EDUSAMBAM ASSESSMENT SERIES

Physics Comprehensive Practice Test 1

PRINTABLE PRACTICE WORKSHEET

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PHYSICAL

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Candidate Name:		**Roll No.:**	
Class / Grade:		**Date:**	
School / Institution:		**Test Centre:**	

Subject	Physics	**Topic**	Physics Comprehensive Practice Test 1	**Total Marks**	100
Total Questions	45	**Time Allowed**	1 Hour (60 minutes)	**Version**	A

GENERAL INSTRUCTIONS

1. Read each question carefully before answering.
2. For Section A and Section B, mark one answer only.
3. For Sections C and E, write your answer clearly in the space provided.
4. For Section D, write the correct letter from Column B against each item in Column A.
5. Do not use correction fluid. Keep all answers clear and legible.
6. This worksheet is prepared from the EDUSAMBAM practice assessment supplied for this paper.

PAPER PATTERN

Section	Questions	Marks Each	Total
Section A — Multiple Choice	15	2	30
Section B — True / False	10	2	20
Section C — Fill in the Blank	10	2	20
Section D — Matching	5 pairs	2	10
Section E — Short Answer	5	4	20
Total	**45**	**—**	**100**

Section A — Multiple Choice — 30 marks

1. What is energy? — Basic · 2 pts

A. A type of force
B. The capacity to do work
C. Only heat and light combined
D. A unit of mass

Answer: ☐ A ☐ B ☐ C ☐ D

2. What is an electric current? — Basic · 2 pts

A. The resistance in a wire
B. A type of magnetic pole
C. The flow of electric charge through a conductor
D. A form of light

Answer: ☐ A ☐ B ☐ C ☐ D

3. What is a force? — Basic · 2 pts

A. A type of energy that never changes
B. A push or a pull on an object
C. The speed of an object
D. A measurement of mass only

Answer: ☐ A ☐ B ☐ C ☐ D

4. What is gravity? — Basic · 2 pts

A. A force that only exists on Earth
B. A force of attraction between any two objects with mass
C. A type of electromagnetic wave
D. A force that repels objects apart

Answer: ☐ A ☐ B ☐ C ☐ D

5. What does temperature actually measure? — Intermediate · 2 pts

A. The average kinetic energy of particles
B. The total amount of thermal energy in an object
C. The mass of a substance
D. The colour of an object

Answer: ☐ A ☐ B ☐ C ☐ D

6. What is light? **Intermediate · 2 pts**

A. A liquid substance
B. A form of electromagnetic energy that travels as a wave
C. A type of sound wave
D. Only visible during the day

Answer: ☐ A ☐ B ☐ C ☐ D

7. What is matter? **Intermediate · 2 pts**

A. Anything that is alive
B. Anything that has mass and takes up space
C. Only solids and liquids
D. Only things you can see

Answer: ☐ A ☐ B ☐ C ☐ D

8. What is the key difference between distance and displacement? **Intermediate · 2 pts**

A. They are exactly the same thing
B. Displacement includes direction; distance is only total path length
C. Distance includes direction; displacement does not
D. Displacement is always larger than distance

Answer: ☐ A ☐ B ☐ C ☐ D

9. What is pressure? **Intermediate · 2 pts**

A. The total weight of an object
B. Force spread over an area
C. The speed at which fluid moves
D. A type of buoyant force

Answer: ☐ A ☐ B ☐ C ☐ D

10. What is sound? **Intermediate · 2 pts**

A. A form of light
B. An electromagnetic wave
C. A mechanical wave created by a vibrating object
D. A type of force

Answer: ☐ A ☐ B ☐ C ☐ D

11. What does the word "physics" originally come from, and what does it mean? **Intermediate · 2 pts**

A. Greek "physika," meaning "natural things"
B. Latin "physicus," meaning "doctor"
C. Arabic "fizik," meaning "number"
D. French "physique," meaning "body"

Answer: ☐ A ☐ B ☐ C ☐ D

12. In physics, when is work actually being done on an object? **Advanced · 2 pts**

A. Whenever you feel tired
B. Whenever a force is applied, moving or not
C. When a force causes an object to move in the direction of that force
D. Only when electricity is involved

Answer: ☐ A ☐ B ☐ C ☐ D

13. What does the Law of Conservation of Energy state? **Advanced · 2 pts**

A. Energy cannot be created or destroyed, only transformed
B. Energy always increases over time
C. Energy can be destroyed but never created
D. Only living things can create energy

Answer: ☐ A ☐ B ☐ C ☐ D

14. What is the scattering of sunlight by gas molecules in the atmosphere called? **Advanced · 2 pts**

A. Refraction
B. Reflection
C. Rayleigh scattering
D. Diffusion scattering

Answer: ☐ A ☐ B ☐ C ☐ D

15. Doing 100 joules of work in 2 seconds gives how much power? **Advanced · 2 pts**

A. 200 watts
B. 50 watts
C. 100 watts
D. 2 watts

Answer: ☐ A ☐ B ☐ C ☐ D

Section B — True / False **20 marks**

16. Energy cannot be created or destroyed, but it can be transformed from one form to another. **Basic · 2 pts**

A. True ☐ **B.** False ☐

17. A solar panel transforms light energy into electrical energy. **Basic · 2 pts**

A. True ☐ **B.** False ☐

18. In a series circuit, each component has a separate independent path for current. **Basic · 2 pts**

A. True ☐ **B.** False ☐

19. Newton’s First Law is also called the law of inertia. **Basic · 2 pts**

A. True ☐ **B.** False ☐

20. If the distance between two masses triples, their gravitational force becomes one-third as large. **Intermediate · 2 pts**

A. True ☐ **B.** False ☐

21. Temperature and heat mean exactly the same thing in physics. **Intermediate · 2 pts**

A. True ☐ **B.** False ☐

22. Refraction is the bending of light as it changes speed when entering a different medium. **Intermediate · 2 pts**

A. True ☐ **B.** False ☐

23. Sound can travel through the vacuum of outer space. **Intermediate · 2 pts**

A. True ☐ **B.** False ☐

24. An object can have zero displacement after travelling a non-zero distance. **Intermediate · 2 pts**

A. True ☐ **B.** False ☐

25. A simple machine can reduce the total amount of work required by creating extra energy. **Intermediate · 2 pts**

A. True ☐ **B.** False ☐

Section C — Fill in the Blank — 20 marks

26. The SI unit of energy is the ____. **Basic · 2 pts**

Answer: _____

27. Electric current is measured in ____. **Basic · 2 pts**

Answer: _____

28. Newton's Second Law is written as F = m____. **Basic · 2 pts**

Answer: _____

29. The force that attracts masses toward one another is called ____. **Basic · 2 pts**

Answer: _____

30. The three main methods of heat transfer are conduction, convection, and ____. **Intermediate · 2 pts**

Answer: _____

31. The bending of light when it passes from one medium into another is called ____. **Intermediate · 2 pts**

Answer: _____

32. The change from liquid to gas is called ____. **Intermediate · 2 pts**

Answer: _____

33. Average speed is calculated as total distance divided by total ____. **Intermediate · 2 pts**

Answer: _____

34. The upward force exerted by a fluid on an immersed object is called ____. **Intermediate · 2 pts**

Answer: _____

35. Power is the rate at which ____ is done or energy is transferred. **Intermediate · 2 pts**

Answer: _____

Section D — Matching — 10 marks

36. Match each term to its correct definition.

Column A	Answer	Column B
Kinetic energy	____	**A.** Bending of light between media
Inertia	____	**B.** Rate of doing work
Refraction	____	**C.** Energy due to motion
Buoyancy	____	**D.** Upward force from a fluid
Power	____	**E.** Resistance to a change in motion

Section E — Short Answer — 20 marks

41. Explain the difference between kinetic energy and gravitational potential energy. Advanced · 4 pts

42. Why does a seatbelt protect a passenger when a car stops suddenly? Advanced · 4 pts

43. State the difference between mass and weight. Advanced · 4 pts

44. Why does a steel ship float even though solid steel is denser than water? Advanced · 4 pts

45. Explain why a ramp makes lifting a load easier without reducing the total work in the ideal case. Advanced · 4 pts

Candidate Signature: _____ **Invigilator Signature:** _____

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Marks Obtained: _____ / 100 Checked By: _____

Result / Grade: _____ Date Checked: _____

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Physics Comprehensive Practice Test 1 — Answer Key

Teacher reference: equivalent grammatically correct wording is acceptable for open-ended items when the meaning is preserved.

Section A — Multiple Choice

1. B
2. C
3. B
4. B
5. A
6. B
7. B
8. B
9. B
10. C
11. A
12. C
13. A
14. C
15. B

Section B — True / False

16. False
17. False
18. True
19. False
20. True
21. True
22. False
23. True
24. False
25. True

Section C — Fill in the Blank

26. joule
27. amperes
28. a
29. gravity
30. radiation
31. refraction
32. vaporization
33. time
34. buoyancy
35. work

Section D — Matching

36. Kinetic energy — C
37. Inertia — E
38. Refraction — A
39. Buoyancy — D
40. Power — B

Section E — Short Answer (Model Answers)

41. kinetic; motion; potential; height

42. inertia; force; slow; stop

43. mass; weight; gravity

44. hollow; displace; water; density; buoyant

45. less force; longer distance; work; trade