

D-124 (H/E)

Science - 2018

Time : 3 Hours]

Class : 10th

[M. M. : 75

Instructions: (i) All questions are compulsory. (ii) Question No. 1 to 4 are objective type. Each question carries $1 \times 5 = 5$ marks. Total marks are $5 \times 4 = 20$. (iii) Internal options are given in question nos. 5 to 20. (iv) Marks of each question are indicated against it. (v) Answer question nos. 5 to 8 in about 30 words each. (vi) Answer question nos. 9 to 12 in about 75 words each. (vii) Answer question nos. 13 to 17 in about 120 words each. (viii) Answer question nos. 18 to 20 in about 150 words each. (ix) Draw neat and clean labelled diagram wherever required.

1. Fill in the blanks:

1×5 = 5

- (i) Chemical equilibrium is only possible in _____ vessel.
- (ii) Distilled water is a _____ of electricity.
- (iii) Urea is formed in the _____ .
- (iv) Metals are _____ of heat and electricity.
- (v) Group of stars are called _____

2. Choose the correct alternative:

1×5 = 5

- (i) General structural formula of Alcohol is
 - (a) R-OH (b) R- CHO
 - (c) R-CO-R (d) R-COOH
- (ii) The planet nearest to the Sun is
 - (a) Earth (b) Saturn
 - (c) Mars (d) Mercury

(iii) The name of the metal that is immersed in Kerosene oil is

- (a) Iron (b) Copper
(c) Sodium (d) Calcium

(iv) SI unit of resistance is

- (a) Volt (b) Ohm
(c) Watt (d) Ampere

(v) Number of chambers are there in the human heart.

- (a) One (b) Two
(c) Three (d) Four

3. Match Column 'A' with 'B':

1×5 = 5

“A”

“B”

- | | |
|--|-----------------------|
| (i) Power of lens | (a) Mercury |
| (ii) Quick Silver | (b) Green Plant |
| (iii) Excretory Organs in the earth worm | (c) Diopter |
| (iv) Producer | (d) Synthetic Plastic |
| (v) Bakelite | (e) Nephridia |
| | (f) Pottassium |
| | (g) Human |

4. Write the answer in one sentence each:

1×5 = 5

- (i) What is the main component of L.P.G ?
- (ii) Write the name of 'Red Planet'
- (iii) Which disease is found in human due to deficiency of blood?
- (iv) What is the unit of sound?
- (v) Write on name of bisexual animal.

5. Define electric power.

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(OR) Define potential difference.

6. Write the laws of refraction. 2
(OR) Write two uses of convex mirror.
7. What is absolute alcohol? 2
(OR) Write the name of any two enzymes.
8. Write any two characteristics of Jovian Planets. 2
(OR) What is Galaxy?
9. Write any three differences between minerals and ores. 3
(OR) Explain froth floatation process of concentration of ore.
10. Write composition, its percentage and uses of any three alloys. 3
(OR) What happens when: (write chemical equation only)
- (i) Zinc reacts with dilute sulphuric acid.
 - (ii) Sulphuric acid reacts caustic soda.
 - (iii) Ammonia reacts with hydrogen chloride gas.
11. What is rain water harvesting? Write two main aims of rain water harvesting. (any two). 3
(OR) What is pollution? Write any two preventive measures to control air pollution.
12. Write the medicinal uses of following plants: 3
- (i) Ginger
 - (ii) Haldi
 - (iii) Amla
- (OR) Write the importance of medicinal plants in brief.
13. Explain compound microscope with diagram. 4
(OR) What is hypermetropia? Give its causes: Explain with the help of a labelled Ray diagram, how it is corrected.

14. Draw a well labelled diagram of voltaic cell. 4
(OR) Draw a well labelled diagram of electric motor.
15. Write any 4 differences between nuclear fusion and nuclear fission. 4
(OR) Explain working of Solar water heater in short by drawing a well labelled diagram.
16. Explain the female reproductive organs of flower by a well labelled diagram. 4
(OR) What is Genetics? Explain mendal's law of dominance with line diagram.
17. Define Detergents. Write any three differences between soap and detergent. 1+ 3= 4
(OR) What is polymerisation? Write name and main uses of any three polymers.
18. Name the factors that affect the rate of a reaction. Explain in detail. 5
(OR) What is heat treatment of steel? Explain.
19. What is photosynthesis? Write any three factors that affect photosynthesis. 5
(OR) Write any five difference between Aerobic respiration and Anaerobic respiration.
20. Write any 5 differences between Artrery and Vein. 5
(OR) Describe the process of urine formation.