

P.A.K.PALANISAMY HIGHER SECONDARY SCHOOL
PRE REVISION EXAMINATION - II

Std : X

SCIENCE
PART - I

Time : 3 hours
Marks: 75
12X1=12

I. Choose the correct answer:-

1. Temperature is the average _____ of the molecules of a substance
a) difference in K.E and P.E
b) sum of P.E and K.E
c) difference in T.E and P.E
d) difference in K.E and T.E
2. Kilowatt hour is the unit of _____
a) resistivity
b) conductivity
c) electrical energy
d) electrical power
3. The ratio of the potential difference to the current is known as _____
a) Resistance
b) resistivity
c) conductance
d) electric power
4. _____ group contains the member of halogen family.
a) 17th
b) 15th
c) 18th
d) 16th
5. _____ is an important metal to form amalgam
a) Ag
b) Hg
c) Mg
d) Al
6. Which of the following is the universal solvent?
a) Acetone
b) Benzene
c) water
d) alcohol
7. During transpiration there is loss of _____.
a) carbon dioxide
b) oxygen
c) water
d) none of above
8. The wall of human heart is made up of _____.
a) Endocardium
b) Epicardium
c) myocardium
d) all of the above
9. Which one of the following hormones is naturally not found in plants?
a) 2,4-D
b) GA3
c) Gibberallin
d) IAA
10. Which one is referred as "Master gland"?
a) pineal gland
b) pituitary gland
c) thyroid gland
d) adrenal gland
11. Estrogen is secreted by _____.
a) anterior pituitary
b) sertoli cells
c) leydig cells
d) spermatogonia
12. Okasaki fragments are joined together by _____.
a) helicase
b) DNA polymerase
c) RNA primer
d) DNA ligase

PART - II

Answer any 7 questions: (Q. No. 15 is Compulsory)

7x2=14

13. Define one calorie
14. State ohm's law
15. Calculate the current of a 100w, 200v electric bulb in a electric circuit.
16. Fill in
a) 6th is the longest period in the periodic table
b) The scientist who propounded the modern periodic law is _____
17. What is non-aqueous solution? Give an example.
18. Match the following:-

1. Blue Vitriol	-	CaSO ₄ . 2H ₂ O ✓
2. Gypsum	-	CaO ✓
3. Deliquescence	-	CuSO ₄ .5H ₂ O ✓
4. Hygroscopic	-	NaOH
19. Why is sinoartial node called the pacemaker of heart?
20. Answer in a word:-
 - a) Which hormone is secreted during emergency situation in man?
 - b) Which hormone is known as time messenger?

21. State whether the following statements are true or false correct false statement.

- a) Stalk of ovule is called pedicle
- b) seeds are the product of asexual reproduction.

22. What do you mean by phenotype and Genotype?

PART - III

7x4=28

Answer any 7 questions: (Q.No. 24 is Compulsory)

23. Distinguish between ideal gas and real gas.

24. An electric iron consumes energy at the rate of 420W, When heating is at the maximum rate. 180W When heating is at the minimum rate. The applied voltage is 220V. What is the current in each case?

25. a) What is rust?

- b) Give the equation for formation of rust.
- c) State two conditions necessary for rusting of iron.

26. a) What happens when $MgSO_4$ is heated.

b) Write the appropriate equation.

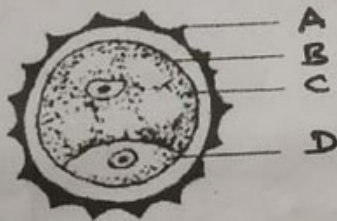
27. Give the importance of transpiration (any four points)

28. Enumerate any four functions of blood.

29. Write any four physiological effects of gibberellins. *SL in E1 F1 by F1*

30. a) Identify the parts A, B, C, D,

b) What are the four phases of menstrual cycle?



31. a) What are Okazaki fragments?

b) Draw the structure of a chromosome.

32. A pure tall plant (TT) is crossed with pure dwarf plant (tt). What would be the F1 and F2 generations. Explain.

PART - IV

3x7=21

Answer all in details

33. a) State the fundamental laws of gases.

(or)

b) (i) What is meant by electric current?

(ii) Name and define its unit

(iii) Which instrument is used to measure electric currents? How should it be connected in a circuit?

34. a) Write the physical properties of metal

(or)

b) (i) Write notes on saturated solution and unsaturated solution.

(ii) In what way hygroscopic substances differ from deliquescent substances?

35. a) Why are leucocytes classified as granulocytes and granulocytes? Name each cell and mention its functions.

(or)

b) How is the structure of DNA organized? What is the biological significance of DNA?
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