

MODEL REVISION TEST - I

SSLC – JANUARY 2022

CLASS : 10
SUBJECT : SCIENCE

MARKS : 75
DURATION : 2.30HRS

Note : 1. Answer all the questions
2. Choose the most suitable answer and write the code with the corresponding answer

12X1=12

- To project the rockets which of the following principles is/are required?
a) Newton's third law of motion b) Newton's law of gravitation
c) Law of conservation of linear momentum d) both a & c
- Plotting a graph for momentum on the X-axis and time on Y-axis, slope of momentum – time graph gives
a) Impulsive force b) Acceleration c) Force d) Rate of force
- In a myopi eye, the image of the object is formed
a) behind the retina b) on the retina c) in front of the retina d) on the blind spot
- A convex lens forms a real, diminished point sized image at focus. Then the position of the object is at
a) focus b) infinity c) at $2f$ d) between f and $2f$
- A normal human eye can clearly see all the objects placed between _____ and infinity.
a) 10 cm b) 15cm c) 20cm d) 25cm
- Mass of 1 mole of Nitrogen atom is _____
a) 28 amu b) 14 amu c) 28g d) 14g
- Which of the following is triatomic molecule?
a) F_2 b) CO_2 c) HI d) CH_4
- Molecule exists in a _____ state,
a) free b) combined state c) gaseous d) All the above
- _____ is formed during anaerobic respiration?
a) Carbohydrate b) Ethyl alcohol c) Acetyl CoA d) Pyruvate
- Casparian strips are present in the _____ of the root
a) Cortex b) Pith c) Pericycle d) Endodermis
- Kreb's cycle takes place in _____
a) Chloroplast b) mitochondrial matrix c) stomata d) inner mitochondrial membrane
- A man of mass 100kg has a weight of _____ at the surface of the earth
a) 980N b) 9.8 N c) 98N d) 480 N

Part II

**Answer any SEVEN questions
(Q.No 22 is compulsory)**

7X2=14

13. State Newton's first law.
14. What are the causes of myopia?
15. Define inertia. Give its classification.
16. State Snell's law.
17. Define atomicity.
18. Define relative atomic mass?
19. Write the differences between atoms and molecules
20. Write any two applications of Avogadro's law.
21. What is Photosynthesis? Write its equation.
20. What is rust? Give the equation for the formation of rust.
22. Calculate the molecular mass of water.
Given :- Atomic weight of Hydrogen is 1. Oxygen is 16.

PART III

7 X 4 = 28

Answer any SEVEN questions

23. Differentiate between mass and weight
24. (i) What is power of accommodation of eye?
(ii) Distinguish between convex lens and concave lens
25. Calculate the velocity of moving body of mass 5kg whose linear momentum is 2.5 kgms^{-1}
26. In a convex lens, when object is placed between F and C draw the ray diagram and write the characteristics of image?
27. How does the light dependent reaction differ from the light independent reaction?
28. Write the different types of isotopes of oxygen and its percentage abundance?
29. State Avogadro's hypothesis and write its number?
30. What is Hypermetropia? What is the cause of it?
31. Write any two stages of Aerobic respiration?
32. Calculate the number of moles present in 27 grams of Aluminium

PART IV

3 X 7 = 21

Answer All the questions

33. a) State and explain Newton's laws of motion

(or)

b) Distinguish between short sight and long sight

34. a) Explain the concepts of "Modern Atomic theory"

(or)

b) Calculate the molecular mass of Carbondioxide and calcium phosphate (Atomic mass :-
Carbon - 12, Oxygen-16, Calcium-40, Phosphorous-30)

35. a) Discuss the internal structure of Dicot root (Bean)

(or)

b) i) What are the factors affecting Photosynthesis?

ii) Draw the structure of chloroplast

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