# Question paper 2023

Class IXscience. marks:80 SA-1

. PART-A. PHYSICS

I. multiple choice questions: 3×1=3

1. SI unit of momentum of an object is —------------.

1. Watt B. Kgm/s

C. Newton D. Kg

2. The value of g is\_\_\_\_\_\_\_\_\_\_

A.9.6m/s B.9.4m/s C. 9.8m/s

D.8.9m/s

3. Speed is a scalar quantity and velocity is —------ quantity

1. Vector. B. Scalar and vector
2. Scalar. D. None of these

II. answer the following in one sentence each:. 2×1=2

4. What does the odometer of an automobile measure.

5. State law of conservation of Momentum .

"OR"

Which of the following has more inertia a rubber ball and a stone of the same size?

III. Answer the following in two or three sentences each... 3×2=6

6. Why is it advised to tie any luggage kept on the roof of a bus with a rope with a rope?

7. A force of 250N is applied to an object of area 5m.calculate the pressure?

8. Distinguish uniform force and non uniform force?

IV.Answer the following in three sentences each. 3×3=9

9. A ball is gently dropped from a height of 20m. if its velocity increases uniformly at the rate of 10 metre per second, with what velocity will it strike the ground? after what time will it strike the ground?

10. If action is always equal to the reaction, explain how a horse can pull a cart.

11. State Archimedies principles.write 2 importance of this principle

V. answer briefly:. 2×4=8

12. A hockey ball of mass 200 g travelling at 10 metre per second is struck by a hockey stick so as to return it along its original path with a velocity at 5 metre per second. calculate the change of momentum offered in the motion of the hockey Ball by the force applied by the hockey stick

. OR

Explain mathematical Formulation of Second Law of motion.

13.a)A bus decrease its speed from 80km/h in 5 sec.Find the acceleration of the bus.

b)The odometer of a car reads 2000km at the start of a trip and 2400km at the end of the trip.if the trip took 8h,calculate the average speed of the car in km/h and m/s

PART-B. Chemistry

VI Choose the correct answer. 1\*4=4

14)Intermolecular force of attraction is maximum in\_\_\_\_\_\_\_\_

a) solids b) Liquids c) gases d) plasma

15)Which of the following process does not convert a liquid into vapours\_\_\_\_\_\_\_

a) Boiling b) Heating c) Evaporation d) Condensation

16)Which one of the following may be termed as pure substances?

a) Iron b) Soil c) Softdrink d) Milk

17)Chalk dissolvbed in water is an example of \_\_\_\_\_\_

a) Colloid b) true solution c) Suspension d) Saturated solution

VII. Answer the following question in one sentence. 4\*2=8

18)What is matter? which of the following is termed as matter?

a) Air b) Fire c) Sky d) Work

19)Express the following temperature in kelvin scale;

a) 25’ C b) 373’ C

20)What is meant by saturated and unsaturated solutions?

21)Write the properties of the gases.

VIII. Answer the following question in 2-3 sentence. 3\*2=6

22)What is meant by suspension? Write the properties of suspension.

23)A solution contains 50g of sugar in 350g water. Calculate the concentration of a solution?

XI. Answer the following question in 3-4 sentence. 4\*2=8

24)Explain the factors which affect evaporatiuon.

25)Define the terms..

a)Element

b)Sublimation

c)Humidity

d)Colloidal solution

PART=C. (Biology)

X. Multiple choice questions. 2\*1=2

27. Which organelle is called powerhouse of cell —------------

A. Lysosome B. Ribosome

C. Golgi complex D. Mitochondria

28. Identify a member of Porifera —-----

1. Sycon B. Euglena

. C. Hydra. D. Sea anemone

XII. Answer the following questions in one sentence each. 3\*1=3

29. What is osmosis ?

30. How many types of elements together make up the xylem tissue? Name them.

31. Name the regions in which parenchyma tissue is present.?

XIII. Answer the following questions in two three sentence each. 2\*4=8

32. Draw a neat labelled diagram of neuron?

33. Differentiate between prokaryotic cell and eukaryotic cell ?

34. How does an amoeba obtain it’s food?

35. Compare the use of manure and fertilizers in maintaining soil fertility?

XIV. Answer the following questions in three or four sentences each. 3\*3=9

34. Differentiate between striated unstriated and Cardiac muscles.?

35. What are the advantages of inter-cropping and crop rotation?

36. What is genetic manipulation? How is it useful in agricultural practices?

XVI. Answer the following questions 1\*4=4

38. Define the term tissue? Differentiate between parenchyma collenchyma and sclerenchyma on the basis of their cell wall.