

Class : X

Sub : PHY. SCIENCE

## MODEL PAPER

### PART - A

#### SECTION - I

*Answer any FIVE of the following choosing atleast two from each group : 5 x 2 = 10*

#### GROUP - A

1. Write the factors that influence value of 'g'.
2. Draw symbols of p-n-p and n-p-n transistor.
3. State the laws of resistance ?
4. What is moderator ? Give an example.

#### GROUP - B

5. Define atomic radius and Ionisation energy.
6. Draw the bond formation of HCl molecule.
7. What are Amino acids give two examples.
8. What are the quantities of a face powder ?

#### SECTION - II

*Answer any FOUR of the following : 4 x 1 = 4*

9. Define time of flight.
10. State law of radioactive disintegration ?
11. What is doping ?
12. What is saponification of oils ?
13. What is annealing ?
14. What is ionic product of water ?

#### SECTION - III

*Answer any FOUR of the following choosing atleast two from each group : 4 x 4 = 16*

#### GROUP - A

15. Compare the properties of  $\alpha$ ,  $\beta$  and  $\gamma$  radiations.
16. What are the uses of radio isotopes.
17. Derive

$\frac{1}{2} \frac{1}{3}$

1 1 1 1

R R R R

= + +

18. Write about the formation of p-type and n-type semiconductors ?

#### GROUP - B

19. Write about Rutherford atom model with defects ?
20. What is modern periodic law ? Explain its main features ?
21. How do you test the quantity of a soap ?
22. What is a drug ? What are its qualities ? How they are classified based on therapeutic action?

#### SECTION - IV

*Draw any one of the diagram : 1 x 5 = 5*

23. Draw nuclear reactor and label its parts ?
24. Draw the diagram showing alcohol manufacture and label the parts ?

-o0o-

FOR MORE VISIT [WWW.STUDYWELL.AT.UA](http://WWW.STUDYWELL.AT.UA)

**PART - A Marks : 35**

**Class : X**

**Sub : PHY. SCIENCE**

## **MODEL PAPER**

**PART - B**

**Max. Marks : 15**

**I. Choose the correct answer :-  $10 \times \frac{1}{2} = 5$**

1. The device used to separate particles from higher mass from those of lower mass in a given mixture

( )

a) Centrifuge b) Photometer c) Gravimeter d) None

2. The electromagnetic waves are ( )

a) Stationary waves b) Transverse wave c) Longitudinal waves d) Both c & b

3. The distance between successive node and antinode ( )

a)  $\frac{\lambda}{2}$  b)  $\frac{\lambda}{8}$  c)  $\frac{\lambda}{4}$  d)  $\lambda$

4. Solid angle is measured in ( )

a) Lumen b) Candela c) Phot d) Steradians

5. Which one of the following is not a diamagnetic substance ( )

a) Air b)  $H_2O$  c) Iron d) Bismuth

6. Magnesium ore is ( )

a) Beryl b) Baryte c) Carnalite d) Hematite

7. In Tollen's test glucose reduces ( )

a) Ag metal to  $Ag^+$  ion b)  $Ag^+$  ion to Ag metal

c)  $Cu^{2+}$  to  $Cu^+$  ion d)  $Cu^+$  ion to  $Cu_2O$

8. Glass blowing is possible with ( )

a) Flint glass b) Pyrex glass c) Soda glass d) Hard glass

9. Colour of Phenolphthalein indicator in acidic medium ( )

a) Colourless b) Green c) Orange d) Red

10. Shaving soap contains excess of ( )

a) Lauric acid b) Glycerol c) Stearic acid d) Oleic acid

**II. Fill in the blanks :  $10 \times \frac{1}{2} = 5$**

11. Screw gauge works on the principle of \_\_\_\_\_.

12. In S.H.M. acceleration of the particles is directly proportional to \_\_\_\_\_.

13. \_\_\_\_\_ protect us from ultraviolet radiations from the sun.

14. The unit of Magnetic pole strength in M.K.S system \_\_\_\_\_.

15. Frequency used in Radio communication \_\_\_\_\_.

16. The reagent used to prepare  $BeH_2$  from  $BeCl_2$  is \_\_\_\_\_.

17. Solid  $CO_2$  is called \_\_\_\_\_.

18. The  $Co-NH$  bond is called \_\_\_\_\_.

19. Deodorant soap contains \_\_\_\_\_.

20. Formula for acetic acid is \_\_\_\_\_.

**III. Match the following :  $10 \times \frac{1}{2} = 5$**

21.  $\otimes$  -rays ( ) a) High ionisation

22.  $\odot$  - rays ( ) b) Same mass number but different atomic numbers

23. Isotopes ( ) c) Electromagnetic radiations

24.  $\langle$  - rays ( ) d) Electrons originating in the nucleus

25. Isobars ( ) e) Same atomic number but different mass number

26. Alkane ( ) a)  $C_2H_4$   
27. Alkene ( ) b)  $C_2H_5OH$   
28. Alkyne ( ) c)  $C_6H_6$   
29. Acid ( ) d)  $C_4H_{10}$   
30. Benzene ( ) e)  $C_2H_2$   
f)  $CH_3COOCH_3$   
g)  $CH_3COOH$   
**-o0o**

**FOR MORE VISIT [WWW.STUDYWELL.AT.UA](http://WWW.STUDYWELL.AT.UA)**