

EDUSAMBAM ASSESSMENT SERIES

Physics Comprehensive Practice Test 3

PRINTABLE PRACTICE WORKSHEET

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Candidate Name:		Roll No.:	
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Subject	Physics	Topic	Physics Comprehensive Practice Test 3	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 kind of energy does a rolling football have?

- A.** Kinetic energy
C. Elastic potential energy

- B.** Gravitational potential energy
D. Nuclear energy

Answer: ☐A ☐B ☐C ☐D

Basic • 2 pts

2. A circuit has 2 amperes of current and 5 ohms of resistance. What is the voltage?

- A.** 2.5 volts
C. 7 volts

- B.** 3 volts
D. 10 volts

Answer: ☐A ☐B ☐C ☐D

Basic • 2 pts

3. What is the name for an object's resistance to a change in motion?

- A.** Inertia
C. Displacement

- B.** Velocity
D. Tension

Answer: ☐A ☐B ☐C ☐D

Basic • 2 pts

4. If the distance between two objects triples, what happens to the gravitational force between them?

- A.** It drops to one-ninth
C. It stays the same

- B.** It drops to one-third
D. It triples

Answer: ☐A ☐B ☐C ☐D

Basic • 2 pts

5. Which direction does heat naturally flow, without extra work being done?

- A.** From cold objects to hot objects
C. It flows equally in both directions

- B.** From hot objects to cold objects
D. Heat doesn't actually flow at all

Answer: ☐A ☐B ☐C ☐D

Intermediate • 2 pts

6. What is the difference between regular and diffuse reflection? A. Regular reflection happens on smooth surfaces; diffuse reflection scatters off rough surfaces C. Diffuse reflection only happens in water Answer: ☐ A ☐ B ☐ C ☐ D	B. They are exactly the same thing D. Regular reflection doesn't involve light at all	Intermediate · 2 pts
7. Which state of matter is easiest to compress? A. Gas C. Liquid Answer: ☐ A ☐ B ☐ C ☐ D	B. Solid D. None of these can be compressed	Intermediate · 2 pts
8. What is the main difference between speed and velocity? A. Speed is always faster than velocity C. Speed and velocity are unrelated concepts Answer: ☐ A ☐ B ☐ C ☐ D	B. Velocity has no formula D. Velocity includes direction; speed does not	Intermediate · 2 pts
9. Why does pressure increase with depth in water? A. There is more water weight pressing down from above C. Water becomes less dense with depth Answer: ☐ A ☐ B ☐ C ☐ D	B. Water gets colder with depth D. Pressure actually decreases with depth	Intermediate · 2 pts
10. What are the tightly squeezed regions of particles in a sound wave called? A. Rarefactions C. Amplitudes Answer: ☐ A ☐ B ☐ C ☐ D	B. Wavelengths D. Compressions	Intermediate · 2 pts
11. Which branch of physics studies heat, temperature, and energy transfer? A. Optics C. Mechanics Answer: ☐ A ☐ B ☐ C ☐ D	B. Thermodynamics D. Nuclear physics	Intermediate · 2 pts
12. How much work is done pushing an object with 20 newtons of force across 5 metres? A. 4 joules C. 15 joules Answer: ☐ A ☐ B ☐ C ☐ D	B. 25 joules D. 100 joules	Advanced · 2 pts
13. Why are fossil fuels considered non-renewable? A. They took millions of years to form and are being used faster than nature replaces them C. They form again within a single year Answer: ☐ A ☐ B ☐ C ☐ D	B. They are actually renewable, this is a common myth D. They are found only underwater	Advanced · 2 pts
14. Which color of visible light has the shortest wavelength? A. Violet C. Orange Answer: ☐ A ☐ B ☐ C ☐ D	B. Red D. Yellow	Advanced · 2 pts
15. Which simple machine is a sloped surface that spreads a lift over a longer distance? A. Wheel and axle C. Screw Answer: ☐ A ☐ B ☐ C ☐ D	B. Inclined plane D. Pulley	Advanced · 2 pts

Section B — True / False

20 marks

16. Displacement includes direction, while distance is total path length. A. True ☐ B. False ☐	Basic · 2 pts
17. A horizontal line on a distance-time graph indicates that the object is moving faster and faster. A. True ☐ B. False ☐	Basic · 2 pts
18. Pressure equals force divided by area. A. True ☐ B. False ☐	Basic · 2 pts
19. Atmospheric pressure at sea level is approximately 101,325 Pa. A. True ☐ B. False ☐	Basic · 2 pts
20. An object with an average density less than the fluid it is in tends to float. A. True ☐ B. False ☐	Intermediate · 2 pts

21. The pitch of a sound is mainly determined by amplitude.
A. True ☐ B. False ☐

22. Light travels much faster than sound, which is why lightning is seen before thunder is heard.
A. True ☐ B. False ☐

23. Plasma is the same thing as an ordinary solid.
A. True ☐ B. False ☐

24. Physics studies matter, energy, motion, and fundamental interactions.
A. True ☐ B. False ☐

25. Work in physics is done whenever a person feels tired, even if the object does not move.
A. True ☐ B. False ☐

Section C — Fill in the Blank

20 marks

26. A quantity with both magnitude and direction is called a ____.
Answer: _____

27. The slope of a distance-time graph represents ____.
Answer: _____

28. Pressure is measured in ____.
Answer: _____

29. Archimedes' Principle relates buoyant force to the weight of the ____ fluid.
Answer: _____

30. The angle of incidence equals the angle of ____.
Answer: _____

31. The lowest-energy visible color has a shorter or longer wavelength than red? ____.
Answer: _____

32. The change from solid directly to gas is called ____.
Answer: _____

33. A sound frequency below 20 Hz is called ____.
Answer: _____

34. The branch of physics dealing with heat, temperature, and energy transfer is ____.
Answer: _____

35. Work is measured in ____.
Answer: _____

Section D — Matching

10 marks

36. Match each term to its correct definition.

Column A	Answer	Column B
Distance	____	A. Solid directly to gas
Pressure	____	B. Branch studying light
Sublimation	____	C. Total path length
Pitch	____	D. Perceived highness or lowness of sound
Optics	____	E. Force per unit area

Section E — Short Answer

20 marks

41. Differentiate distance and displacement with an example.

Advanced · 4 pts

42. Why does pressure increase when the same force acts on a smaller area?

Advanced · 4 pts

43. Explain why a rainbow or spectrum can be related to refraction and dispersion of light.

Advanced · 4 pts

44. Describe the three everyday states of matter in terms of particle arrangement or motion.

Advanced · 4 pts

45. What makes physics different from simply memorising observations?

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 3 — Answer Key

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

Section A — Multiple Choice

1. A

2. D

3. A

4. A

5. B

6. A

7. A

8. D
9. A

10. D

11. B

12. D

13. A

14. A

15. B

Section B — True / False

16. False

17. True

18. False

19. False

20. False
21. True

22. False

23. True

24. False

25. True

Section C — Fill in the Blank

26. vector

27. speed

28. pascals

29. displaced

30. reflection
31. shorter

32. sublimation

33. infrasound

34. thermodynamics

35. joules

Section D — Matching

36. Distance — C

37. Pressure — E

38. Sublimation — A
39. Pitch — D

40. Optics — B

Section E — Short Answer (Model Answers)

41. distance; path; displacement; direction
42. force; area; pressure; smaller
43. refraction; wavelength; colors; dispersion
44. solid; liquid; gas; particles
45. laws; testable; mathematical; explain