

EDUSAMBAM ASSESSMENT SERIES

Weather & Climate & Earth's Structure

PRINTABLE PRACTICE WORKSHEET

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Candidate Name:		Roll No.:	
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Subject	General Knowledge	Topic	Weather & Climate & Earth's Structure	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 — Column Matching	5 pairs	2	10
Section E — Short Answer	5	4	20
Total	45	—	100

Section A — Multiple Choice

30 marks

1. Which best describes the difference between weather and climate?

Basic • 2 pts

- A.** Weather is long-term, climate is short-term
C. They mean exactly the same thing

- B.** Weather is short-term, climate is long-term
D. Climate only applies to oceans

Answer: ☐A ☐B ☐C ☐D

2. In which layer of the atmosphere does weather occur?

Basic • 2 pts

- A.** Thermosphere
C. Troposphere

- B.** Stratosphere
D. Mesosphere

Answer: ☐A ☐B ☐C ☐D

3. Which layer of the atmosphere contains the ozone layer?

Basic • 2 pts

- A.** Troposphere
C. Exosphere

- B.** Stratosphere
D. Mesosphere

Answer: ☐A ☐B ☐C ☐D

4. What effect traps heat in Earth's atmosphere, warming the planet?

Basic • 2 pts

- A.** Greenhouse effect
C. Coriolis effect

- B.** Photosynthesis effect
D. Doppler effect

Answer: ☐A ☐B ☐C ☐D

5. Which of these is a major greenhouse gas?

Intermediate • 2 pts

- A.** Nitrogen
C. Carbon dioxide

- B.** Oxygen
D. Argon

Answer: ☐A ☐B ☐C ☐D

6. What causes wind? A. Ocean currents C. The Moon's gravity Answer: ☐ A ☐ B ☐ C ☐ D	B. Differences in air pressure D. Volcanic eruptions	Intermediate • 2 pts
7. What is Earth's solid, iron-nickel innermost layer called? A. Inner core C. Mantle Answer: ☐ A ☐ B ☐ C ☐ D	B. Outer core D. Crust	Intermediate • 2 pts
8. What is the thick, semi-solid layer between Earth's core and crust called? A. Outer core C. Mantle Answer: ☐ A ☐ B ☐ C ☐ D	B. Inner core D. Lithosphere	Intermediate • 2 pts
9. What is the thin outermost layer of the Earth called? A. Mantle C. Outer core Answer: ☐ A ☐ B ☐ C ☐ D	B. Crust D. Inner core	Intermediate • 2 pts
10. What do we call large pieces of Earth's crust and upper mantle that move slowly over time? A. Tectonic plates C. Ocean trenches Answer: ☐ A ☐ B ☐ C ☐ D	B. Continental shelves D. Fault lines only	Intermediate • 2 pts
11. What generally causes earthquakes? A. Ocean tides C. Changes in wind speed Answer: ☐ A ☐ B ☐ C ☐ D	B. Sudden release of energy along faults D. Solar flares	Intermediate • 2 pts
12. What scale measures earthquake magnitude? A. The Beaufort scale C. The Richter scale Answer: ☐ A ☐ B ☐ C ☐ D	B. The Fujita scale D. The Saffir-Simpson scale	Advanced • 2 pts
13. What theory proposed that continents were once joined together as one landmass? A. Plate subduction C. Seafloor spreading only Answer: ☐ A ☐ B ☐ C ☐ D	B. Continental drift D. Crustal folding	Advanced • 2 pts
14. What was the ancient supercontinent called? A. Pangaea C. Gondwana only Answer: ☐ A ☐ B ☐ C ☐ D	B. Laurasia only D. Atlantis	Advanced • 2 pts
15. What region around the Pacific Ocean has especially high volcanic and earthquake activity? A. The Doldrums C. The Ring of Fire Answer: ☐ A ☐ B ☐ C ☐ D	B. The Sahara Belt D. The Continental Divide	Advanced • 2 pts

Section B — True / False		20 marks
16. Climate refers to short-term, day-to-day atmospheric conditions. A. True ☐ B. False ☐		Basic • 2 pts
17. The ozone layer is located in the stratosphere. A. True ☐ B. False ☐		Basic • 2 pts
18. Carbon dioxide is a greenhouse gas. A. True ☐ B. False ☐		Basic • 2 pts
19. Earth's outer core is solid. A. True ☐ B. False ☐		Basic • 2 pts
20. Oceanic crust is thicker than continental crust. A. True ☐ B. False ☐		Intermediate • 2 pts
21. Tectonic plates move very slowly over time. A. True ☐ B. False ☐		Intermediate • 2 pts

22. Alfred Wegener proposed the theory of continental drift.
A. True ☐ **B.** False ☐

23. Earthquakes only occur at convergent plate boundaries.
A. True ☐ **B.** False ☐

24. The Ring of Fire is located around the Pacific Ocean.
A. True ☐ **B.** False ☐

25. Global warming refers to a long-term rise in Earth's average temperature.
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. Weather conditions occur in the lowest layer of the atmosphere, called the _____.
Answer: _____

27. Boundaries where tectonic plates move apart from each other are called _____ boundaries.
Answer: _____

28. Boundaries where tectonic plates collide are called _____ boundaries.
Answer: _____

29. Boundaries where tectonic plates slide past each other are called _____ boundaries.
Answer: _____

30. Earth's crust is divided into oceanic crust and _____ crust.
Answer: _____

31. The supercontinent that later broke apart into today's continents was called _____.
Answer: _____

32. The scientist who proposed continental drift was _____.
Answer: _____

33. The layer of Earth located between the crust and the outer core is called the _____.
Answer: _____

34. Earth's innermost layer, made mostly of solid iron and nickel, is called the _____.
Answer: _____

35. A long-term rise in Earth's average temperature caused by greenhouse gases is called _____.
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 — Column Matching

10 marks

36-40. Match each term to its correct definition.

Column A	Answer	Column B
Inner Core	_____	A. Liquid Metal Layer
Outer Core	_____	B. Thick Semi-Solid Layer
Mantle	_____	C. Thin Outer Rocky Layer
Crust	_____	D. Lowest Atmospheric Layer Where Weather Occurs
Troposphere	_____	E. Solid Iron-Nickel Center

Section E — Short Answer

20 marks

41. Explain briefly the difference between weather and climate.

42. Why is the ozone layer important to life on Earth?

Advanced • 4 pts

Advanced • 4 pts

43. Explain briefly what happens at a convergent plate boundary.

Advanced · 4 pts

44. Why do earthquakes often occur along tectonic plate boundaries?

Advanced · 4 pts

45. Explain briefly why the greenhouse effect is necessary for life, even though too much of it is harmful.

Advanced · 4 pts

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

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Marks Obtained: _____ / 100

Checked By: _____

Result / Grade: _____

Date Checked: _____

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Weather & Climate & Earth's Structure — 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. A

5. C

6. B

7. A

8. C
9. B

10. A

11. B

12. C

13. B

14. A

15. C

Section B — True / False

16. False

17. True

18. True

19. False

20. False
21. True

22. True

23. False

24. True

25. True

Section C — Fill in the Blank

26. troposphere

27. divergent

28. convergent

29. transform

30. continental
31. pangaea

32. alfred wegener

33. mantle

34. inner core

35. global warming

Section D — Column Matching

36. Inner Core — E

37. Outer Core — A

38. Mantle — B
39. Crust — C

40. Troposphere — D

Section E — Short Answer (Model Answers)

41. short-term; day-to-day; long-term; average patterns

42. uv radiation; absorbs; protects; harmful rays

43. collide; forced under; mountains; subduction

44. stress; energy release; plates move; shaking

45. keeps earth warm; supports life; excess heat; too much