



MARK SCHEME
GEOGRAPHY SPECIMEN PAPER
Maximum Mark: 50

Subject Code: 06
Paper Code: 01

MARKING PRINCIPLES

Generic Marking Principles: These generic marking principles must be followed by all the markers when assessing candidates' responses. They should be used together with the specific details provided in the mark scheme or the generic level descriptors for each question. Every question paper and its corresponding mark scheme will also adhere to these marking principles.

GENERIC MARKING PRINCIPLE 1: Marks must be awarded in accordance with:

- the specific content of the mark scheme or the generic level descriptions provided for the question,
- the specific skills identified in the mark scheme or descriptors, and

the standard of performance expected from candidates, as exemplified through standardisation scripts.

GENERIC MARKING PRINCIPLE 2: Only whole marks are to be awarded. No half marks or fractional marks should be given under any circumstances.

GENERIC MARKING PRINCIPLE 3: Marks must be awarded positively:

- Credit must be given for correct and valid responses, as outlined in the mark scheme.
- Where a candidate's response exceeds the expected content or extends beyond the syllabus in a relevant way, appropriate credit may be awarded, in consultation with the Chief Marker.
- Marks are awarded when the candidate demonstrates clear evidence of knowledge, understanding, or skill.
- Marks must not be deducted for incorrect answers, omissions, or irrelevant material.

Spelling, punctuation, and grammar should only be considered if explicitly stated in the question's assessment criteria. However, responses must be sufficiently clear in meaning.

GENERIC MARKING PRINCIPLE 4: Rules must be applied consistently across all scripts, including cases where candidates do not follow specific instructions or where generic level descriptions are applied. For example, if a candidate writes more answers than required or responds in the wrong format, the marker should still assess the response based on the marking scheme. If the marking scheme includes a penalty for not following instructions, it should be applied. If no penalty is mentioned, valid responses should still be credited. In the case of generic level descriptions such as "basic understanding" or "detailed explanation", all markers must interpret and apply these levels in the same way across all scripts. This helps ensure that every candidate is marked fairly and consistently.

GENERIC MARKING PRINCIPLE 5: The full range of marks available in the mark scheme must be used where appropriate. However, the actual distribution of marks may depend on the quality of responses observed.

GENERIC MARKING PRINCIPLE 6: Marks must be awarded strictly based on the criteria and expectations defined in the mark scheme. Judgments should not be influenced by grade thresholds, grade descriptions, or assumptions about overall candidate performance.

Point based Marking

Guidance

- DO credit answers which are worded differently from the mark scheme if they clearly convey the same meaning (unless the mark scheme requires a specific term).
- DO credit alternative answers/examples which are not written in the mark scheme if they are correct.
- DO NOT credit answers simply for using a 'key term' unless that is all that is required. (Check for evidence it is understood and not used wrongly.)
- DO NOT credit answers which are obviously self-contradicting or trying to cover all possibilities.
- DO NOT give further credit for what is effectively repetition of a correct point already credited unless the language itself is being tested. This applies equally to 'mirror statements' (i. Page 2 of 12Page 2 of 12e. polluted/not polluted).

DO NOT require spellings to be correct, unless this is part of the test. However, spellings of syllabus terms must allow for clear and unambiguous separation from other syllabus terms with which they may be confused (e.g. Corrasion/Corrosion).

Calculation

- The mark scheme will outline the steps for the most likely correct method(s), including the marks allocated for each step, the correct answer(s), and the marks awarded for the final answer.
- If working or explanation is required to obtain full credit, this will be clearly stated in both the question paper and the mark scheme. In all other cases, a correct final answer should receive full marks even if no supporting working is provided.
- If a candidate applies a valid method that is not specifically included in the mark scheme, equivalent marks should be awarded for achieving equivalent stages of the solution.

Where a candidate uses an incorrect figure obtained from earlier working, the 'own figure rule' applies. Full marks may still be awarded provided the method used is correct and complete. Additional guidance or exceptions to this principle will be specified in the mark scheme where necessary.

Level Based Marking

Level	Description	Marks
5	Developed response that evaluates the question • Relevant and accurate knowledge and clear understanding that answers the question. • Developed reasoning with an assessment of alternative factors/viewpoints to reach a logical decision. • Relevant evidence/examples that are accurate and detailed and support the answer.	9–10
4	Developed response with relevant evaluation • Mostly relevant and accurate knowledge with secure understanding that answers the question. • Developed reasoning with discussion of alternative factors/viewpoints.	7–8

	Relevant evidence/examples that are generally accurate with some detail that mostly support the answer.	
3	Explanatory response with simple evaluation - Mostly relevant knowledge with some understanding that answers the question, but with some limitations in breadth and/or accuracy. - Reasoning lacks development and discussion of alternative factors/ viewpoints may be limited; the answer is largely explanatory. - Evidence/examples which are limited in some way (relevance, accuracy or detail) are used in the answer.	5–6
2	Descriptive response related to the question - Some relevant knowledge with partial understanding linked to the question. - Limited reasoning: the answer is largely descriptive. - Some limited examples may be used in the answer.	3–4
1	Limited response related to the topic - Limited knowledge and understanding related to the topic which does not answer the question. - Examples may be absent or in name only.	1–2
0	No creditable response.	0

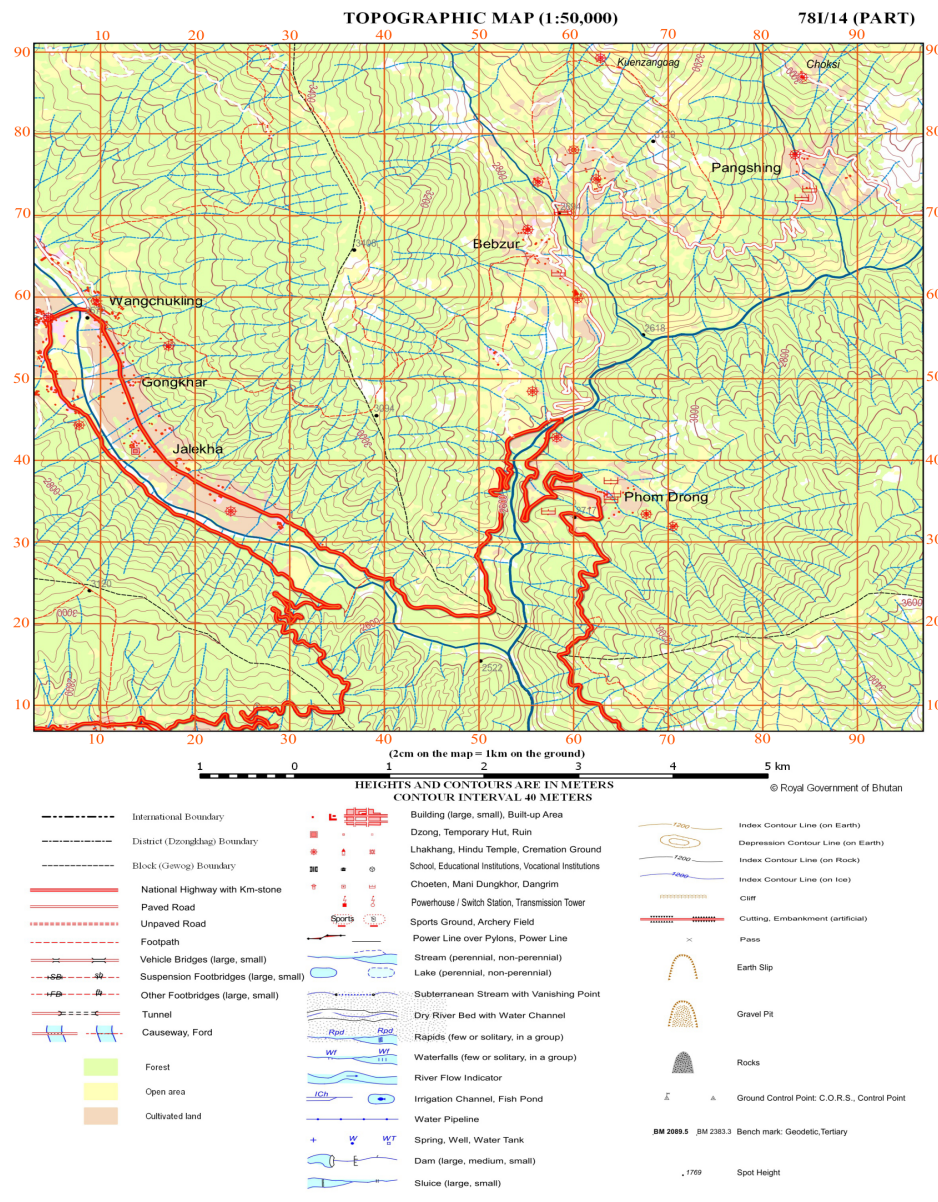
SECTION A [30 MARKS]
ANSWER ALL QUESTIONS

Award 1 mark for the valid answer

Question I	Answer	Marks
1.	B	1
2.	B	1
3.	C	1
4.	A	1
5.	A	1
6.	C	1
7.	A	1
8.	B	1
9.	C	1
10.	B	1
11.	B	1

12.	C	1
13.	B	1
14.	C	1
15.	D	1

Question II



1. Explain two factors that contribute to economic opportunities for people living in grid square 1040.		
Award four marks for two correct answer and two marks for one correct answer Expected response: a. Cultivated land: The presence of cultivated land provides opportunities for crop farming and food production, which supports livelihoods and income generation. b. Road transport network: A paved road/highway passing through the grid enables the transport of agricultural produce and goods, facilitating trade and access to markets. c. Availability of water: Streams/rivers supply water for irrigation, livestock, and domestic use, supporting agriculture and related economic activities. d. Clustered settlements: Settlements such as Jalekha and Gongkhar provide a local labor force and market, encouraging small businesses, shops, and services. e. Gentle valley terrain: The relatively gentle valley floor with wider spacing of contour lines is suitable for farming, settlement, and infrastructure development, creating favorable conditions for economic activities. Answer is not exhaustive...		
2. State the type of landform formed by the contour lines in grid square 7070.		
Award One mark for identifying a correct landform. Answer: A gentle slope		
3. The central part of a map is feasible for the development of an industry. Give two reasons.		
Award four marks for two correct reasons and two marks for one correct reason. Expected response: a. Good road connectivity: Roads passing through the central area facilitate the transportation of raw materials and finished products. b. Availability of water: Nearby rivers or streams provide a reliable water supply required for industrial processes and cleaning.		

c. Relatively flat land: The presence of gentle slopes or flat valley floors makes construction of factories and infrastructure easier and less expensive. d. Availability of labour: Nearby settlements provide a readily available workforce for industries. e. Availability of electricity: Proximity to settlements and transport routes makes it easier to extend electricity and other public utilities to industries. f. Adequate land for expansion: Open land in the valley provides sufficient space for establishing industrial buildings and future expansion. g. Good accessibility to markets: The central location with transport links enables industries to distribute products efficiently to nearby settlements and markets. Answer is not exhaustive...		
4. Calculate the actual distance between the spot heights 3120 and 3600.		
Award one mark for the process and one mark for the correct answer. Map distance = 12cm 2cm = 1km (map scale) 12cm = $\frac{12}{2} = 6\text{km}$ Actual distance = 6km		
5. Give two reasons why the South eastern area of the map is unfavourable for agricultural activities.		
Award four marks for two correct reasons and two marks for one correct reason. Expected Answer: a. Dense forest cover – Most of the area is covered by forest, leaving very little open or cultivated land suitable for agriculture. b. Steep slopes – contour lines are closely spaced, indicating steep terrain that makes farming difficult and increases the risk of soil erosion. c. High elevation – The area has several high spot heights and contours, creating a colder climate and a shorter growing season for crops.		

d. Poor accessibility – there are few roads and settlements in the south-eastern area. lack of transportation makes it difficult to transport agricultural produce to markets. Answer is not exhaustive...		
SECTION B [20 MARKS] ANSWER ANY TWO QUESTIONS		
Question III To what extent does the evidences of the Big Bang theory support the origin of the universe?	[10]	
Award 4 marks for Understanding and Knowledge <i>Candidates should demonstrate the understanding of the Big Bang theory and state its supporting evidences.</i> Expected answers: - The Big Bang Theory states that the Universe began from an extremely hot and dense state (singularity) and has expanded over time. Evidences: - Cosmic microwave background radiation (CMBR): CMBR provides strong evidence of the predicted early hot stage of the Universe. - Discovery of Red shift of galaxies: Red shift provides direct evidence that galaxies are moving apart, supporting the expansion of the Universe. - Abundance of hydrogen and helium: The abundance of hydrogen and helium matches scientific predictions about the early Universe. Award 6 marks for evaluation of the theory Candidates must include the following developed explanation for the evidences while considering limitations and making a judgment. Two marks for each well-developed explanation of the evidence. Explanation of evidences: - The presence of background radiation supports the Big Bang Theory by showing leftover heat from the early universe. However, it cannot explain what caused the Big Bang or what existed before it, so it is not complete proof of the universe's origin. - Red shift provides evidence that the universe is expanding, but it does not explain what caused the expansion or prove that the Big Bang was the only possible origin of the universe. - The abundance of hydrogen and helium supports the Big Bang Theory, but it does not provide conclusive proof of the universe's origin, as some of these elements can also be produced by stars and other natural processes.		

Therefore, the evidence supports the Big Bang Theory because multiple observations confirm that the Universe expanded from an earlier hot and dense state. However, the theory does not provide complete answers about the beginning of the Universe. Answer is not exhaustive...		
Question IV Evaluate how modern technology platforms, such as video conferencing, instant messaging, and email, help overcome time-zone challenges in international communication. [10]	[10]	
Award 4 marks for Knowledge and Understanding <i>Students must understand and write benefits of the technologies.</i> Award two marks for two benefits with examples. Expected answers: - Enables real-time communication through video conferencing. Example: A manager in India uses Zoom to hold a live meeting with employees in Japan without traveling. - Supports instant exchange of messages through instant messaging. Example: A student sends a WhatsApp message to a classmate to ask about homework and receives a reply within seconds. - Reduces communication delays between countries. Example: A customer in Bhutan emails a company in Singapore and gets a response the same day instead of waiting several days for a letter. - Makes scheduling meetings across different time zones easier. Example: A company uses Microsoft Teams to schedule a meeting between employees in Australia and the UK, and the app shows the correct meeting time for each person. - Allows file and information sharing instantly. Example: A teacher shares lecture notes through Google Drive, and students can download them immediately from anywhere. Award 6 marks for evaluation <i>Students should be able to make a judgement by considering both strengths and limitations before reaching a conclusion.</i> Award two marks for two well-developed strengths with examples - Enables instant communication regardless of geographical distance. Example: A doctor in Bhutan can instantly video call a specialist in India to discuss a patient's treatment. - Reduces delays in decision-making. Example: A company manager sends a message to the team, and everyone replies immediately, allowing a quick decision. - Supports virtual meetings, reducing travel time and cost. Example: Employees from different cities attend an online meeting instead of traveling Page 8 of 12to the head office.		

• Allows people to communicate at different times using email. Example: A teacher emails an assignment at night, and students read and reply the next morning. • Improves teamwork by sharing documents online. Example: Group members work together on the same Google Docs file without meeting in person. • Increases productivity in multinational organisations. Example: Employees in different countries work on the same project and complete tasks faster by communicating online. • Facilitates rapid sharing of documents and information. Example: A company sends a report to all employees by email, and everyone receives it within a few seconds. Limitations: Award two marks for two well-developed limitations with examples • Real-time meetings still require coordinating different working hours. Example: One employee joins the meeting early in the morning while another joins late at night. • Internet connectivity issues may disrupt communication. Example: A video call freezes because the internet connection is slow. • Technical failures or software problems can interrupt meetings. Example: The meeting ends suddenly because the app crashes. • Language and cultural differences may still cause misunderstandings. Example: A team member misunderstands a message because of language differences. • Security and privacy concerns may affect communication. Example: A hacker gains access to confidential company files. • Time-zone differences can contribute to employee fatigue or reduced work–life balance. Example: An employee has to attend meetings late at night and feels tired the next day. Therefore, modern technology platforms are very effective in reducing time-zone communication problems because they allow people to communicate instantly or at a convenient time. However, they do not completely eliminate these challenges, as scheduling difficulties, technological limitations, and human factors such as language and cultural differences still remain. Answer is not exhaustive...		
Question V Evaluate the effectiveness of the Solar Nebula theory to explain the formation of the Solar system.	[10]	
Award 4 mark for understanding and knowledge <i>Candidates should demonstrate the key ideas of the theory</i> Expected answers:		

• The Solar System formed about 4.6 billion years ago from a rotating cloud of gas and dust called a solar nebula. • Gravity caused the nebula to collapse, forming the Sun at the centre. • Remaining dust and rocks collided and accreted to form planets. Award 6 marks for Evaluation <i>Candidates must include the following developed explanation for the evidences while considering limitations and making a judgment.</i> Award Two marks for one well-developed explanation of the evidence. <i>Candidates should explain strengths/evidence supporting the theory (Why it is effective)</i> • Explains the formation of the Sun and planets: The concentration of material at the centre explains why the Sun contains most of the Solar System's mass. • Explains the arrangement of planets: Inner rocky planets formed closer to the Sun where temperatures were higher. Outer gas giants formed further away where gases and ice could accumulate. • Explains the similar characteristics of planets: Planets orbit the Sun in the same direction and nearly the same plane, supporting formation from a rotating disc. Award Two marks for one well-developed explanation of the limitation and Two marks for the judgment <i>Students should evaluate limitations such as:</i> • Does not fully explain some details of planet formation: the exact process of how small particles grew into large planets is still uncertain. • Difficulty explaining some features: Some unusual planetary characteristics, such as the extreme tilt of planets like Uranus, require additional explanations. • Cannot explain the original source of the nebula: It explains the formation of the Solar System but not the origin of the material that formed the nebula. Therefore, the Solar Nebula Theory is highly effective because it explains many major features of the Solar System, including the formation of the Sun, planets, and their orbital patterns. However, it does not completely explain every detail of planetary formation. So, it provides the most widely accepted explanation but requires further scientific evidence to address remaining uncertainties. Answer is not exhaustive...		
Question VI		

Evaluate the significance of longitude in global navigation. Award 4 marks for Knowledge and Understanding <i>Candidates should explain the role of longitude in global navigation.</i> Award 4 marks for any four significance Expected answers: • Helps people find the correct location and direction. • Makes travelling easier and faster. • Helps ships and airplanes travel safely. • Supports emergency services in locating people quickly. • Assists in delivering goods efficiently. • Helps farmers survey and manage their land. • Supports map making and land surveying. Award 6 marks for Evaluation <i>Candidates should make a judgement by considering both the strengths and limitations of longitude before reaching a conclusion.</i> Award 2 marks for two well-developed strengths Strengths: • Helps people find the correct location and direction: Provides accurate location information and reduces the chance of getting lost. • Makes travelling easier and faster: Helps people choose the shortest and best routes, saving time. • Helps ships and airplanes travel safely: Provides accurate routes and reduces the risk of accidents. • Supports emergency services in locating people quickly: Helps rescue teams find people faster during emergencies. • Assists in delivering goods efficiently: Helps companies track vehicles and deliver goods on time. • Helps farmers survey and manage their land: Helps farmers measure land and improve farming activities. • Supports map making and land surveying: Provides accurate location data for creating maps and planning land use. <i>Candidates should make a judgement by considering both the strengths and limitations of longitude before reaching a conclusion.</i> Award 2 marks for two well- developed limitations Limitations:		
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• It may give wrong information if satellite signals are weak or interrupted. • People may become too dependent on navigation devices and lose basic map-reading skills. • System failure or signal errors can create risks during travel. • It may not work well in remote areas with poor satellite coverage. • Technical problems can delay deliveries and affect business operations. • GPS equipment can be expensive and difficult for some farmers to use. • Requires advanced technology and trained people to collect accurate data. Award 2 marks for the conclusion and making proper judgement Global navigation has more strengths than limitations because it improves transportation, safety, business activities, farming, mapping, and daily travel. Although it may face challenges such as signal failure, high cost, and dependence on technology, its benefits are greater as it helps people and organizations make accurate decisions and perform activities more efficiently. Therefore, global navigation is a highly significant technology in the world. Answer is not exhaustive...		
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