



SHRI KRISHNA ACADEMY

NEET, JEE & BOARD EXAM (10th, +1, +2) COACHING CENTRE

SBM SCHOOL CAMPUS, TRICHY MAIN ROAD, NAMAKKAL

CELL: 99655 31727 , 94432 31727

Std : X

Sub: Science

PRE-QUARTERLY EXAMINATION

Time : 2.30 Hrs

Marks : 75

I. Choose the correct answer :

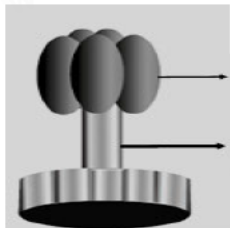
12x1=12

- Impulse is equal to
 - rate of change of momentum
 - rate of force and time
 - change of momentum
 - rate of change of mass
- is used to correct the defect of vision in hypermetropia
 - Convex lens
 - Concave lens
 - Bi-focal lens
 - Convex mirror
- The value of universal gas constant
 - $3.81 \text{ mol}^{-1} \text{ K}^{-1}$
 - $8.03 \text{ mol}^{-1} \text{ K}^{-1}$
 - $1.38 \text{ mol}^{-1} \text{ K}^{-1}$
 - $8.31 \text{ mol}^{-1} \text{ K}^{-1}$
- The mass of sodium in 11.7g of NaCl is
 - 2.3g
 - 4.6g
 - 6.9g
 - 7.1g
- In the aluminothermic process the role of Al is _____.
 - oxidizing agent
 - reducing agent
 - hydrogenating agent
 - sulphurising agent
- A solution in which no more solute can be dissolved in a definite amount of solvent at a given temperature is called _____.
 - Saturated solution
 - Unsaturated solution
 - Supersaturated solution
 - Dilute solution
- Oxygen is produced at what point during photosynthesis?
 - when ATP is converted to ADP
 - when CO_2 is fixed
 - when H_2O is split
 - All of these
- In leech locomotion is performed by
 - Anterior sucker
 - Posterior sucker
 - Setae
 - None of the above
- In reflex action, the reflex arc is formed by
 - brain, spinal cord, muscle
 - receptor, muscle, spinal cord
 - muscle, receptor, brain
 - receptor, spinal cord, muscle
- Pituitary gland is found in
 - Around trachea
 - Gonads
 - Pancreas
 - Brain
- Choose the correct match
 - Endosperm -2n
 - Embryo -3n
 - Egg -2n
 - Male gamete -n
- Okazaki fragments are joined together by _____.
 - Helicase
 - DNA polymerase
 - RNA primer
 - DNA ligase

SECTION - B

Note : Answer any seven questions. (Q.NO:22 is compulsory) 7x2=14

13. State Newton's second law.
14. Fill in the blanks:
 - i) refractive index of a transparent medium is always greater than
 - ii) Amount of light entering into the eye is controlled by.....
15. Define one calorie.
16. Calcium carbonate is decomposed on heating in the following reaction
$$\text{CaCO}_3 \longrightarrow \text{CaO} + \text{CO}_2$$
 - i. How many moles of Calcium carbonate are involved in this reaction?
 - ii. Calculate the gram molecular mass of calcium carbonate involved in this reaction
17. Draw and label the structure of oxysores



18. The aquatic animals live more in cold region Why?
19. Draw the structure of brain and label the parts
20. What is bolting?
21. **Assertion** : Oxytocin from the posterior pituitary stimulates the uterine contractions
Reason : The ejection of milk is stimulated by posterior pituitary hormone oxytocin
 - a) Both assertion and Reason are true and Reason is correct explanation of Assertion
 - b) Both assertion and Reason are true but Reason is not the correct explanation of Assertion
 - c) Assertion is true but Reason is false
 - d) Both Assertion and Reason are false
22. Differentiate convex lens and concave lens.

SECTION - III

Note : i) Answer any seven questions (Q.NO:32 is compulsory)

7x4=28

ii) Draw diagram wherever necessary.

23. What are the types of inertia? Give an example for each type.
24. List any five properties of light
25. If you keep ice at 0° C and water at 0°C in either of your hands, in which hand you will feel more chillness? Why?
26. Write the difference between atoms and molecules
27. Write notes on
 - i) saturated solutions
 - ii) un saturated solutions
28. Tabulate the different parts of the brain and their functions?
29. a) Read the following content and answer the question below;
Pure-bred tall pea plants are first crossed with pure-bred dwarf pea plants. the pea plants obtain F₁ generation are then cross-bred to produce F₂ generation of pea plant
 - i) What do the plants of F₁ generation look like?
 - ii) What is the ratio of tall plants to dwarf plants in F₂ generation?
 - iii) Which type of plants were missing in F₁ generation but reappeared in F₂ generation?
30. Differentiate the following
 - i) Monocot root and Dicot root
 - ii) Aerobic and Anaerobic respiration
31. i) How does locomotion take place in leech? ii) Accessory sex organ in female?
32. a) State-the law of volume
b) A is a silvery white metal. A combines with O₂ to form B at 800°C, the alloy of A is used in making the aircraft. Find A and B

SECTION – IV

Note : 1. Answer all the question 2. Each question carries seven marks

3. Draw diagram wherever necessary

3x7=21

33. State the universal law of gravitation and derive its mathematical expression (OR)

An object of height 3 cm is placed at 10cm from a concave lens of focal length 15 cm. Find the size of the image.

34. a) i) Calculate the mass of 1.51×10^{23} of H_2O

ii) Calculate the moles of 46g sodium

iii) Calculate the number of molecules present in the 36g water (OR)

b) Write notes on various factors affecting solubility

35 a) Function of thyroid hormones? (OR)

b) What are the phases of menstrual cycle? Indicate the changes in the ovary and uterus.

ALL THE BEST

SHRI KRISHNA ACADEMY

✍ **QUESTION BANK AND MINIMUM MATERIALS for ALL SUBJECTS AVAILABLE FOR X,XI,XII.**

✍ **CREATIVE QUESTIONS , STUDY MATERIALS(TOPPER GUIDE),**

→ **For MORE DETAILS - 99655 31727 , 99768 73243**