

I. Choose the correct answer :

(5x1=5)

1. SI unit of temperature is _____

a)Celsius b)Fahrenheit c)Kelvin d)Ampere

2. Pascal's law is used in_____

a)Hydraulic lift b)Brake system

c)Pressing heavy bundles d)All the above

3. Luminous intensity is the intensity of _____

a)Laser light b)UV light c)Visible light d)IR light

4. Which of the following liquids has more viscosity_____

a)Grease b)Water c)Coconut oil d)Ghee

5.Atomic clocks are used in _____

a)GPS b)ISRO c)NASA d)None of these

II. Fill in the blanks

(5x1=5)

6._____is used to measure electric current.

7. A simple barometer was first constructed by _____

8. The solid angle is measured in _____

9. Normal temperature of the human body is

between 98.4°F and _____

10. _____friction is less than sliding friction.

III. Write True or False

(5x1=5)

11. SI units are metric system of units

12. A moving body comes to rest due to friction alone

13. Candela is used to express electric field intensity

14. Infra red thermometer, measures the temperature of an object without any physical contact.

15. Liquids and gases together are called fluids.

IV. Match the following

(5x1=5)

16. Temperature - Cause of friction

17. Static friction - Reduce friction

18. Lubricants - Closeness to the actual value

18. Accuracy - Objects are at rest

20. Irregular surface - Measure of hotness or coldness

V. Assertion and Reason

(2x1 $\frac{1}{2}$ = 3)

21. Assertion: Sharp knives are used to cut the vegetables

Reason : Sharp edges exert more pressure.

a)Both assertion and reason are true and the reason is the correct explanation of the assertion

b)Both assertion and reason are true, but the reason is not the correct explanation of the assertion

c) Assertion is true , but the reason is false

d) Assertion is false, but the reason is true.

22.Assertion : The seconds hand of a clock is having least count of one second.

Reason : Least count is the maximum measurement that can be measured accurately by an instrument.

a)Both assertion and reason are true and reason is the correct explanation of the assertion

b) Both assertion and reason are true but reason is not the correct explanation of the assertion.

c) Assertion is true, but reason is false

d) Assertion is false, but reason is true

VI. Analogy (2x1=2)

23. Downward force : Weight ;

Upward force offered by liquid: _____

24. Knot in a thread: _____ friction;

Ball bearing : _____ friction

VII. Answer in a word or two (very short answer) (5x1=5)

25. What is the unit of mass in FPS system?

26. How many times will the “minute hand” rotate in one hour?

27. Give the name of the instrument used for the measurement of temperature.

28. Name the device used to measure atmospheric pressure.

29. What is the unit of force.

VIII. Answer any eight of the following questions in one or two sentences. (8x2 $\frac{1}{2}$ =20)

30. Name some common systems of measurement.

31. Define Ampere.

32. Name two instruments which help to measure the pressure of the liquid.

33. Why are heavy bags provided with broad straps?

34. What is measurement.

35. Define temperature.

36. Write the various scales to measure temperature.

37. What is electric current?

38. Write down two applications of Pascal’s law.

39. Taking out paste from a tooth paste tube is an example to highlight which physical property?

40. What are the two types of kinetic friction?

41. Name the types of clocks based on working mechanism.

IX. Give reason for the following (1x1=1)

42. Your friend was absent yesterday. You are enquiring about his absence. He told, he was affected by a fever of 100°C and went to a hospital for treatment. Is it possible to reach 100°C fever? If it is wrong, try to make him to understand his mistake.

X. Answer any four of the following in detail (4x5=20)

43. List out the base quantities with their units.

44. Describe an experiment to prove that the pressure in a liquid increases with depth.

45. Write a short note on different types of clocks.

46. Give the different types of friction and explain each with an example.

47. Explain how friction can be minimised.

48. Describe an experiment to prove that friction depends on the nature of a surface.

49. “Friction is a necessary evil” - Explain.

XI. Solve the following problems (2x2=4)

50. Convert 60°C into Kelvin

51. Convert 90° into radian.

