

# QUARTERLY COMMON EXAMINATION - 2022

9 - STD

SCIENCE

Time : 2.30 Hrs

9205

Marks : 75

## PART - I

I Answer all the questions.

12 X 1 = 12

Choose the most suitable answer and write the code with the corresponding answer.

- Which among the following is not a device to measure mass?  
a) spring balance    b) beam balance    c) physical balance    d) digital balance
- The area under velocity - time graph represents  
a) velocity of the moving object    b) displacement the covered by the moving object  
c) speed of the moving object    d) acceleration of the moving object
- Clouds float in atmosphere because of their low  
a) density    b) pressure    c) velocity    d) mass
- Among the following ..... is a mixture.  
a) common salt    b) juice    c) Carbon di oxide    d) pure silver
- The correct electronic configuration of Potassium is  
a) 2,8,9    b) 2,8,1    c) 2,8,8,1    d) 2,8,8,3
- Elements in the modern periodic table are arranged in ..... groups and ..... periods.  
a) 7,18    b) 18,7    c) 17,8    d) 8,17
- Mesoglea is present in  
a) Porifera    b) Coelenterata    c) Annelida    d) Arthropoda
- Excretory organ of tape worm is  
a) flame cells    b) nephridia    c) body surface    d) solenocytes
- The tissue composed of living thin walled polyhedral cell is  
a) Parenchyma    b) Collenchyma    c) Sclerenchyma    d) none of above
- Aerenchyma is found in  
a) Epiphytes    b) Hydrophytes    c) Halophytes    d) Xerophytes
- Transpiration takes place through .....  
a) fruit    b) seed    c) flower    d) stomata
- Which key should be pressed to run a slide show?  
a) F1    b) Tab    c) F5    d) F2

## PART - II

II Answer any seven questions. Question number 22 is compulsory.

7 X 2 = 14

13. Define measurement.

14. Match the following.

### Column - I

1. Length

2. Mass

3. Time

4. Temperature

### Column - II

a) Kelvin

b) Metre

c) Kilogram

d) Second

15. Compare speed and velocity.

16. State Pascal's law.

17. A few drops of 'Dettol' when added to water the mixture turns turbid. Why?

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218. State modern periodic law.  
 219. Define taxonomy?  
 220. State whether true or false. If false, correct the statement.  
 i) Hermaphrodite animals have both male and female sex organs.  
 ii) Trachea are the respiratory organ of Annelida.  
 21. Fill in the blanks.  
 i) ..... and ..... are complex tissues.  
 ii) Epithelial cells with Cilia are found in of our body.  
 22. Draw and label the parts of structure of Neutron.

### PART - III

**III Answer any 7 questions. Question number 32 is compulsory.**

7 X 4 = 28

23. Differentiate mass and weight.  
 24. Explain different types of motion.  
 25. a) Why does a Helium balloon float in air?  
 b) Why it is easy to swim in Sea water than in river water?  
 26. Which of the following are pure substances.  
 a) Ice, Milk, Iron, Hydrochloric acid, Mercury, Brick and water.  
 b) Define sublimation.  
 27. Draw the structure of Oxygen and Sulphur atoms.  
 28. State any five features of modern periodic table.  
 29. List five characteristic features of Fishes.  
 30. a) **Match the following.**
- | Phylum              | Examples.  |
|---------------------|------------|
| i) Coelenterata     | - Snail    |
| ii) Platyhelminthes | - Starfish |
| iii) Echinodermata  | - Tapeworm |
| iv) Mollusca        | - Hydra    |
- b) Differentiate phototropism from photonasty.  
 31. Photosynthesis converts energy X into energy Y.  
 a) What are X and Y?  
 b) Green plants are autotrophic in their made of nutrition. Why?  
 32. Calculate the number of neutrons, protons and electrons.  
 Atomic number 3 and mass number 7.

### PART - IV

**IV Answer all the questions.**

3 X 7 = 21

33. How will you find the thickness of a one rupee coin? **(OR)**  
 Describe the construction and working of Mercury barometer.  
 34. Explain Tyndall effect and Brownian movement with suitable diagram. **(OR)**  
 a) Write the differences between elements and compounds and give an example for each.  
 b) How are homogenous solutions different from heterogeneous solution? Explain with examples.  
 35. List out the differences between mitosis and meiosis. **(OR)**  
 a) Define Transpiration.  
 b) Differentiate between tropic and nastic movements.