

END TERM 3 2026
GRADE 10
GEOGRAPHY
MARKING SCHEME & TEACHER'S GUIDE
TOTAL: 100 MARKS

GENERAL MARKING PRINCIPLE: Award scientifically/geographically correct alternative wording. For calculations, award method marks where the correct procedure is shown. For map/diagram responses, accept equivalent correctly labelled features where the evidence supports the answer.

1. Any two branches: Physical Geography, Human Geography, Practical Geography, Economic Geography, Environmental Geography, etc. (2×1) **(2 marks)**
2. Any two: resource mapping; planning; locating physical/human features; route planning; land-use planning; studying relief/drainage/vegetation; development planning. (2×1) **(2 marks)**
3. Any two: observation, interview, questionnaire, measurement, field survey, sampling, secondary/documentary research. (2×1) **(2 marks)**
4. Any two: hardware, software, data, people/users, procedures/methods. (2×1) **(2 marks)**
5. Igneous, sedimentary and metamorphic rocks. (2 marks for all three; award 1+1+1 with max 2 if required.) **(2 marks)**
6. Any two: movement along faults/tectonic plate movement, volcanic activity, collapse of underground structures, human-induced seismic activity where appropriate. (2×1) **(2 marks)**
7. Any two: subsistence, commercial, intensive, extensive, mixed, pastoralism, arable, plantation agriculture, urban agriculture. (2×1) **(2 marks)**
8. Any two: open-cast/opencast mining, underground mining, shaft mining, drilling, quarrying, dredging, alluvial mining. (2×1) **(2 marks)**
9. Any two: solar, wind, hydroelectric, geothermal, biomass, tidal/wave. (2×1) **(2 marks)**
10. Any two: raw materials, market, transport, labour, power/energy, capital, water, government policy, land/site, security. (2×1) **(2 marks)**
11. (a) Award 1 mark each for three correctly identified features matching the supplied map labels. (3) (b) Any three: contours, spot heights, trigonometrical stations, layer tinting, hachures, hill shading, form lines. (3) (c) Any two explained uses, e.g. identifying water resources, agricultural potential, settlement suitability, forest/vegetation resources, drainage-related hazards. (2) **(8 marks)**
12. (a) $120+80+30+70 = 300$ households. (2) (b) $120/300 \times 100 = 40\%$. (2) (c) Any two: bar graph, pie chart, line graph, histogram where appropriate, proportional symbol/cartographic presentation. (2) (d) Any two: simplifies large data sets; facilitates comparison; reveals trends/patterns; supports planning/decision-making. (2) **(8 marks)**
13. (a) Intrusive features form when magma cools below the Earth's surface; extrusive features form when lava cools at/on the surface. (2) (b) Any two: fertile soils, new landforms, destruction of vegetation/property, air pollution/ash, habitat change, hazards to people, etc. (2) (c) Any two explained strategies: hazard mapping, public education, evacuation plans, earthquake-resistant buildings, emergency drills, early warning/communication, safe land-use planning. (2) (d) Richter scale measures magnitude/energy released; Mercalli scale measures intensity/effects/damage. (2) **(8 marks)**
14. (a) Anticline and syncline according to the labels. (2) (b) Compression causes rock layers to bend/fold rather than fracture, especially under suitable pressure, temperature and plastic conditions. (2) (c) Any two: anticlines, synclines, fold mountains, valleys, escarpments/ridges associated with folded structures. (2) (d) Any two: affects settlement; creates mountains/valleys influencing transport; affects agriculture; creates tourism opportunities; influences mineral/water occurrence. (2) **(8 marks)**
15. (a) Any two: improved seeds, irrigation, mechanisation, fertilisers/manure, pest control, extension services, soil conservation, improved breeds, market access. (2) (b) Two environmental problems plus one solution each: land degradation/soil erosion—land reclamation/rehabilitation; water pollution—treatment and controlled discharge; habitat destruction—restoration/revegetation; dust/noise—dust suppression/buffer zones. (4) (c) Any two: reduces

reliance on fossil fuels; improves energy security; supports employment/investment; reduces environmental pollution; supports rural development; sustainable long-term supply. (2) **(8 marks)**

16. (a) Any three: geological conditions/size/quality of deposit; depth and accessibility; technology; capital; transport; market; labour; government policy; environmental considerations. (3) (b) Any three main stages: site preparation/clearing, removal of overburden, drilling/blasting or excavation, loading/hauling, crushing/processing, waste management. (3) (c) Two effects + one rehabilitation measure for each, e.g. land degradation—backfilling/recontouring/revegetation; water pollution—treatment and controlled runoff; habitat loss—restoration; dust—water spraying/vegetation buffers. (4) **(10 marks)**

17. (a) Volcanic regions have heat from magma/hot rocks close to the surface; groundwater is heated and can form steam/hot water reservoirs. (3) (b) Steam/hot water is brought to the surface, drives turbines, turbines drive generators, electricity is produced; cooling/reinjection may follow. (3) (c) Advantages: low greenhouse-gas emissions, renewable, reliable where resources are available, reduces fossil-fuel dependence, supports jobs/development. Challenges: high initial cost, site-specific resources, drilling risk, environmental/land-use concerns, possible emissions/mineralised fluids, technical requirements. Award any four explained points, with balance across advantages/challenges. (4) **(10 marks)**

18. (a) Any four explained: raw materials, market, transport, labour, power, water, capital, land/site, government policy, security/environment. (4) (b) Any three: employment; tax revenue; value addition; infrastructure; export earnings/foreign exchange; urban growth; technological development; market creation. (3) (c) Any three challenges paired with a suitable solution: pollution—clean technology/regulation; inadequate power—energy investment; poor infrastructure—improve transport/utilities; limited capital—finance/investment incentives; skills shortage—training; market competition—quality/productivity improvement. (3) **(10 marks)**

19. (a) GIS can store road/traffic/spatial data, map accident/traffic locations, analyse proximity and suitability, identify safer crossing locations and produce maps for planning. Any three explained points. (3) (b) Any three: collect primary/secondary data; organise/code data; analyse using statistics/maps/GIS; interpret patterns; present using tables, graphs, maps/reports. (3) (c) Four sectors should be addressed with sustainability measures/examples; award 1 mark per well-developed sector, e.g. agriculture—soil/water conservation; energy—renewables/efficiency; mining—rehabilitation and pollution control; industry—clean production/waste management. (4) **(10 marks)**

CURRICULUM TRACEABILITY

Question	Sub-strand(s) assessed	Marks
1	1.1 Introduction to Geography	2
2	1.2 Map Reading and Interpretation	2
3	1.3 Statistical Methods	2
4	1.4 Geographical Information Systems (GIS)	2
5	2.1 Rocks	2
6	2.4 Earthquakes	2
7	3.1 Agriculture	2
8	3.2 Mining	2
9	3.3 Energy	2
10	3.4 Industry	2
11	1.2 Map Reading and Interpretation	8
12	1.3 Statistical Methods	8
13	2.3 Volcanicity; 2.4 Earthquakes	8
14	2.2 Folding	8
15	3.1 Agriculture; 3.3 Energy	8
16	3.2 Mining	10
17	3.3 Energy; 2.3 Volcanicity	10
18	3.4 Industry	10
19	1.4 GIS; 1.3 Statistical Methods; 3.1–3.4 Human and Economic Activities	10

FULL GRADE 10 COVERAGE CHECK

Strand	Sub-strands in supplied KICD design	Coverage in paper
1.0 Practical Geography	1.1 Introduction to Geography; 1.2 Map Reading and Interpretation; 1.3 Statistical Methods; 1.4 Geographical Information Systems (GIS)	All assessed
2.0 Natural Systems and Processes	2.1 Rocks; 2.2 Folding; 2.3 Volcanicity; 2.4 Earthquakes	All assessed
3.0 Human and Economic Activities	3.1 Agriculture; 3.2 Mining; 3.3 Energy; 3.4 Industry	All assessed

SOURCE ALIGNMENT NOTE The assessment follows the organisation of the supplied KICD Grade 10 Geography Curriculum Design: Practical Geography, Natural Systems and Processes, and Human and Economic

Activities. The curriculum design's summary on page 14 lists the twelve sub-strands, while pages 15–44 provide the specific learning outcomes and suggested learning experiences. The paper therefore treats the assessment as cumulative across the complete Grade 10 design rather than restricting it to a single term.

EXAMINER GUIDANCE

- Accept equivalent geographical terminology where the meaning is correct.
- Where a question asks for an explanation, a bare list should normally receive only the mark(s) attributable to correctly stated points.
- Calculation questions require working; award method marks where the correct operation is shown.
- For maps and diagrams, accept equivalent representations if conventional geographical conventions and labels are correct.
- Do not award marks for unsupported or contradictory statements.
- The supplied curriculum design recommends written tests, observation, questionnaires, projects, portfolios, anecdotal records and checklists as assessment methods; this summative paper concentrates on written assessment while sampling practical/map/data skills.

