condensation
D. Evaporation

Q14. Shown figure represents the symbol of:

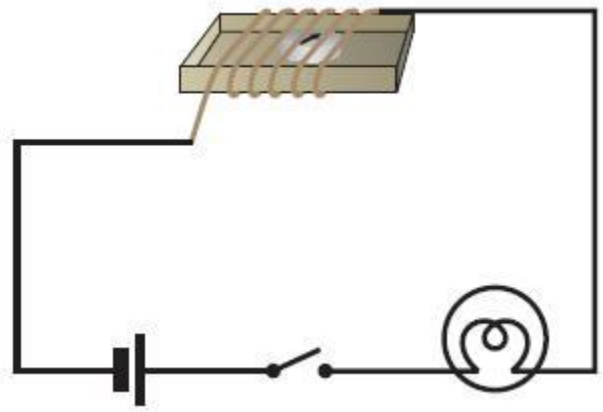


A. Electric cell
B. Battery
C. Switch ON
D. Switch OFF

Q15. An electric bulb works on the principle of:

A. Chemical effect of electric current
B. Heating effect of electric current
C. Magnetic effect of electric current
D. Electronic effect of electric current

Q16. What will you observe in a compass needle shown in the figure when the switch is moved to ON position?



A. It shows deflection and then comes back to its original position
B. It shows deflection and retains it till the current is switched OFF.
C. It keeps showing deflections on both sides continuously
D. It does not show any deflection

Q17. Who was the first person to notice the magnetic effect of electric current?

A. Faraday
B. Ampere
C. Oersted
D. Volta

Q18. Three lenses A, B and C produce magnification of 1,2 and 3 respectively. The net magnification of the combination is:

A. 6
B. 3
C. 2
D. 9

Q19. A straight line passing through the geometric centre of the spherical mirror and the focus is called the _____ of the mirror.

A. focal length
B. radius of curvature
C. principal axis
D. aperture

Q20. What property of a convex mirror gives it many uses, especially relating to safety?

A. They form enlarged images
B. They have narrower range of view than a plane mirror
C. They have wider range of view than a plane mirror
D. They are cheaper than plane mirrors

SECTION-B

Q21. What do you understand by water table? Name the factors that affect water table.

Q22. What is sewarage? Write its function.

Q23. Name the following:

(i) The uppermost branches of the trees in a forest, forming a more or less continuous layer of foliage, appearing like a roof over the other plants in the forest.
(ii) The micro-organisms which convert the dead plants and animals to humus.
(iii) The dark coloured substance in soil formed by the decomposition of leaves and other plant material by soil microorganisms.
(iv) A sequence of organisms in a community, where each member is eaten by another member.

Q24. Mention two ways in which plants get benefit by seed dispersal.

Q25. Formation of clouds is a physical change. Explain.

Q26. Why is digestion classified as a chemical change?

Q27. What is crystallisation? Give its main use.

Q28. Define opaque objects. Give two examples of it.

Q29. Draw a circuit diagram which includes the following:

A cell, a bulb, an open switch

Q30. What are the two characteristic features of the image shown in the given figure?

SECTION-C

Q31. Discuss the process of reproduction in yeast.

Q32. Differentiate between artery, vein and capillary.

Q33.

(a) Flowers are generally very colourful and fragrant. How is this important for pollination?

(b) What happens when the male and female gamete are fused together? What does it develop into?

Q34.

(a) In summer, why do we find white patches on our clothes, especially in areas like underarms?

(b) Describe the excretory products of birds and lizards.

Q35. A magnesium strip is burnt. The ash so obtained is dissolved in water. What kind of changes are these? Write the chemical equations for these changes. What is the nature of magnesium oxide solution? How will you test it?

Q36.

(a) Why is rusting of iron faster in coastal areas?

(b) Write an experiment to show that air and moisture are necessary for rusting.

Q37. Differentiate between physical and chemical changes (four points).

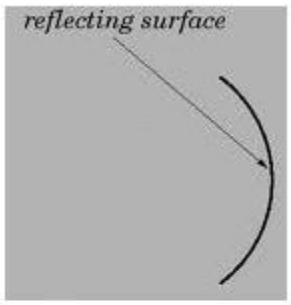
Q38. Describe an activity to show that the image is at the same distance behind the mirror as the object is in front of it.

Q39. Describe an activity to make an electromagnet.

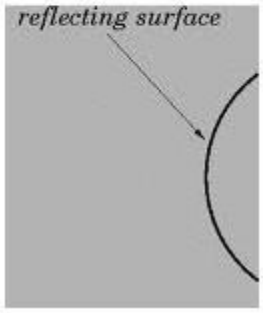
Q40.

(a) Identify the types of mirror in the following diagrams.

(i)



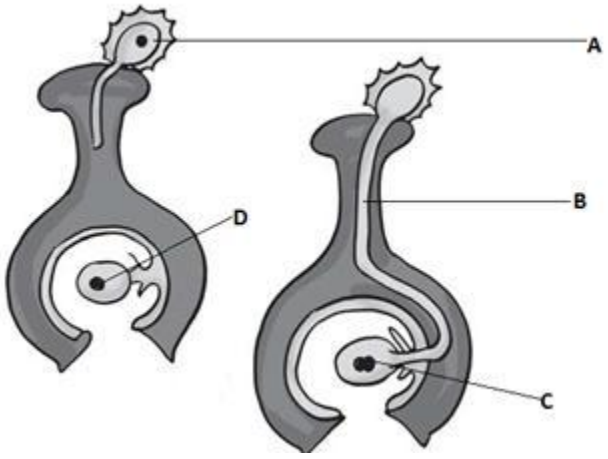
(ii)



(b) How many colours are there in white light? Name the various colours of white light.

SECTION-D

Q41.

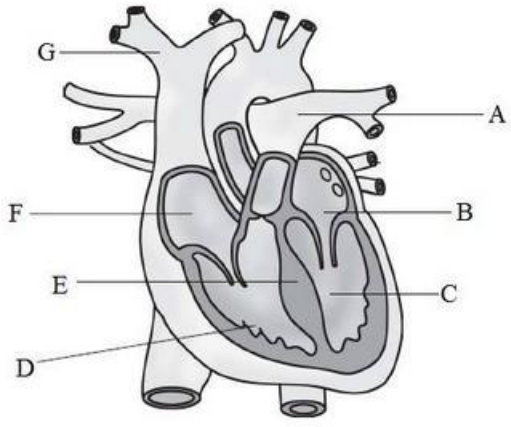


(a) Identify A, B, C and D in the below figure.
(b) Name the parts of a pistil.
(c) How pollen tube is formed? What is its function?

Q42.

(a) Write the importance of:
  (i) Stethoscope
  (ii) Atrium
  (iii) Ventricle

(b) What is the function of the region marked 'E' in the figure?



Q43.

(i) Most physical changes are reversible. Give two examples to support this statement.

(ii) How does the ozone layer protects us from the harmful UV radiations. Is there any chemical change involved in it?

(iii) Why is burning of magnesium ribbon considered a chemical change?

Q44.

(a) State the heating effect of the electric current.

(b) Why is it that same current flowing through the tungsten filament of an electric bulb produces enormous heat but almost negligible heat is produced in the connecting wires of the bulb?

(c) Where can we place a key or a switch in an electric circuit?