

DISTRICT COMMON EXAMINATION BOARD
QUARTERLY EXAMINATIONS - 2015-16

GENERAL SCIENCE - Paper - I

(Physical Science)

(English Version)

PART - A

Class : IX]

(Max. Marks : 35)

[Time : 2 Hrs.

SECTION - I (Marks : 10)

Note : 1. Answer any FIVE questions. Choosing at least Two from each of the following Groups A and B.

2. Each question carries TWO Marks.

Group - A

1. How do you appreciate sweating mechanism of human body to control the temperature of the body ?

2. Why do we prefer to sip hot tea with a saucer rather than a cup ?

3. Distinguish between distance and displacement ?

4. An object of mass 5 kg is moving with a velocity of 10 ms^{-1} .

A force is applied so that in 20 sec, it attains a velocity of 25 ms^{-1} .

What is the amount of force applied on the object ?

[Turn Over

Group - B

5. Explain with example, "Though speed remains constant, its velocity changes" ?
6. Classify the following into elements, compounds and mixtures ?
 - a) sodium b) soil c) Air d) Silver e) carbon di oxide
 - f) Blood g) Methane h) Soap
7. How does a washing machine squeeze out water from wet clothes ?
8. Two objects have masses 8 kg and 25 kg. Which one has more inertia ? Why ?

SECTION - II (Marks : 4)

Note : 1. Answer any **FOUR** questions out of the following in one or two sentences each.

2. Each question carries **ONE** Mark.

9. Convert 27°C into Kelvin scale ?
10. An ant is moving on the surface of a ball. Does it's velocity change or not ?
11. When do the distance and displacement become equal ?

[Contd. 3rd

12. What is friction ?
13. Why should we shake syrups before using ?
14. What is chromatography ?

SECTION - III (Marks : 16)

Note : 1. Answer any **FOUR** questions, choosing **Two** from each of the following **Groups A and B.**

2. Each question carries **FOUR** Marks.

Group - A

15. Explain an activity to know the effect of surface area, humidity and wind speed on evaporation ?
16. Describe an experiment to show that "Lighter gases diffuse more rapidly than heavier gases."
17. A car travells at a velocity of 80 km/h during the first half of its running time and at 40 km/h during the other half. Find the average speed of the car ?
18. Illustrate an example of each of the three laws of motion ?

Group - B

19. Distinguish between the properties of suspensions and colloids ?
20. Describe an experiment to seperate ammonium chloride and salt from its mixture ?

[Turn Over

21. Deduce the "Law of conservation of Momentum".
22. Derive $s = ut + \frac{1}{2}at^2$.

SECTION - IV (Marks : 5)

Answer any ONE of the following questions.

10

23. Draw Model diagram showing arrangement of particles in solids liquids and gases ?
24. Draw the diagram showing experimental set-up showing fractional distillation ? Label its parts ?



Regd. No. **R - 49 A**Marks :

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GENERAL SCIENCE - Paper - I

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PART - B

Class : IX]

(Max. Marks : 15)

[Time : ½ Hr.

I. Choose the correct answer and write in brackets provided.

20 x ½ = 10

1. The substance that undergoes sublimation is _____ ()
 a) Sugar b) Salt c) Iodine d) Ice
2. The melting point of ice is _____ ()
 a) 0°C b) 100°C c) 373°K d) 0°K
3. The highly compressible state of matter is _____ ()
 a) Solid b) liquid c) gas d) plasma
4. A gas can be liquified by _____ ()
 a) increasing pressure b) decreasing temperature
 c) decreasing pressure d) a and b
5. Which of the following is a Rector quantity. ()
 a) Displacement b) Distance
 c) Speed d) Mass
6. Units of acceleration in S.I system ()
 a) m/sec b) m/sec² c) cm/sec d) cm/sec²

[Turn Over

16. Which of the following is a pure substance ()
a) Brass b) Bronze c) steel d) Iron sulphide
17. Two mixible liquids differing in their boiling points by 30°C can be separated by ()
a) Simple distillation b) Fractional distillation
c) Evaporation d) None
18. Tyndall effect is exhibited by ()
a) Suspensions b) True solutions
c) Colloids d) Mixtures
19. Milk is _____ ()
a) an emulsion b) a colloid
c) Liquid dispersed in another liquid d) all the above
20. Naphthalene and iron filings can be separated by _____ ()
a) sublimation b) decantation
c) distillation d) sedimentation

II. Fill in the blanks.**5 x ½ = 2½**

21. Solid carbon di oxide is called _____
22. A freely falling body moves with uniform _____
23. Momentum of a body is product of its _____ and _____
24. A system is said to be _____ when external force acting on it is zero.
25. Mixtures that easily scatter beam of light are called _____

[Turn Over

III. Match the following.

5 x ½ = 2½

Group - A

Group - B

26. Conversion of liquid into

gas

()

a) Sublimation

27. Non-compressible

()

b) gas

28. Maximum expansion

()

c) Solid

29. Constituents of matter

()

d) Particle

30. Conversion solids into gas

()

e) evaporation

