FIRST MID TERM MODEL QUESTION PAPER -2019

STD: X   **MARKS: 50**

SUB: SCIENCE   **TIME: 1.30hrs**

SECTION-I

i. Choose the correct answer   **(8×1=8)**

1. If the Earth shrinks to 50% of its real radius its mass remaining the same, the weight of a body on the Earth will_____.
    (decrease by 50%, increase by 50%, decrease by 25%, increase by 300%)

2. A convex lens forms a real, diminished point sized image at focus. Then the position of the image is at (focus, infinity, at 2f, between f and 2f)

3. The volume occupied by 4.4g of CO2 at S.T.P
    (22.4 litre, 2.24 litre, 0.24 litre, 0.1 litre)

4. _____ is a relative periodic property.
    (Atomic radii, ionic radii, electron affinity, electro negativity)

5. Which is formed during anaerobic respiration?
    (Carbohydrate, Ethyl alcohol, Acetyl coA, Pyruvate)

6. The body of leech has
    (23 segments, 33 segments, 38 segments, 30 segments)

7. The wall of human heart is made of
    (Endocardium, Epicardium, Myocardium, All of the above)

8. Vomiting centre is located in
    (medulla oblongata, stomach, cerebrum, hypothalamus)

ii. Answer in a word or sentence   **(4×1=4)**

9. What is the least count of a Travelling microscope?
10. What is the average atomic mass of Hydrogen?
11. What is the common step in aerobic and anaerobic pathway?
12. Write the dental formula of rabbit.

SECTION – II

iii. Answer Any Nine of the following:

(Question number 15 is compulsory)　　　　　　(9×2=18)

13. How does an astronaut float in a space shuttle?

14. State whether the following statements are true or false. Correct the statement if it is false.

    a. Apparent weight of a person is always equal to his actual weight.

    b. Weight of a body is greater at the equator and less at the polar region.

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

16. Give any two examples for heterodiatomic molecules.

17. What is rust? Give the equation for formation of rust.

18. Match the following:

	Column - I	Column - II
a	Galvanisation	Heating in the absence of air
b	Calcination	Coating with Zn
c	Redox reaction	Silver – tin amalgam
d	Dental filling	Alumino thermic process

19. What is respiratory quotient?

20. Draw and label the structure of Oxysomes.

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

22. Who discovered Rh factor? Why was it named so?

23. Trace the pathway followed by water molecules from the time it enters a plant root to the time it escapes into the atmosphere from a leaf.

24. Differentiate between medullated and non-medullated nerve fibre.

25. Assertion: Corpus callosum is present in space between the duramater and piamater.

    Reason: It serves to maintain the constant intracranial pressure.

    a. Assertion is correct and reason is wrong

    b. Reason is correct and the assertion is wrong

    c. Both assertion and reason are correct

    d. Both assertion and reason are wrong

SECTION-III

iv. **ANSWER ANY FOUR OF THE FOLLOWING IN DETAIL:**   **(4×5=20)**

26. a. The ratio of masses of two planets is 2:3 and the ratio of their radii is 4:7. Find the ratio of their accelerations due to gravity.

    b. Give the applications of universal law of gravitation.

(OR)

Explain the construction and working of a "Compound Microscope".

27. a. Calculate the % of each element in Calcium carbonate. (Atomic mass: C - 12, O - 16, Ca – 40)

    b. List out the applications of Avogadro's law.

(OR)

(i)   List out the physical properties of metals.

28. How does the light dependent reaction differ from the light independent reaction? What are the end products and reactants in each? Where does each reaction occur within the chloroplast?

(OR)

    a. How does the locomotion take place in leech?

    b. Draw the structure of Rabbit brain and label any two parts.

29. a. Enumerate the functions of blood.

    b. Give any two importance of transpiration.

(OR)

30. Classify the neurons based on its structure.

**** *ALL THE BEST* *****

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