

BN-IX-XIX-I
PHYSICS — 9th

NOTE: There are three sections of this paper. Read the instructions carefully and attempt accordingly.

SECTION-A (VERSION-C)

Time: 20 Minutes

Marks: 12

1. Attempt all questions of Section-A by filling the corresponding bubble on the MCQ ANSWER SHEET and return it to the Superintendent within given time, even if you have not attempted any question. Cutting, erasing and overwriting will be awarded no marks.

- i. The SI unit of density is A) kg, B) kgm^3 , C) kgm^{-2} , D) kgm^{-3}
- ii. The relation between coefficient of linear and volume expansion is A) $\alpha = 3\gamma$, B) $\gamma = 3\alpha$, C) $\gamma = \frac{\alpha}{2}$, D) $\gamma = 6\alpha$
- iii. The temperature at which a body is radiating any heat is A) 0°C , B) 0°F , C) 0K , D) all of these
- iv. Conventionally, clockwise torque is taken as A) negative, B) positive, C) zero, D) neither positive nor negative
- v. The value of 'g' at the surfaces of the moon is A) 9.8ms^{-2} , B) 1.63ms^{-2} , C) 4.9ms^{-2} , D) 8.9ms^{-2}
- vi. An object of mass 10kg is lifted vertically through a height of 5m. The potential energy gained by the object is A) 0.5J, B) 2J, C) 50J, D) 490J
- vii. The area under a speed-time graph represents A) acceleration, B) velocity, C) speed, D) distance
- viii. The unit of tension in the string is A) kg, B) N, C) gram, D) ms^{-2}
- ix. Which of the following forces can act as a centripetal force? A) tension, B) friction, C) gravitational force, D) all of these
- x. An angstrom (Å) is a unit of A) mass, B) length, C) heat, D) force
- xi. Which of the following is the smallest prefix? A) pico, B) peta, C) tera, D) milli
- xii. Branch of physics which deals with the motion of bodies is called A) statics, B) optics, C) mechanics, D) solid state physics