SMARTWIZ

GRADE 12 GEOGRAPHY EXAM

MARKS: 300

MARKS	

TIME: 3 HOURS

SCHOOL _____

CLASS (eg. 4A) _____

SURNAME _____

NAME _____

Instructions for Learners:

- Read all instructions carefully before you begin the exam.
- Write your full name and student number clearly on the answer sheet/book.
- Answer all questions unless otherwise instructed.
- Show all your work/calculations where necessary.
- Write neatly and clearly.
- Use only a blue or black pen. Do not use correction fluid or tape.
- Electronic devices (calculators, cell phones, etc.) are not allowed unless explicitly permitted.
- Raise your hand if you have any questions.
- Do not talk to other learners during the exam.
- Any form of dishonesty will result in immediate disqualification from the exam.

This exam consists of Five pages, including the cover page.

SECTION A: MULTIPLE CHOICE QUESTIONS (30 × 1 = 30 MARKS)

Choose the correct answer and write only the letter (A–D) on the line.

1. What term describes the total number of people per unit of land area?
   A. Population density B. Birth rate C. Urbanization D. Carrying capacity
   Answer: _____
2. Which of the following is an example of a renewable resource?
   A. Coal B. Oil C. Solar energy D. Uranium
   Answer: _____
3. A confluence is:
   A. A type of estuary B. Where two rivers meet C. The mouth of a river D. A delta formation
   Answer: _____
4. Which of the following is NOT a characteristic of a high-pressure system in the Southern Hemisphere?
   A. Clockwise wind rotation B. Generally clear skies C. Rising air D. Stable atmospheric conditions
   Answer: _____
5. A meander is most likely to be found in which part of a river?
   A. Upper course B. Middle course C. Lower course D. Source
   Answer: _____
6. Which factor is most responsible for the formation of a rain shadow desert?
   A. Ocean currents B. Slope aspect C. Orographic rainfall D. Humidity levels
   Answer: _____
7. What is the primary cause of sea-level rise associated with global warming?
   A. Tectonic uplift B. Increased river discharge C. Melting polar ice and thermal expansion D. Stronger tides
   Answer: _____
8. Which of the following would most likely reduce soil erosion?
   A. Deforestation B. Strip cropping C. Overgrazing D. Urban expansion
   Answer: _____
9. Which statement best describes a stratovolcano?
   A. Broad, dome-shaped and effusive B. Flat and found along divergent boundaries
   C. Tall, steep-sided, explosive eruptions D. Found only in subduction zones
   Answer: _____
10. Which biome is dominated by coniferous forests?
    A. Tropical rainforest B. Tundra C. Savannah D. Taiga
    Answer: _____
11. The most common reason for rural-to-urban migration in developing countries is:
    A. Climate change B. Natural disasters C. Better employment opportunities D. High birth rates
    Answer: _____
12. Which is an example of a primary economic activity?
    A. Oil refining B. Logging C. Teaching D. Banking
    Answer: _____
13. Which type of farming is best suited to arid and semi-arid areas?
    A. Commercial grain farming B. Dairy farming C. Subsistence rice farming D. Mixed farming
    Answer: _____

14. The movement of people from cities to rural areas is known as:
    A. Suburbanization B. Urbanisation C. Rural depopulation D. Counter-urbanisation
    Answer: _____
15. The process where fertile land becomes desert is called:
    A. Erosion B. Sedimentation C. Desertification D. Salinization
    Answer: _____
16. Which tool is most useful in mapping and analyzing spatial patterns of data?
    A. GPS B. Thermometer C. GIS D. Barometer
    Answer: _____
17. An isobar on a weather map indicates:
    A. Wind direction B. Equal rainfall C. Equal air pressure D. Altitude
    Answer: _____
18. Which of the following is a non-renewable resource?
    A. Wind B. Solar C. Natural gas D. Biomass
    Answer: _____
19. A population pyramid with a wide base and narrow top suggests:
    A. An ageing population B. High infant mortality C. Rapid population growth D. A developed country
    Answer: _____
20. Which country is most likely to be in the secondary sector of development?
    A. Japan B. Ethiopia C. Brazil D. Nigeria
    Answer: _____
21. What is the main reason cities are located near rivers?
    A. Beautiful scenery B. Transportation and water supply C. Earthquake protection D. Cold climate
    Answer: _____
22. In the Southern Hemisphere, cold ocean currents flow:
    A. West to east along the equator B. From poles to the equator
    C. From the equator to the poles D. Around high-pressure belts
    Answer: _____
23. What is the main goal of the United Nations Sustainable Development Goals (SDGs)?
    A. Promote military alliances B. Regulate international trade
    C. Achieve a better and more sustainable future D. Monitor population growth
    Answer: _____
24. The term "brain drain" refers to:
    A. Migration of highly skilled people B. Loss of minerals due to mining
    C. Industrial pollution D. Soil degradation due to overuse
    Answer: _____
25. Which landform is most commonly associated with glacial activity?
    A. Mesa B. Drumlin C. Volcano D. Basin
    Answer: _____
26. What is the main cause of earthquakes?
    A. Wind erosion B. Volcanic eruption C. Movement along fault lines D. Acid rain
    Answer: _____
27. Which form of precipitation occurs when warm air rises rapidly and cools?
    A. Frontal rainfall B. Convectional rainfall C. Orographic rainfall D. Cyclonic rainfall
    Answer: _____
28. The informal sector is typically characterized by:
    A. High taxation B. Large corporate ownership

C. Unregistered small-scale business D. Government employment
Answer: _____

29. A greenbelt is designed to:
A. Increase housing in urban cores B. Prevent urban sprawl
C. Expand agricultural land D. Provide transport links
Answer: _____

30. A major consequence of overfishing is:
A. Coral bleaching B. Ocean acidification C. Decrease in fish populations D. Oil spills
Answer: _____

SECTION B: STRUCTURED SHORT ANSWERS (10 × 10 = 100 MARKS)

Answer ALL TEN questions. Each carries 10 marks.

31. Describe the key components of a river system and explain the function of a drainage basin.
Answer:
_____
_____
_____
_____

32. Explain the process of plate tectonics and its impact on the landscape. Include examples of landforms created by each type of plate boundary.
Answer:
_____
_____
_____
_____

33. Discuss the impact of El Niño and La Niña on global weather patterns. Provide at least two real-world case studies.
Answer:
_____
_____
_____
_____

34. Compare and contrast rural and urban settlements in terms of function, pattern, and service provision.
Answer:
_____
_____
_____
_____

35. Evaluate how population growth affects resource availability in sub-Saharan Africa.
Answer:
_____
_____
_____
_____

36. Explain five push and five pull factors in migration and provide examples of their impact on host and origin communities.
Answer:
_____
_____
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_____

37. Describe three types of rainfall and explain the conditions under which each type occurs.
Answer:
_____
_____
_____
_____

38. Discuss the causes and consequences of deforestation in the Amazon rainforest.
Answer:
_____
_____
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39. Explain the factors that influence the location of industries using an example from your country or another region.
Answer:
_____
_____
_____
_____

40. Discuss the concept of sustainable development. Give real-world examples of sustainable practices in agriculture or urban planning.
Answer:
_____
_____
_____
_____

SECTION C: MAP WORK AND DATA ANALYSIS (5 × 14 = 70 MARKS)

Use the provided topographic map, orthophoto, and climate graph.

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Temperature (°C)	5	6	9	13	18	22	25	24	20	15	9	6
Rainfall (mm)	80	60	55	50	40	35	30	35	40	60	75	85

41. Interpret contour patterns and describe the topography in the north-eastern quadrant of the map. Use compass directions and landform terminology.
Answer:
_____
_____
_____
_____

42. Calculate the average gradient between two marked points on the map. Explain your method.
Answer:
_____
_____
_____
_____

43. Use the synoptic weather chart to identify frontal systems and weather conditions. Predict how the conditions will change in 24 hours.
Answer:
_____
_____
_____
_____

44. Analyze the land use on the orthophoto. Identify three human and two physical features and explain their interaction.
Answer:
_____
_____
_____
_____

45. Examine the climate graph. Describe the temperature and rainfall trends. Determine the Köppen climate type and discuss how this affects vegetation and agriculture.
Answer:
_____
_____
_____
_____

SECTION D: ESSAY QUESTIONS (2 × 50 = 100 MARKS)

Choose TWO essays. Each is worth 50 marks. Use case studies, data, and diagrams where appropriate.

46. Urbanisation and Planning:
Discuss the major causes and consequences of rapid urbanisation in developing countries. Evaluate the effectiveness of urban planning strategies to address housing, transportation, and service delivery.
Answer:

47. Climate Change and Its Effects:
Examine the environmental, economic, and social impacts of climate change in one African country. Suggest mitigation and adaptation strategies currently in place and recommend further action.
Answer:

48. Geomorphological Hazards:
Choose one geomorphological hazard (e.g., volcanoes, landslides, earthquakes) and discuss its causes, effects on human settlements, and the response measures taken before and after the event.
Answer:

49. Water as a Resource:
Discuss the importance of water as a geographic resource. Evaluate water scarcity issues and management strategies in semi-arid regions.
Answer:

END OF EXAM

TOTAL : 100

MEMO

SECTION A: MULTIPLE CHOICE (30 × 1 = 30 MARKS)

Q	Ans	Q	Ans	Q	Ans
1	A	11	C	21	A
2	C	12	D	22	D
3	B	13	A	23	B
4	D	14	B	24	C
5	B	15	C	25	B
6	C	16	A	26	D
7	A	17	B	27	C
8	C	18	C	28	B
9	C	19	D	29	A
10	C	20	B	30	D

✅ **1 mark for each correct answer.**
✅ Accept only the letter corresponding to the correct answer.

SECTION B: STRUCTURED SHORT ANSWERS (10 × 10 = 100 MARKS)

Accept other relevant, well-explained answers.

Q31: River system components

- Source, mouth, tributary, watershed, confluence (5 × 1 = 5)
- Drainage basin: definition and function (2 + 3 = 5)

Q32: Plate tectonics

- Explanation of plate tectonics (2)
- Types of boundaries (3)
- Landforms: mountains (convergent), ridges (divergent), faults (transform) – with examples (5)

Q33: El Niño/La Niña

- Explanation of each (4)
- Global impacts (3)
- Two real-world examples (e.g., drought in Australia, floods in Peru) (3)

Q34: Urban vs Rural

- Functions (2)
- Patterns (2)

- Services (3)
- Comparison (3)

Q35: Population growth & resources

- Definition of overpopulation (2)
- Effects: water scarcity, deforestation, urban sprawl, etc. (4)
- Examples in sub-Saharan Africa (4)

Q36: Migration

- 5 push factors (e.g., war, unemployment, natural disaster) (5)
- 5 pull factors (e.g., jobs, safety, education) (5)

Q37: Rainfall types

- Orographic, frontal, convectional (3 × 2 = 6)
- Conditions for each (4)

Q38: Amazon deforestation

- Causes: farming, logging, mining (3)
- Consequences: biodiversity loss, climate change, soil erosion (4)
- Stats/examples (3)

Q39: Industrial location factors

- Factors: raw materials, transport, labour, market, climate (5)
- Example: e.g., car manufacturing near ports (5)

Q40: Sustainable development

- Definition (2)
- Principles (e.g., social equity, environment, economy) (3)
- Real examples (e.g., rooftop gardens, green buildings, renewable energy) (5)

SECTION C: MAP WORK AND DATA (5 × 14 = 70 MARKS)

Q41: Topography

- Contour patterns (3)
- Slope type (2)
- Valley/ridge identification (2)
- Direction (1)
- Landform description using correct terminology (6)

Q42: Gradient calculation

- Height difference (2)
- Distance (2)
- Formula: gradient = vertical/horizontal (2)
- Final answer with units (2)
- Explanation of method (6)

Q43: Synoptic chart

- Front identification (3)
- Wind direction and pressure (3)
- Temperature and weather conditions (4)
- Prediction (4)

Q44: Orthophoto interpretation

- Identify physical features (e.g., river, hill) (2)
- Human features (e.g., road, school, settlement) (2)
- Explanation of interactions (e.g., roads avoid steep slopes) (5)
- Land use types (5)

Q45: Climate graph

- Max/min temp (2)
- Rainfall pattern (3)
- Seasonality (2)
- Climate classification (Köppen) (2)
- Vegetation & agricultural implications (5)

SECTION D: ESSAYS (2 × 50 = 100 MARKS)

Mark using the following **rubric per essay**:

Criteria	Marks
Introduction (definition, scope, clarity)	5
Content knowledge (relevant, factual, geographic understanding)	15
Use of examples/case studies	10
Logical structure and argument	10
Conclusion (summary, insight)	5
Maps, diagrams, stats used appropriately	5
TOTAL PER ESSAY	**50**

Example: Q46 – Urbanisation

- Causes: rural-urban migration, population growth

- Consequences: slums, traffic congestion, pollution, inequality
- Strategies: zoning, green belts, integrated transport, upgrading informal settlements
- Case studies: e.g., Lagos, Nairobi, or Rio

Example: Q47 – Climate Change

- Impacts: desertification, extreme weather, flooding, food insecurity
- Adaptation: drought-resistant crops, early warning systems
- Mitigation: reforestation, renewable energy
- African example: South Africa, Kenya, etc.

✅ **TOTAL MARKS: 300**