

Cambridge IGCSE™

PAKISTAN STUDIES**0448/02**

Paper 2 The Environment of Pakistan

May/June 2025

MARK SCHEME

Maximum Mark: 75

Published

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

Cambridge International will not enter into discussions about these mark schemes.

Cambridge International is publishing the mark schemes for the May/June 2025 series for most Cambridge IGCSE, Cambridge International A and AS Level components, and some Cambridge O Level components.

This document consists of **25** printed pages.

Generic Marking Principles

These general marking principles must be applied by all examiners when marking candidate answers. They should be applied alongside the specific content of the mark scheme or generic level descriptions for a question. Each question paper and mark scheme will also comply with these marking principles.

GENERIC MARKING PRINCIPLE 1:

Marks must be awarded in line with:

- the specific content of the mark scheme or the generic level descriptors for the question
- the specific skills defined in the mark scheme or in the generic level descriptors for the question
- the standard of response required by a candidate as exemplified by the standardisation scripts.

GENERIC MARKING PRINCIPLE 2:

Marks awarded are always **whole marks** (not half marks, or other fractions).

GENERIC MARKING PRINCIPLE 3:

Marks must be awarded **positively**:

- marks are awarded for correct/valid answers, as defined in the mark scheme. However, credit is given for valid answers which go beyond the scope of the syllabus and mark scheme, referring to your Team Leader as appropriate
- marks are awarded when candidates clearly demonstrate what they know and can do
- marks are not deducted for errors
- marks are not deducted for omissions
- answers should only be judged on the quality of spelling, punctuation and grammar when these features are specifically assessed by the question as indicated by the mark scheme. The meaning, however, should be unambiguous.

GENERIC MARKING PRINCIPLE 4:

Rules must be applied consistently, e.g. in situations where candidates have not followed instructions or in the application of generic level descriptors.

GENERIC MARKING PRINCIPLE 5:

Marks should be awarded using the full range of marks defined in the mark scheme for the question (however; the use of the full mark range may be limited according to the quality of the candidate responses seen).

GENERIC MARKING PRINCIPLE 6:

Marks awarded are based solely on the requirements as defined in the mark scheme. Marks should not be awarded with grade thresholds or grade descriptors in mind.

Annotations guidance for centres

Examiners use a system of annotations as a shorthand for communicating their marking decisions to one another. Examiners are trained during the standardisation process on how and when to use annotations. The purpose of annotations is to inform the standardisation and monitoring processes and guide the supervising examiners when they are checking the work of examiners within their team. The meaning of annotations and how they are used is specific to each component and is understood by all examiners who mark the component.

We publish annotations in our mark schemes to help centres understand the annotations they may see on copies of scripts. Note that there may not be a direct correlation between the number of annotations on a script and the mark awarded. Similarly, the use of an annotation may not be an indication of the quality of the response.

The annotations listed below were available to examiners marking this component in this series.

Annotations

Annotation	Meaning
	Omission mark, further detail required
	Benefit of the doubt
	Incorrect point
	Correct point
	Development of a point Used in 4-mark development questions and 6-mark level of response questions
	Example Used to indicate exemplification in 6-mark level of response questions
	Evaluation/judgement
	Level 1 Used in 6-mark level of response questions
	Level 2 Used in 6-mark level of response questions
	Level 3 Used in 6-mark level of response questions
	Not answered the question
	Repetition of point/example/material
	Indicates that the point has been noted, but no credit has been given or Placed on all blank pages to indicate the examiner has seen every page of the script

Question	Answer	Marks
1(a)(i)	<p>Name the country labelled <u>W</u> and the city labelled <u>X</u> on Fig. 1.1.</p> <p>W: Afghanistan</p> <p>X: Hyderabad/Nawabshah</p> <p style="text-align: right;">2 @ 1 mark</p>	2
1(a)(ii)	<p>Using Fig 1.1 <u>only</u>, Measure the length of the Sulaiman range.</p> <p>340 (330–350) (km)</p> <p style="text-align: right;">1 @ 1 mark</p>	1
1(a)(iii)	<p>Using Fig. 1.1 <u>only</u>, describe the location of the Sulaiman range.</p> <ul style="list-style-type: none"> • in central Pakistan • in Balochistan/KPK/Punjab or on/along boundary between, <u>e.g.</u> Balochistan <u>and</u> KPK/Punjab • near <u>international boundary</u> • N/NE of Sindh • NE of the Arabian sea • near/E/NE/SE of Quetta • SW/SSW/S of Peshawar • distance from Quetta 180–330 <u>km</u>/from Peshawar 250–600 <u>km</u> • between 28° <u>and</u> 32° <u>N/latitude</u> or 68° <u>and</u> 72° <u>E/longitude</u> or accurate pair within given ranges, e.g. 29° N and 70° E <p style="text-align: right;">3 @ 1 mark</p>	3
1(a)(iv)	<p>Suggest why mining may be difficult in mountainous areas.</p> <ul style="list-style-type: none"> • uneven terrain/rugged land topography/steep (relief) • rockfalls/landslides/avalanches/snow and ice • extreme climate/extreme/<u>very</u> cold/hot temperatures • <u>difficult</u> to bring/use machinery/build <u>mining</u> infrastructure • remote location/inaccessible/lack of roads/rail networks • lack of electricity/water/education/healthcare • cost of mining operations is high/expensive • sparsely populated/shortage of workers • dangerous/difficult <u>working conditions</u>/accidents likely <p style="text-align: right;">2 @ 1 mark</p>	2
1(b)(i)	<p>Using Fig. 1.2 <u>only</u>, identify the amount of granite extracted.</p> <p>4100 (million tonnes)</p> <p style="text-align: right;">1 @ 1 mark</p>	1

Question	Answer	Marks
1(b)(ii)	<p>Describe how mineral extraction is beneficial to Pakistan.</p> <ul style="list-style-type: none"> • minerals are valuable • large contribution to GDP/GNP/can be exported/reduces need for imports/improves the balance of payments/provides foreign exchange/attracts foreign investment • provides jobs/reduces unemployment/increases tax revenue • helps the development of remote areas • provides raw materials <u>for</u> agriculture/industries/manufacturing/to make value added goods • provides raw materials <u>for</u> construction/building/roads/bridges, etc. • enables generation of electricity/power <p style="text-align: right;">2 @ 1 mark</p>	2
1(c)(i)	<p>Complete Fig.1.3 by using arrows to match the forest type to the altitude where it grows.</p> <ul style="list-style-type: none"> • tropical thorn = below 1000m • alpine = 4000-4500m • coniferous = 1000-4000m <p style="text-align: right;">3 correct = 2 marks 1 or 2 correct = 1 mark</p>	2
1(c)(ii)	<p>State <u>two</u> human activities which are reducing the extent of forests in Pakistan.</p> <ul style="list-style-type: none"> • <u>fuelwood/firewood</u>/cooking/heating • farming/agriculture/over-grazing • industries/factories/logging/furniture making • mining • (building) dams/reservoirs • (building) settlements/houses/urbanisation • (building) road/rail/transport network • forest fires <u>started accidentally</u> <p style="text-align: right;">2 @ 1 mark</p>	2

Question	Answer	Marks
1(c)(iii)	<p>Explain <u>two</u> reasons for afforestation in Pakistan. You should develop your answer.</p> <ul style="list-style-type: none"> • to create wildlife habitats; to encourage biodiversity/species/ breeding • to reduce flooding/surface runoff/to soak up water; trees intercept rainfall/reduce siltation/prevent waterlogging • to protect coast from tidal surges/tsunami: many mangroves/ forests have been damaged/removed • to prevent soil erosion/desertification/to increase soil fertility; tree roots stabilise soil • to combat the impacts of climate change/global warming/to provide cleaner air; trees absorb carbon dioxide/ trees produce oxygen/ to reduce Pakistan's carbon emissions • to create shade; to reduce (local) temperatures/provide shelter for animals/people from sun • to increase rainfall; to provide water <u>for</u> irrigation/drinking • to provide materials <u>for</u> future/use; in construction/furniture/named industry/to sell/generate income/export • for tourism/increases areas of scenic beauty; creating areas for recreation/leisure/to benefit human health • to create jobs/reduce unemployment; such as forest workers /rangers/which increases tax revenue <p>Note: 1 mark for simple point and a further mark for the development of the point. 1 mark for second simple point and a further mark for development of the second point.</p> <p>Note: Max. 2 marks if no development.</p> <p style="text-align: right;">2 @ 2 marks</p>	4

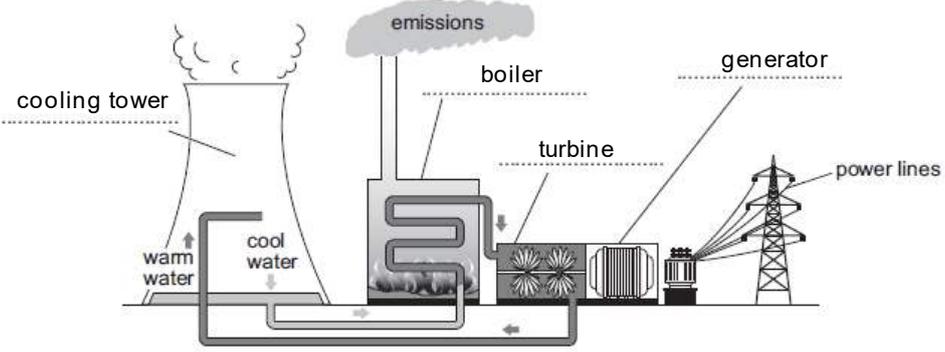
Question	Answer	Marks
1(d)	<p>Evaluate the opportunities for, and challenges of, continuing to develop mineral resource extraction sustainably in Pakistan.</p> <p>Give reasons to support your <u>judgement</u> and refer to examples you have studied. You should consider <u>different</u> points of view in your answer.</p> <p>Levels marking</p> <p>No valid response 0</p> <p>Level 1 1–2 Simple point referring to one view (1) Simple points referring to any view (2)</p> <p>Level 2 3–4 Developed point referring to one view only (3) Developed points referring to both views or developed point and a relevant example (4)</p> <p>Level 3 5–6 Developed points referring to both views with evaluation or relevant example (5) Developed points referring to both views with evaluation and relevant example (6)</p> <p>Content guide opportunities for continuing to develop mineral resource extraction sustainably:</p> <ul style="list-style-type: none"> • Pakistan is rich in mineral resources, if more were extracted it could contribute to GDP growth/create employment • higher amounts of minerals may provide necessary materials to expand secondary industries to increase value added goods • greater extraction may lead to reduced need to import resources and improve the balance of trade • education and use of technology/efficient methods could make mineral extraction less environmentally damaging • damage from mineral extraction could be repaired by afforestation schemes, etc. and areas could be enhanced <p>challenges of continuing to develop mineral resource extraction sustainably:</p> <ul style="list-style-type: none"> • mineral extraction can cause air/water/land pollution, land reparations after mining take a long time and add to costs • Pakistan’s mineral resources are finite, mining operations are not cost effective as they cause great environmental damage for limited amounts of mineral resources • it is primary industry and there is greater potential for economic growth by developing secondary industries (manufactured goods have higher values) and service industries • some minerals are in areas that are difficult to access so require road building, this increases cost and degrades environments • mining is dangerous work and can cause long-term health problems, safety equipment is required which increases costs • requires specialist machinery, importing this can be expensive as is recruiting high skilled workers 	6

Question	Answer	Marks
2(a)(i)	<p>Using Fig 2.1 only:</p> <ul style="list-style-type: none"> • identify the highest rainfall: 52 (mm) • calculate the temperature range: 10.5/11 (°C) <p style="text-align: right;">2 @ 1 mark</p>	2
2(a)(ii)	<p>State the season when regions of Pakistan experience rainfall from:</p> <ul style="list-style-type: none"> • the south-west monsoon: summer • the western depressions: winter <p style="text-align: right;">2 @ 1 mark</p>	2
2(a)(iii)	<p>Identify the location that is associated with the climatic conditions given. <u>Circle</u> the correct answer for each statement.</p> <ul style="list-style-type: none"> • cold winter, mild summer and rainfall in all seasons: northern Khyber Pakhtunkhwa • mild winter, warm summer, extreme aridity: central Balochistan <p style="text-align: right;">2 @ 1 mark</p>	2
2(b)(i)	<p>Using Fig. 2.2 only, describe <u>three</u> characteristics of the landscape shown.</p> <ul style="list-style-type: none"> • rocks/rocky/stones/stony • sand(y)/(sand) dunes • vast/large (area) • ridges/ripples • uneven/hilly/rugged/undulating/rolling/bumpy • (steep) slopes • barren/<u>bare ground</u> • <u>dead/withered</u> vegetation • dry/arid <p style="text-align: right;">3 @ 1 mark</p>	3
2(b)(ii)	<p>Define 'drought'.</p> <ul style="list-style-type: none"> • a period/a time/a season/months/weeks • of no/low/scarcity/lack of precipitation/rainfall <p style="text-align: right;">2 @ 1 mark</p>	2

Question	Answer	Marks
2(b)(iii)	<p>Describe how altitude and latitude affect temperature in Pakistan.</p> <p>altitude:</p> <ul style="list-style-type: none"> • temperatures are low(er) at high(er) altitudes/high(er) at low(er) altitudes • the temperature drops by 6.5 degrees for each 1000m increase in altitude • air is more dense/thicker can absorb more heat/water vapour/dust particles/solar radiation (causing higher temperature) at low altitude/sea level <p>or</p> <p>air is less dense/thinner can absorb less heat/water vapor/dust particles/solar radiation (causing lower temperature) at high altitude/in mountainous regions</p> <ul style="list-style-type: none"> • at low(er) altitude air absorbs more heat <u>from Earth's surface</u> <p>or</p> <p>at high(er) altitude air absorbs less heat <u>from Earth's surface</u></p> <p>latitude:</p> <ul style="list-style-type: none"> • low(er) latitudes/clos(er) to Equator/Tropic of Cancer have high(er) temperatures <p>or</p> <p>high(er) latitudes/furth(er) from Equator have low(er) temperatures</p> <ul style="list-style-type: none"> • southern Pakistan has higher temperatures than northern Pakistan/temperatures decrease further north/increase further south • low(er) latitudes/close(r) to Equator sun rays at a higher angle/shine directly/more focused on small area (cause higher temperatures) <p>or</p> <p>high(er) latitudes/further from Equator sun rays at a lower angle/heating effect is more spread out (cause lower temperatures)</p> <ul style="list-style-type: none"> • low(er) latitudes/close(r) to the Equator sunlight is strongest/sun's rays pass through a smaller depth of atmosphere (causing higher temperatures) <p>or</p> <p>high(er) latitudes/further from Equator sunlight is weakest/sun's rays pass through a greater depth of atmosphere (causing lower temperatures)</p> <p style="text-align: right;">4 @ 1 mark</p>	4

Question	Answer	Marks
2(c)	<p>Explain how rain storms can impact agriculture in Pakistan. You should develop your answer.</p> <p>negative impacts:</p> <ul style="list-style-type: none"> • <u>high/heavy</u> rainfall; washes crops away/causes crop failure • high/strong winds; cause soil erosion/damage crops/uproot plants • lightning strikes; can start field fires/burn crops • soil erosion; leads to infertile land • flooding; causes areas to be cut off/livestock to die/be stranded/topsoil washed away/causes waterlogging and salinity • still/stagnant water; can lead to pests that spoil crops • contaminated water supplies; farmers can't irrigate their remaining crops/give to livestock • electricity supply disrupted; irrigation systems can't work • damaged roads/bridges; can't travel to market/get supplies • damaged farm buildings; high cost to repair/nowhere to store equipment/produce/harvest • destroyed crops/lost livestock; farmers lose income/food shortages <p>positive impacts:</p> <ul style="list-style-type: none"> • bring more nutrients to soil; improves yields in future years • replenishes water supplies; farmers can store this for irrigation • rain waters crops; increasing output/no need to irrigate <p>Note: 1 mark for simple point and a further mark for the development of the point. 1 mark for second simple point and a further mark for development of the second point.</p> <p>Note: Max. 2 marks if no development.</p> <p style="text-align: right;">2 @ 2 marks</p>	4

Question	Answer	Marks
2(d)	<p>In the Swat Valley, winter temperatures can be as low as -10°C and there is regular snowfall. Evaluate the benefits and challenges of low temperatures, ice and snow for people living in the northern areas of Pakistan.</p> <p>Give reasons to support your <u>judgement</u> and refer to examples you have studied. You should consider <u>different</u> points of view in your answer.</p> <p>Levels marking</p> <p>No valid response 0</p> <p>Level 1 1–2 Simple point referring to one view (1) Simple points referring to any view (2)</p> <p>Level 2 3–4 Developed point referring to one view only (3) Developed points referring to both views or developed point and a relevant example (4)</p> <p>Level 3 5–6 Developed points referring to both views with evaluation or relevant example (5) Developed points referring to both views with evaluation and relevant example (6)</p> <p>Content guide</p> <p>benefits of low temperatures, ice and snow:</p> <ul style="list-style-type: none"> • areas with significant snow/glaciers can have scenic beauty • areas can become tourist attractions and therefore the potential to generate employment/income/GDP • development of ski resorts/ice skating/leisure opportunities can attract foreign investment/require investment e.g. roads built that locals can also utilise • glacial meltwater can provide essential water for irrigation • glacial meltwater will refill the hydel reservoirs • cooler summers make living conditions tolerable/remove the need for air conditioning <p>challenges of low temperatures, ice and snow:</p> <ul style="list-style-type: none"> • roads become blocked by snow and ice/avalanches • difficulty in growing crops so have to keep livestock such as sheep/goats, practice transhumance • rivers/pipes freeze causing a limited supply of water for people/crops/leads to frozen soil • extreme cold winters mean people need to spend more on heating their homes • cannot work outside, restricted to cottage industry work • some people have to leave their homes when it gets very cold 	6

Question	Answer	Marks
3(a)(i)	<p>Using Fig. 3.1 <u>only</u> identify:</p> <ul style="list-style-type: none"> the city that is located close to a thermal power station in the west of Pakistan: Quetta the number of thermal power stations located in Sindh: 6 <p style="text-align: right;">2 @ 1 mark</p>	2
3(a)(ii)	<p>Using Fig. 3.1 <u>only</u>, describe the distribution of thermal power stations.</p> <ul style="list-style-type: none"> clustered/widespread/uneven in E/SE/S/central Pakistan most are in Sindh (and Punjab)/Sindh has the highest number of power stations more in Sindh than Punjab/Balochistan/KPK/more in Punjab than Balochistan/KPK around/near Karachi S/SE of Peshawar <u>one/isolated</u> power station in west/near/S/SSW of Quetta along/near/on/around rivers/Indus on/along boundaries between, <u>e.g.</u> Balochistan/Punjab/Sindh 2/3 are close to <u>international boundaries</u> <p style="text-align: right;">3 @ 1 mark</p>	3
3(b)(i)	<p><u>Complete</u> the labels on Fig. 3.2. Choose the correct words from the box and place them in the spaces provided.</p> <div style="text-align: center;">  <p>Fig. 3.2</p> </div> <p style="text-align: right;">3 or 4 correct = 2 marks 1 or 2 correct = 1 mark</p>	2
3(b)(ii)	<p>Describe how coal is mined in an open cast mine.</p> <ul style="list-style-type: none"> <u>drills are used to</u> create holes in the rock/prepare the area the surface rocks are removed/explosives/blasting used <u>excavators/machinery/power shovels used to</u> remove overburden/rock/debris / to scoop up/dig out coal/mineral (coal/mineral) is loaded into / transported by lorries/trucks/railway wagons/trolleys/conveyors <p style="text-align: right;">2 @ 1 mark</p>	2

Question	Answer	Marks
3(b)(iii)	<p>Cost is one factor that can affect the availability of electricity. State <u>three</u> other factors that can affect the availability of electricity in Pakistan.</p> <ul style="list-style-type: none"> • topography/rugged terrain/mountains/deserts • extreme temperatures/<u>heavy</u> rainfall/extreme climate • flooding/<u>high</u> winds/(thunder)storms/earthquakes/landslides • supply of, <u>e.g.</u> fossil fuels/coal/oil/gas/water/sunshine • power stations/network/grid/power lines/pylons • siltation in reservoirs/dams • population density/demand/high usage • industrialisation/industrial estates • load shedding • loss of electricity from (long) transmission lines • workers/labour <p style="text-align: right;">3 @ 1 mark</p>	3
3(b)(iv)	<p>Explain why the cost of some non-renewable power sources in Pakistan may increase. You should develop your answer.</p> <ul style="list-style-type: none"> • scarcity/running out/limited supply of natural resources available in Pakistan; natural resources have to be imported • need for higher quality minerals; which have higher value, increasing cost of energy produced • natural resources have to be imported; causing higher transportation costs • high(er) costs of imported minerals; due to currency depreciation/changes in exchange rates • decreased production of natural resources in other countries; can affect global trade values (e.g. oil) • higher costs of mineral extraction; technology/machinery/ skilled labour required • costs of building/maintaining pylons/powerlines/pipelines; causes higher energy costs for consumers • increased demand for power/growing population; demand higher than supply/competition increases prices • political factors; increasing tariffs/taxes on natural resources/influence of international organisations (e.g. IMF/OPEC) <p>Note: 1 mark for simple point and a further mark for the development of the point. 1 mark for second simple point and a further mark for development of the second point.</p> <p>Note: Max. 2 marks if no development.</p> <p style="text-align: right;">2 @ 2 marks</p>	4
3(c)(i)	<p>Define ‘renewable energy’.</p> <p>Energy that can be reused/will not run out/is infinite</p> <p style="text-align: right;">1 @ 1 mark</p>	1

Question	Answer	Marks
3(c)(ii)	<p>Describe how electricity can be generated from geothermal resources.</p> <ul style="list-style-type: none"> • drill down to find/use areas of underground heat/hot water • water is pumped down/heated by hot rocks/Earth's core • water turns to steam/steam comes to the surface • spins/turns/rotates/drives turbines/<u>generator</u> creates electricity <p style="text-align: right;">2 @ 1 mark</p>	2
3(d)	<p>Read the following two views about ways to increase renewable power generation in Pakistan:</p> <p>A: Pakistan should focus more on small-scale power generation such as solar panels in villages.</p> <p>B: Pakistan should focus more on large-scale power generation projects such as hydel dams.</p> <p>Which view do you agree with more? Give reasons to support your answer and refer to examples you have studied. You should consider <u>view A and view B</u> in your answer.</p> <p>Levels marking</p> <p>No valid response 0</p> <p>Level 1 1–2 Simple point referring to one view (1) Simple points referring to any view (2)</p> <p>Level 2 3–4 Developed point referring to one view only (3) Developed points referring to both views or developed point and a relevant example (4)</p> <p>Level 3 5–6 Developed points referring to both views with evaluation or relevant example (5) Developed points referring to both views with evaluation and relevant example (6)</p> <p>Content guide</p> <p>arguments for focusing on small-scale power generation such as solar panels in villages:</p> <ul style="list-style-type: none"> • small scale power generation can support households that don't have access to the national grid (around 25%)/in more remote areas to improve quality of life/access to education • potential to generate electricity during load shedding • relatively inexpensive, NGOs sometimes provide finance to set up such equipment 	6

Question	Answer	Marks
3(d)	<p>arguments against focusing on small-scale power generation such as solar panels in villages:</p> <ul style="list-style-type: none"> • would not produce sufficient energy to meet future demand for domestic or industrial use, which could impact GDP • equipment may still be too expensive for some households • some power generation methods are not available 24/7 • batteries to store energy are extremely expensive <p>arguments for focusing on large-scale power generation such as hydel dams:</p> <ul style="list-style-type: none"> • capacity to generate large amounts of energy which reduces reliance on imported fossil fuels, improving balance of trade • can provide a more consistent supply of energy which is needed for industry/could reduce frequency of loadshedding • large-scale construction projects can generate employment <p>arguments against focusing on large-scale power generation such as hydel dams:</p> <ul style="list-style-type: none"> • hydel dams require a lot of land to be flooded for reservoir • may require international experts to support, which can be expensive <p>overall costs of large-scale projects are very high, which may mean investment in other areas/services is reduced</p>	

Question	Answer	Marks
4(a)(i)	<p>Identify the international seaports labelled <u>Y</u> and <u>Z</u> on Fig. 4.1.</p> <p>Y = Gwadar Z = (Muhammad) (Bin) Qasim / Port Qasim</p> <p style="text-align: right;">2 @ 1 mark</p>	2
4(a)(ii)	<p>Using Fig. 4.1 <u>only</u>, state the compass direction from Peshawar to Quetta.</p> <p>south-west/SW</p> <p style="text-align: right;">1 @ 1 mark</p>	1
4(a)(iii)	<p>Using Fig. 4.1 <u>only</u>, compare the distribution of dry ports with the distribution of airports.</p> <ul style="list-style-type: none"> • there are more airports <u>than</u> dry ports/9 airports <u>versus</u> 4 dry ports • <u>both</u> are scattered/widespread/uneven across the country • airports exist further north than dry ports • airports are in all provinces <u>but</u> dry ports are not / <u>both</u> are found in Balochistan/Punjab/Sindh • Balochistan has the most airports <u>and</u> dry ports • Sindh has the least airports <u>and</u> dry ports • dry ports are all close to an airport, <u>but</u> airports can be located far from dry ports <p style="text-align: right;">2 @ 1 mark</p>	2
4(a)(iv)	<p>State <u>three</u> factors which can affect the development of airports.</p> <ul style="list-style-type: none"> • topography/flat/plain/cheap/vacant/large land • funding/capital/investment/costs • government policy/subsidies/loans/tax incentives • population/workers/expertise • demand/tourism/disposable income • electricity supply • water supply • road/rail links/transport links • security/crime <p style="text-align: right;">3 @ 1 mark</p>	3
4(b)(i)	<p><u>Complete</u> Fig. 4.2 using the information in the table.</p> <p>Correctly plotted graph:</p> <ul style="list-style-type: none"> • 2018: 7.2 • 2019: 8.3 <p>line completed</p> <p style="text-align: right;">2 @ 1 mark 1 mark for 2 correct points plotted 1 mark for line joining points</p>	2

Question	Answer	Marks
4(b)(ii)	<p>Complete the statements about the railway network in Pakistan. Choose the correct words from the box and place them in the spaces provided.</p> <p>Pakistan has a large rail network linking major cities: a main line runs from north to south, connecting Peshawar in the north and Karachi in the south. Some areas in northern Pakistan have few railway lines. The province with the most dense rail network is Punjab.</p> <p style="text-align: right;">3 correct = 2 marks 1 or 2 correct = 1 mark</p>	2
4(b)(iii)	<p>Describe <u>one</u> advantage and <u>one</u> disadvantage of using roads to transport goods in Pakistan.</p> <p>advantages:</p> <ul style="list-style-type: none"> • motorway network exists/connects cities/industries/other countries • flexible choice of routes/times of day/night to travel • a door-to-door service • can carry multiple goods/use vehicles of different sizes <p>disadvantages:</p> <ul style="list-style-type: none"> • roads not built everywhere/areas are inaccessible/blocked/unmetalled roads • <u>toll roads</u> add cost • cause congestion/traffic/delays • emissions/causes air pollution/noise pollution <p style="text-align: right;">2 @ 1 mark</p>	2
4(c)(i)	<p>Define 'dry port'.</p> <p><u>inland</u> port/depot/terminal</p> <p style="text-align: right;">1 @ 1 mark</p>	1

Question	Answer	Marks
4(c)(ii)	<p>Explain <u>one</u> reason why dry ports and <u>one</u> reason why international seaports have been developed in Pakistan. You should develop your answer.</p> <p>dry ports:</p> <ul style="list-style-type: none"> • to increase trade/for import/export of goods; which can help increase GDP/improves balance of payments/increases foreign exchange earnings/reduces cost of importing/exporting • reduces burden at seaports/completes customs processing; there are very few seaports/increases volume of cargo/goods can be loaded quickly/saves time for import/exporters • stimulate trade in cities inland; which can reduce uneven development/helps develop local industries/ service industries develop nearby/creates jobs/removes need to travel to seaport • to help government collect revenue; stimulates further economic development/can be spent on service provision • to make use of existing transport networks; goods can be moved efficiently/reducing costs for industry/increasing import/export capacity <p>international seaports:</p> <ul style="list-style-type: none"> • to increase trade/provide access to international shipping routes/for import/export of goods; which can help increase GDP/improves balance of payments/increases foreign exchange earnings/reduce pressure on other seaports • to access warm/deep waters; maximises economic benefits/all year-round access to the sea/trade • main roads and railway lines are built; linking ports to settlements/industries • can help to promote tourism/fishing/other industries; can be used for passengers/increase employment/revenue • container ships carry heavy/bulky/huge amounts of goods; lowers transport costs/can be moved over a long distance • attracts (foreign) investment/Pakistan has a coastline; land-locked countries use the port services/giving advantages in trade <p>Note: 1 mark for simple point for dry ports and a further mark for the development of the point. 1 mark for simple point for international seaports and a further mark for development of this point.</p> <p>Note: Max. 2 marks if no development.</p> <p style="text-align: right;">2 @ 2 marks</p>	4

Question	Answer	Marks
4(d)	<p>To what extent can building new airports in Pakistan support its future sustainable development?</p> <p>Give reasons to support your <u>judgement</u> and refer to examples you have studied. You should consider <u>different</u> points of view in your answer.</p> <p>Levels marking</p> <p>No valid response 0</p> <p>Level 1 1–2 Simple point referring to one view (1) Simple points referring to any view (2)</p> <p>Level 2 3–4 Developed point referring to one view only (3) Developed points referring to both views or developed point and a relevant example (4)</p> <p>Level 3 5–6 Developed points referring to both views with evaluation or relevant example (5) Developed points referring to both views with evaluation and relevant example (6)</p> <p>Content</p> <p>new airports can support future sustainable development:</p> <ul style="list-style-type: none"> • international airports will encourage tourism • will encourage trade of high-value or perishable goods • travel is fast so people/goods reach destinations quickly • increase the volume of trade • creates jobs in construction/within the airport/increase economic sustainability • encourages investment in the nearby area • tourism and travel promotes culture of Pakistan/travel around the country to see family and friends more easily <p>new airports would be limited in supporting future sustainable development/other projects would be more successful:</p> <ul style="list-style-type: none"> • air transport has a large environmental impact/carbon footprint/CO2 emissions are high • planes cause noise pollution for people living nearby • building new airports takes up land that could be used for farming/other industries/destroys habitats • Pakistan has recently built new international airports so further might not be needed • money may be better spent improving road/rail networks and links into neighbouring countries/domestically • major exports from Pakistan are heavy so air transport is expensive/efficient seaports would be better 	6

Question	Answer	Marks
5(a)(i)	<p>Using Fig. 5.1 <u>only</u>:</p> <ul style="list-style-type: none"> • what is the proportion of people employed in urban areas in 1990? 26 or 27(%) • by how much has the proportion of people employed in rural areas decreased between 1990 and 2020? 34 or 33(%) <p style="text-align: right;">2 @ 1 mark</p>	2
5(a)(ii)	<p>Which of the following statements about employment sectors are correct? Tick <u>two</u> boxes in the table.</p> <p>Most workers are in primary and secondary sector jobs The tertiary sector employs the highest proportion of workers</p> <p style="text-align: right;">2 @ 1 mark</p>	2
5(a)(iii)	<p>Suggest <u>two</u> reasons why the number of workers employed in agriculture in Pakistan is changing.</p> <ul style="list-style-type: none"> • mechanisation/machinery (reduces workers needed) • industrialisation/factories/growth of secondary sector • growth of services/tertiary sector • rural to urban <u>migration/move</u> to cities • low wages/falling income/people seek higher pay • literacy/education/seek better working conditions • flooding/waterlogging/salinity/desertification/soil erosion • increasing costs of seeds/pesticides/chemicals • land reform/ownership causes number employed to change • population growth creates higher demand for food/more food production needed • commercial farms are expanding/need high numbers of workers <p style="text-align: right;">2 @ 1 mark</p>	2
5(b)(i)	<p>Using Fig. 5.2 <u>only</u>, describe the pattern of rates of unemployment.</p> <ul style="list-style-type: none"> • uneven/scattered/patchy/varied • high(er) unemployment in N/low(er) unemployment in S/SE • 4–6.99 is most widespread/common on the map/along the (Arabian Sea) coast • Balochistan mostly has medium/2.5–3.99/4–6.99 rates • Punjab has the <u>highest/9.5+</u> rates • Sindh has the <u>lowest/1.0–1.49</u> rates • Punjab has the greatest range/variety of unemployment rates • along river (Indus)/NW/N/NE of Karachi rate is low/lowest/1–1.49/1.5–2.49 • <u>near/around/E/S/W</u> of Multan unemployment is high/highest/7.0–9.49/9.5+ • along <u>international boundaries</u> unemployment rates are low(er)/1.5–2.49/2.5–3.99 <p style="text-align: right;">3 @ 1 mark</p>	3

Question	Answer	Marks
5(b)(ii)	<p data-bbox="308 248 1246 315">State <u>three</u> impacts of unemployment that affect people living in urban areas in Pakistan.</p> <ul data-bbox="308 349 1294 636" style="list-style-type: none">• loss of income/financial stability / poverty• <u>cannot afford/access</u> education/healthcare/food/power/water/internet• decline in mental health/physical health/quality of life• homelessness/informal housing/tent cities• crime/unrest• growth of informal employment/underemployment• competition for/decreased job opportunities• increased outmigration/moving abroad (for employment) <p data-bbox="1161 636 1318 669">3 @ 1 mark</p>	3

Question	Answer	Marks
5(b)(iii)	<p>Explain <u>two</u> ways that unemployment and informal employment can affect Pakistan's gross domestic product (GDP). You should develop your answer.</p> <p>increase GDP:</p> <ul style="list-style-type: none"> • informal work can increase GDP; manufactured goods are sold as export items • cottage industries; gain foreign exchange by selling goods to tourists/tourists spend foreign currency • (unemployed) people move to work abroad; they send remittances/money back home (this allows their families to spend more on goods and services) <p>decrease GDP:</p> <ul style="list-style-type: none"> • fewer people working/earning wages/lower pay/unreliable work/ underemployment; tax revenue decreases/fewer goods/services are produced • lack of disposable income; unemployed/informal workers typically spend less/low demand for goods and services • people rely on government support; reduced funds available for government to invest (in other sectors of the economy) • informal industries/companies/workers aren't registered with the government; no income is generated for the country/tax revenue decreases/income not included in GDP • (informal industries) generate less output; there are fewer goods for sale in markets/fewer goods available to export • some working conditions may not meet international standards; can result in sanctions • some informal goods do not always meet quality standards; importers may be less likely to buy • people move to work abroad; their income isn't included in GDP • (unemployed) do not learn job skills/lack of skilled workers/ the highest skilled/paid people emigrate/brain drain; foreign investors are less likely to invest <p>Note: 1 mark for simple point and a further mark for the development of the point. 1 mark for second simple point and a further mark for development of the second point.</p> <p>Note: Max. 2 marks if no development.</p> <p style="text-align: right;">2 @ 2 marks</p>	4

Question	Answer	Marks
5(c)	<p>Describe how governing authorities can encourage industrial growth in Pakistan.</p> <ul style="list-style-type: none"> • nationalising/setting up new industries/privatisation/policies/bans/laws • establishing industrial <u>estates/zones</u>/Export Processing Zones (EPZs)/dry ports/Special Economic Zones (SEZ) • investing in education/training/encouraging research and development/recruit experts • improving transport network/power/water supplies • improving telecommunications/internet/phone network • offering loans/grants/incentives/tax holidays/low tariffs/subsidies • trade agreements/blocs/international partnerships (e.g. CPEC) <p style="text-align: right;">3 @ 1 mark</p>	3

Question	Answer	Marks
5(d)	<p>Read the following two views about ways to increase economic development in Pakistan:</p> <p>A: The best way to support economic growth is to increase access to telecommunications.</p> <p>B: The best way to support economic growth is to increase access to education.</p> <p>Which view do you agree with more? Give reasons to support your answer and refer to examples you have studied. You should consider view A <u>and</u> view B in your answer.</p> <p>Levels marking</p> <p>No valid response 0</p> <p>Level 1 1–2 Simple point referring to one view (1) Simple points referring to any view (2)</p> <p>Level 2 3–4 Developed point referring to one view only (3) Developed points referring to both views or developed point and a relevant example (4)</p> <p>Level 3 5–6 Developed points referring to both views with evaluation or relevant example (5) Developed points referring to both views with evaluation and relevant example (6)</p> <p>Content</p> <p>increasing access to telecommunications is the best way to support economic growth in Pakistan:</p> <ul style="list-style-type: none"> • telecoms allow people and businesses to share information and ideas easily/quickly/cheaply across long distances • mobile phones and internet allow people and businesses to be instantly in touch globally/allow people to work remotely so widen employment opportunities • mobile phones masts provide signals to large areas • much economic growth is online via mobile applications (apps)/social media/websites used for marketing and sales • can provide online education and training in remote areas/can provide access to specialist teachers/students learn ICT skills for future employment • can encourage more MNCs to locate branches in Pakistan • telecom industries create many skilled and well-paid tertiary jobs 	6

Question	Answer	Marks
5(d)	<p>increasing access to telecommunications is not the best way to support economic growth in Pakistan:</p> <ul style="list-style-type: none"> • telecoms can replace jobs as efficiency makes some roles less necessary • cities have mobile and internet networks, but enormous demand slows speeds • load shedding can reduce the efficiency of internet connections as routers/devices require power to operate/ charge batteries • building the infrastructure is difficult and expensive in remote areas/in difficult topography/in extreme climate regions • in remote areas, where people would benefit most from telecoms, low population makes investment uneconomical • online information is not always reliable/local cultures and values may be eroded/can be misused/spread misinformation • growth in telecoms has also increased the occurrence of cybercrime/cyberattacks <p>increasing access to education is the best way to support economic growth in Pakistan:</p> <ul style="list-style-type: none"> • a skilled workforce attracts investment in an area • skilled workers earn higher wages and contribute more taxes • education/training helps improve people's health and life expectancy, making a more productive workforce • family planning education leads to lower birth rates and controlled population growth which is economically more sustainable • educated women can work in more highly paid jobs <p>increasing access to education is not the best way to support economic growth in Pakistan:</p> <ul style="list-style-type: none"> • a large proportion of the population is of working age, more job opportunities would bring faster growth than education • there are many underemployed people meaning there may not be enough high skilled jobs available • education may not increase in some places/where traditional lifestyles are preferred • population density in some areas is low, making investment in schools/teachers not economically viable 	