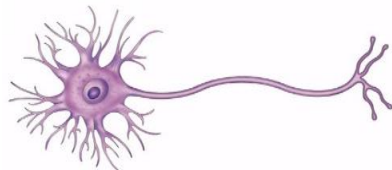**Answer the following:-**

1. Name the physical quantity measured by the area occupied below the velocity time graph.   1
2. Calculate the force required to produce an acceleration of $2m/s^2$ in a body of mass 400g.   1
3. What happens when acetone is poured on the palm?   1
4. Give any two characteristics of compound.   1

5. Identify the image and state one function.   1


6. What is notochord? Which group of animals have a primitive form of notochord? Name it and   2
   give one example?
7. Write the chemical formula of :   2
    a) Aluminium phosphate.
    b) Sodium sulphide.

P.T.O

Answer the following:-

1. Name the physical quantity which is determined by the rate of change of momentum.   1
2. An electric train is moving with a velocity of 120km/h. How much distance will it cover   1
   in 30s.
3. Identify the image given below and state one function.   1
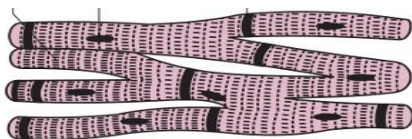
4. A sponge is solid but can be easily compressed. Give reason.   1
5. Mention any two applications of chromatography.   1
6. Write the chemical formula of :   2
    a. Ammonium carbonate.
    b. Sodium oxide.
7. a. Define relative density of a substance.   2
    b. Relative density of silver is 10.8. The density of water is $1000kg/m^3$. What is the density
       of silver in SI units?   P.T.O

8. a) List two factors on which buoyant force depends.   2

   b) Find the pressure, when a thrust of 20N is applied on a surface area of 10cm².

9. a) Define power. Give its SI unit.   3

   b) In a house 3 bulbs of 100W each are lighted for 5 hours daily, 2 fans of 50W each are used

     for 10 hours daily and an electric heater of 1kW is used for half an hour daily. Calculate

     the total energy consumed in a month of 31 days and its cost at the rate of Rs. 3.6 per kWh.

10. a) What is meant by symptom directed treatment?   3

    b) Distinguish between vaccine and antibiotics.

    c) What are vectors? Give an example.

11. A gas jar contains 1.7g of ammonia gas. Calculate the following :   3

    a) How many moles of ammonia are present in the gas jar?

    b) How many molecules of ammonia are present in the jar?

    c) Define the term mole.

      [atomic masses of given elements, N=14,H=1]

----oOo----

8. Name the two groups of invertebrates that are diploblastic and state one distinguishing   2
   feature of each.

9. a. What is the basis of principle of immunization?   3

   b. Distinguish between chronic and acute disease.

   c. What are carriers of disease? Give an example.

10.a. State two factors on which the magnitude of work depends.   3

   b. What is the work to be done to increase the velocity of a car from 18km/h to 90km/h,

     if the mass of the car is 2000kg?

11. Calculate: 3

   a. Number of molecules in 90g of H_2O.

   b. Number of moles in 19g of H_2O_2.

   c. Define the term mole.

   [atomic masses of given elements, O=16,H=1]

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