FIRST MID TERM MODEL QUESTION PAPER - 2023

Class : X   SCIENCE   Total mark : 75M

I .Choose the best correct answer   (12 x 1= 12 m)

1. One kilogram force equal to ....
   a) 9.8 dyne   b) 9.8 x 10^4 N   c) 98 x 10^4 dyne   d) 980 dyne
2. The unit of weight is ....
   a) Kg m b) kg   c) Newton   d) kg/m
3. Mean value of the acceleration due to gravity is
   a) 10.1 m/s^2 b) 8.8 m/s^2 c) 9.8m/s^2 d) none of above
4. In which of the following sport the turning of effect of force used ?
   a) Swimming b) Tennis   c) cycling d) hockey
5. To produce a displacement .... Is required
   a) Force   b) mass   c) velocity   d) acceleration
6. Magnification of a convex lens is ....
   a) +   b) -   c) + or _   d) 0
7. The eye defect "presbyopia" can be corrected by ....
   a) Convex lens   b) concave lens   c) convex mirror d) bifocal lenses
8. ....helps in transpiration
   a) Stomato   b) Epidermis   c) Trichomes   d) Root hairs
9. Mammals are .... animals
   a) Coled blood   b) warm blood   c) poikilothermic d) All the above
10. The brain of leech lies above the ....
    a) Mouth   b) Buccal cavity c) pharynx   d) crop
11. PNS is formed of.......... Pairs of cranical nerves in rabbit
    a) 10   b) 12   c) 14   d) 16
12. The wall of human heart is made of
    a) Endocardium   b) Epicardium   c) unicellular   d) both b and c

II.Answer any SEVEN Questions Q. NO .22 is compulsory   (7 x 2 = 14 m)

13. What is inertia
14. State Newton's second law
15. Write the types of forces
16. What is refractive index

17. Why are traffic signals red in color ?

18. What is the common steps in aerobin and anaerobic pathway

19. How does leech respire?

20. What is cohesion?

21. Why are the rings of cartilages found in trachea of rabbi ?

22. A ball of mass 1 kg moving with a speed of 10 m/s rebounds after a perfect elastic collision with the floor. Calculate the change in linear momentum of the ball

III. Answer any SEVEN Questions Q.NO. 32 is compulsory.   (7x 4 = 28m)

23. Differentiate mass and weight

24. Define impulse

25. Define Linear momentum

26. State Rayleigh's law of scattering

27. state snell's law

28. Differentiate convex lens and concave lens

29. What is respiratory quotient ?

30. Write a short note on mesophyll

31. What causes the opening and closing of guard cells of stomato during transpiration ?

32 What is transpiration ? give the importance of transpiration

Answer ALL Questions   (3 x 7 = 21m)

33 a) List any SEVEN properties of light

                        (or)

   b) An object is placed at a distance 20cm from a convex lens of focal length 10cm find the image distance and nature of the image

34 a) State and prove the laws of conservation of linear momentum

                        (or)

b)Write a note on vascular tissue system

35a) How do plants absorb water? Explain

(or)

b)Draw a transverse section of Dicot leaf label the parts

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