



EDUSAMBAM ASSESSMENT SERIES

Physics Comprehensive Practice Test 5

PRINTABLE PRACTICE WORKSHEET

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Candidate Name:		Roll No.:	
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Subject	Physics	Topic	Physics Comprehensive Practice Test 5	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. As a ball falls from a height, what happens to its energy?

- A.** It disappears completely
C. Kinetic energy converts into potential energy

- B.** Potential energy converts into kinetic energy
D. It becomes sound energy only

Answer: ☐A ☐B ☐C ☐D

Basic • 2 pts

2. Why are electrical wires coated in rubber or plastic?

- A.** To help the current flow faster
C. To make the wire magnetic

- B.** To insulate the current so it doesn't escape the wire
D. To reduce the wire's weight

Answer: ☐A ☐B ☐C ☐D

Basic • 2 pts

3. What force is needed to accelerate a 2 kg object at 3 m/s²?

- A.** 3 newtons
C. 2 newtons

- B.** 6 newtons
D. 9 newtons

Answer: ☐A ☐B ☐C ☐D

Basic • 2 pts

4. Which astronaut demonstrated the feather-and-hammer drop on the Moon in 1971?

- A.** Neil Armstrong
C. Buzz Aldrin

- B.** David Scott (Apollo 15)
D. Yuri Gagarin

Answer: ☐A ☐B ☐C ☐D

Basic • 2 pts

5. At what Celsius temperature does water freeze?

- A.** 0°C
C. 100°C

- B.** 32°C
D. -273°C

Answer: ☐A ☐B ☐C ☐D

Intermediate • 2 pts

6. Why does a straw in a glass of water appear bent? A. The straw physically bends in water C. Water always distorts nearby objects Answer: ☐ A ☐ B ☐ C ☐ D	B. Light refracts (bends) as it passes from water into air D. It is an optical illusion with no physical cause Intermediate · 2 pts
7. What is sublimation? A. A gas turning into a liquid C. A liquid turning into a solid Answer: ☐ A ☐ B ☐ C ☐ D	B. A solid turning directly into a gas, skipping the liquid state D. A gas turning into plasma Intermediate · 2 pts
8. A cyclist covers 30 km in 2 hours. What is their average speed? A. 10 km/h C. 30 km/h Answer: ☐ A ☐ B ☐ C ☐ D	B. 15 km/h D. 60 km/h Intermediate · 2 pts
9. Why don't we feel crushed by atmospheric pressure constantly pressing on us? A. Atmospheric pressure is actually zero at ground level C. Human skin is completely impervious to pressure Answer: ☐ A ☐ B ☐ C ☐ D	B. Fluids inside our bodies push outward with equal, opposite pressure D. Atmospheric pressure only exists at high altitude Intermediate · 2 pts
10. What determines how loud a sound is? A. Frequency C. Wavelength color Answer: ☐ A ☐ B ☐ C ☐ D	B. Amplitude D. The speed of light Intermediate · 2 pts
11. According to the article, how is chemistry related to physics? A. They are completely unrelated fields C. Chemistry came before physics Answer: ☐ A ☐ B ☐ C ☐ D	B. Chemistry is physics applied to atoms and molecules D. Physics is a branch of chemistry Intermediate · 2 pts
12. Doing 100 joules of work in 2 seconds gives how much power? A. 200 watts C. 100 watts Answer: ☐ A ☐ B ☐ C ☐ D	B. 50 watts D. 2 watts Advanced · 2 pts
13. What is energy? A. A type of force C. Only heat and light combined Answer: ☐ A ☐ B ☐ C ☐ D	B. The capacity to do work D. A unit of mass Advanced · 2 pts
14. What is light? A. A liquid substance C. A type of sound wave Answer: ☐ A ☐ B ☐ C ☐ D	B. A form of electromagnetic energy that travels as a wave D. Only visible during the day Advanced · 2 pts
15. Why is no real simple machine perfectly efficient? A. Simple machines are theoretical only and don't really exist C. They always increase the total energy in the system Answer: ☐ A ☐ B ☐ C ☐ D	B. They require electricity to work at all D. Friction between moving parts always converts some work into wasted heat Advanced · 2 pts

Section B — True / False

20 marks

16. Kinetic energy depends on an object's motion. A. True ☐ B. False ☐	Basic · 2 pts
17. An electric current can produce a magnetic field around a wire. A. True ☐ B. False ☐	Basic · 2 pts
18. A heavier object always falls faster than a lighter object in a vacuum. A. True ☐ B. False ☐	Basic · 2 pts
19. Mass is measured in newtons. A. True ☐ B. False ☐	Basic · 2 pts
20. Heat can be transferred by conduction, convection, or radiation. A. True ☐ B. False ☐	Intermediate · 2 pts
21. Blue light has a longer wavelength than red light. A. True ☐ B. False ☐	Intermediate · 2 pts

22. Condensation changes a gas into a liquid.
A. True ☐ **B.** False ☐

23. Velocity includes direction, whereas speed does not.
A. True ☐ **B.** False ☐

24. A floating object displaces fluid whose weight balances its own weight.
A. True ☐ **B.** False ☐

25. A sound wave is a mechanical wave that needs a medium.
A. True ☐ **B.** False ☐

Intermediate · 2 pts

Intermediate · 2 pts

Intermediate · 2 pts

Intermediate · 2 pts

Section C — Fill in the Blank

20 marks

26. Gravitational potential energy depends on mass, gravitational field strength, and ____.
Answer: _____

27. The unit of electric current is the ____.
Answer: _____

28. Newton’s First Law is associated with the concept of ____.
Answer: _____

29. Weight is a gravitational ____ acting on mass.
Answer: _____

30. The transfer of heat by electromagnetic waves is called ____.
Answer: _____

31. The normal line is used to measure the angle of incidence and angle of ____.
Answer: _____

32. The state of matter with no fixed shape but a fixed volume is a ____.
Answer: _____

33. Speed = distance divided by ____.
Answer: _____

34. An object sinks when its average density is ____ than the fluid’s density.
Answer: _____

35. The Doppler effect is a change in observed frequency caused by relative ____.
Answer: _____

Basic · 2 pts

Basic · 2 pts

Basic · 2 pts

Basic · 2 pts

Intermediate · 2 pts

Intermediate · 2 pts

Intermediate · 2 pts

Intermediate · 2 pts

Intermediate · 2 pts

Intermediate · 2 pts

Section D — Matching

10 marks

36. Match each term to its correct definition.

Column A	Answer	Column B
Voltage	____	A. Heat transfer by electromagnetic waves
Inertia	____	B. Sloped surface
Radiation	____	C. Electrical push in a circuit
Displacement	____	D. Change in position with direction
Inclined plane	____	E. Resistance to change in motion

Section E — Short Answer

20 marks

41. Describe the conservation of energy using a falling object as an example.

42. Why does increasing resistance reduce current for a fixed voltage?

Advanced · 4 pts

Advanced · 4 pts

43. Explain why a feather and hammer fall together on the Moon when air resistance is absent.

Advanced · 4 pts

44. How do pitch and loudness differ?

Advanced · 4 pts

45. Explain mechanical advantage as a trade between force and distance.

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 5 — 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. B

3. B

4. B

5. A

6. B

7. B

8. B
9. B

10. B

11. B

12. B

13. B

14. B

15. D

Section B — True / False

16. False

17. False

18. True

19. True

20. False
21. True

22. False

23. False

24. False

25. False

Section C — Fill in the Blank

26. height

27. ampere

28. inertia

29. force

30. radiation
31. reflection

32. liquid

33. time

34. greater

35. motion

Section D — Matching

36. Voltage — C

37. Inertia — E

38. Radiation — A
39. Displacement — D

40. Inclined plane — B

Section E — Short Answer (Model Answers)

41. potential; kinetic; conservation; same; energy

42. Ohm; $V=IR$; resistance; current

43. gravity; same acceleration; air resistance

44. pitch; frequency; loudness; amplitude

45. force; distance; trade; machine; work