SLIP TEST - SUB :PHYSICS,,, UNIT – IV,,, CLASS: Xl

DATE : 19. 11.2024

TOTAL MARK: 20 M TIME : 45 MINUTES

SECTION – A

Choose the correct Answer (3 x 1 = 3M)

1. The work done by the conservative force for a closed path is

   (a) always negative (b) zero (c) always positive (d) not defined

2. If the linear momentum of the object is increased by 0.1%, then the kinetic energy is increased by

   (a) 0.1 % (b) 0.2% (c) 0.4% (d) 0.01%

3. 1 hp = …….?

   a) 716 W b) 736 W c) 746 W d) 726 W

Answer Any FOUR Questionscompulsory Q.no 9. (4 x 3 = 12 M)

4. Explain the characteristics of elastic and inelastic collision.
5. Write the differences between conservative and Non-conservative forces. Give two examples each
6. Define the following a) Coefficient of restitution b) Power
7. Calculate the energy consumed in electrical units when a 75 W fan is used for 8 hours daily for one month (30 days).
8. Define (i) Kinetic energy (ii) potential energy
9. Two objects of masses 2 kg and 4 kg are moving with the same momentum of 20 kg m s-1. (a) Will they have same kinetic energy? (b) Will they have same speed?

Section – B (1 x 5 = 5 M)

Answer All the Questions

10. a) Arrive at an expression for elastic collision in one dimension and discuss various cases.

(OR)

b) (i) State and explain work energy principle. Mention any three examples for

it (ii) Relation between momentum and kinetic energy .

PREPARED BY

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