

WORK, ENERGY AND POWER

General Instructions: Answer all the questions. If you are unable to answer any question, go through the page number that is given against that particular question in the text book. You can find the answer.

Test Paper-IV

MAX MARKS: 20

TIME: 60Mts

- | | | | |
|---|---|------|---|
| 1 | Define the following | P129 | 3 |
| | a. Elastic collision | | |
| | b. Completely inelastic collision | | |
| | c. Inelastic collision. | | |
| 2 | Discuss the collision in one dimension | P129 | 3 |
| 3 | Discuss the collision in two dimensions | P129 | 3 |
| 4 | Give the differences between elastic collision and inelastic collision. | P129 | 2 |
| 5 | What is meant by Head on collision? | P130 | 1 |
| 6 | Match the following | P133 | 3 |

GROUP-A

1. Work
2. Kinetic energy
3. Spring Constant
4. Power
5. Mechanical energy
6. Potential energy

GROUP-B

- a. $K = \frac{1}{2}mv^2$
- b. $P = F \cdot v$
- c. $E = K + V$
- d. $F = -kx$
- e. $V = mgh$
- f. $W = F \cdot d$

- | | | | |
|---|----------------------------|------|---|
| 7 | Match the following | P133 | 2 |
|---|----------------------------|------|---|

GROUP-A

1. Work
2. Potential energy
3. Spring Constant
4. Power

GROUP-B

- a. $[MT^{-2}]$
- b. $[ML^2T^{-2}]$
- c. $[ML^2T^{-2}]$
- d. $[ML^2T^{-2}]$

8	Convert 1KWH into joules	P128	2
9	What is the difference between the mass defect of a nuclear reaction with that of a chemical reaction?	P127	1