Step Academy official

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STUDENT NAME			CLASS	New 1st Year (FSC/ICS)
PAPER CODE	84364		SUBJECT	Physics
TIME ALLOWED	60		TOTAL MARKS	25
Paper Date	05-02-2026		Paper Type	

Q1. **Choose the correct answer.** 5X1=5

1. If 50kg crate is pushed through 2m across the floor with a force of 50 N, the work done will be.

(A) 245J **(B)** 150J **(C)** 200J **(D)** 100J

2. The SI unit of work is:

(A) Newton **(B)** Watt **(C)** Pascal **(D)** Joule

3. Which of the following is the example of conservative force?

(A) Resorting force in compressed spring **(B)** Tension in string **(C)** Propulsion force of rocke **(D)** Gravitational field

4. A machine with higher power rating means:

(A) It consumes less power **(B)** It works more slowly **(C)** It does more work in less time **(D)** It cannot be used continuously

5. Pull of the Earth on 20 kg body on surface of earth is:

(A) 20N **(B)** 196 N **(C)** 19.6 N **(D)** 1960 N

Q2. **Write short answers of the following questions.** 5X2=10

1. Is work done by a variable force always positive?

2. On what factors does G.P.E depend?

3. Does escape velocity depend on the mass of the object?

4. Can K.E be converted back into P.E?

5. What is work done by a gravitational force?

Q3. **Write detailed answers of the following questions.** 2X5=10

1. Define K.E and derive an expression for the same.

2. A 1200 kg car is running at a speed of 40 km h^{-1}. How much power will be expended by it to accelerate at 2 ms^{-2}.