

HALF YEARLY EXAMINATION, 2017-18

SCIENCE

Class - VII

Time : 3 hrs.

M.M.: 80

Name of the student _____ Section ____ Date-20.09.2017 (Wednesday)

General Instructions :

- Read the instructions carefully.
- All questions are **compulsory**.
- Question paper consists of **2 Sections**. **Section A** comprises **descriptive** type questions and **Section-B** comprises **multiple choice questions**.
- Write the answer in **proper sequence** and **draw diagrams** wherever necessary.
- Use options wherever mentioned in the questions.

SECTION – A

Answer the following questions.

- Q.1** Name the mode of heat transfer in – (1)
a) solid b) liquid
- Q.2** Define speed and mention its SI unit. (1)
- Q.3** What does the formula of substance tell you? (2)
- Q.4** Define chemical change. Also give two examples of it. (2)
- Q.5** The distance between two stations is 240km. A train takes 4hours to cover this distance. Calculate the speed of the train. (2)
- Q.6** Define neutralisation reaction. Mention any one example. (3)
- Q.7** Classify the changes involved in the following processes as physical or chemical changes. (3)
a) photosynthesis b) dissolving sugar in water c) melting of wax
- Q.8** a) Define – (i) shearing ii) sericulture (3)
b) Name any two animals from which wool is obtained.
- Q.9** Name the various modes of heat transfer giving one example of each. (3)
- Q.10** Why are utensils made of metals but its handles are made of plastic? (3)
- Q.11** Draw the distance-time graph for a car moving at speed of 5 m/sec. (3)
- Q.12** Neha is studying in class VII. One day she returned home from the school in the afternoon and noticed that her younger brother, Naresh was watching TV keeping all the lights and fans 'ON'. She also noticed that the windows were closed and curtains were drawn, which made the room dark. She calmly opened the windows, drew the curtains aside, which illuminated and aerated the room. Then, she asked Naresh to turn 'OFF' the lights and fans. (1+2)

- a) Why did Neha tell Naresh to switch 'OFF' the lights and fans?
 b) List two values exhibited by Neha.

Q.13 What is electromagnet? Mention its two uses. (3)

Q.14 What is fuse? How does it protect electric circuit from excessive supply of current? (3)

OR

- a) What is circuit diagram? (1)
 b) Write the symbol of bulb, cell, battery and switch in 'OFF' position. (2)

Q.15 Draw neat and labelled diagram of – (3)
 Circuit diagram of a torch which works on three cells.

OR

Circuit diagram of short circuit.

Q.16 a) Define valency with example. (2)

b) Find the valencies of the underlined elements or radicals in the following compounds – (3)

- i) BaCl₂ ii) PCl₅ iii) NaOH

Q.17 a) Define neutral substances with an example. (2)

b) Give three properties of base. (3)

Q.18 a) Mention any two changes that heat can cause in substances. (2)

- b) Explain why – (3)
 i) It is better to wear lighter shades in summer
 ii) Two thin sweaters feel warmer than one thick sweater.

OR

Explain with a diagram how land and sea breezes originate. (5)

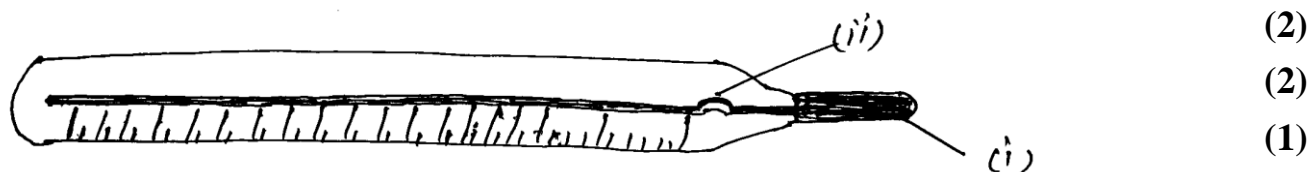
Q.19 a) What is the time period of a pendulum? (2)

b) Mention one factor that determines the time period of a pendulum./ (1)

c) What property of a pendulum made it suitable to be used in the manufacture of clocks? (2)

Q.20 What is electrical resistance? On what does the resistance of a piece of material depend? How does resistance affect current? (5)

Q.21 (2)



- a) Identify (i) and (ii) (2)
 b) Identify the type of thermometer and give its one use. (2)
 c) What is the use of (ii) in the above thermometer? (1)

SECTION - B

Q.22 Choose the correct option.

(12)

- a) The valency of sulphur in sulphur dioxide (SO_2) is –
i) 1 ii) 2 iii) 3 iv) 4
- b) Which of the following is the symbol of gold –
i) Gd ii) Ag iii) Au iv) Pb
- c) Which acid is found in lemon –
i) Lactic acid ii) Citric acid iii) Acetic acid iv) none of these
- d) Solution changes the colour of red litmus paper to blue. The solution is-
i) basic ii) acidic iii) neutral iv) none of these
- e) A man painted his main gate made up of iron, to
i) prevent it from rusting ii) protect it from Sun.
iii) make it look beautiful iv) make it dust free
- f) Which of the following is a physical change?
i) rusting of iron ii) melting of ice
iii) formation of curd iv) burning of wood
- g) Silk fibre is obtained from –
i) fleece of sheep ii) cotton ball
iii) cocoon iv) shiny jute stalk
- h) Which of the following is not a type of silk ?
i) mulberry silk ii) tassar silk iii) mooga silk iv) moth silk
- i) Sun's heat reaches the Earth by mode of –
i) conduction ii) convection iii) radiation iv) evaporation
- j) Melting point of ice in Fahrenheit scale is –
i) 33°F ii) 32°F iii) 33°F iv) 34°F
- k) Filament of bulb is made of –
i) nichrome ii) copper iii) aluminium iv) tungsten
- l) Which of the following device has higher resistance –
i) fan ii) room heater iii) cooler iv) AC

