

HALF YEARLY EXAMINATION - 2021

Sub. : General Science

Class : IX

Time : 3 hours

Marks : 90+10=100

Group - A

1. Write the answer of following questions :

1x5=5

(a) The melting point of Ice is --

- (i) 223K (ii) 273K (iii) 300K (iv) 100K

(b) Identify the solution among the following mixtures --

- (i) Soil (ii) Soda water (iii) Air (iv) Sea water

(c) The Unit of Force is --

- (i) Mitre (ii) Newton (iii) Kg (iv) Pascal

(d) Which of the following is metalloid --

- (i) Hydrogen (ii) Oxygen (iii) Boron (iv) Iodine

(e) Universal gravitation constant is --

- (i) $6.763 \times 10^{-11} \text{ Nm}^2\text{kg}^{-2}$ (ii) $6.673 \times 10^{-12} \text{ Nm}^2\text{kg}^{-2}$
(iii) $6.763 \times 10^{-11} \text{ Nm}^2\text{kg}^{-2}$ (iv) $6.763 \times 10^{-11} \text{ Nm}^1\text{kg}^{-2}$

2. Write very short answer of the following :

1x5=5

(a) What is dry ice?

(b) What is odometer?

(c) What is C.N.G.?

(d) Write a name of alloy?

(e) What is biotic component?

3. (a) Write two characteristic of particle of matter.

2

(b) What is solution? Write two properties of solution.

2

(c) Write difference between mass and weight.

2

(d) Why should we wear cotton cloth in summer?

2

(e) Convert into Kelvin scale --

2

- (i) 25°C (ii) 373°C

(f) Write two difference between homogeneous and heterogeneous mixtures?

2

(g) What is called acceleration? Write the S.I. unit of acceleration.

2

(h) Write two differences between velocity and speed.

2

(i) What is uniform motion and non uniform motion?

2

(j) Prove that, $v = \frac{s}{t}$

2

4. What is called evaporation? Write two factors of evaporation.

3

5. A bus decreases its speed from 80 km/h to 60 km/h in 5 seconds. Find the acceleration of the bus. 3
6. Write the Universal law of gravitation. What is the value of acceleration due to gravity "g". 3
7. Write the 2nd law of motion. Prove that, $F=ma$. 4
8. How can we separate a mixture of two immiscible liquids. Explain with diagram. 4
9. (a) Write the law of conservation of momentum. 2
(b) Mass of an object is 10 kg. What is its weight on the Earth? 2
10. (a) What is water pollution? Mention two factors and two effects of water pollution. 1+2=3
(b) What is called Acid rain? 2
11. An object crossed 16 m in 4 sec. and then the same object crossed 16 m within 2 sec., Find out the average speed of the object. 4

Group - B

12. Write short answer : 1x5=5
 - (a) Who discovered cell?
 - (b) What is tissue?
 - (c) What is the unit of DNA?
 - (d) What is plasma?
 - (e) Where is cellulose found?
13. Why mitochondria is known as the power houses of the cell? 3
14. What are the functions of Golgi apparatus? 2
15. Draw a labelled diagram of a neuron. 3
16. Write the differences between Prokaryotic cell and Eukaryotic cell? 2
17. Write two functions of stomata. 2
18. Write the difference between Xylem and Phloem. 2
19. Write two characteristics of Cardiac muscles. 2
20. Write a short note (any three) : 3x3=9
 - (a) Lysosomes (b) Meristematic tissue
 - (c) Plasma membrane (d) ATP (e) Blood
21. Project. 10