Cambridge O Level

PAKISTAN STUDIES **2059/02**

Paper 2 The Environment of Pakistan **October/November 2024**

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.

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This document consists of **26** *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	Display name	How annotations are applied
✓	Tick	to indicate each correct point
^	^	Omission (inverted v) for any response that is not quite good enough to gain a mark.
BOD	BOD	Benefit of the doubt. The response may not be exactly as it is written in the mark scheme but the meaning is there.
✗	Cross	to indicate an incorrect point.
DEV	DEV	to indicate development of a point or an idea in: • 4 mark develop answers. • 6 mark level response answers.
EG	EG	Example. To indicate a place specific or exemplification in a 6 mark level response answer
EVAL	EVAL	Evaluation. To indicate an evaluative statement in a 6 mark level response answer
L1 L2 L3	L1 L2 L3	Level stamp. Indicates the final level of a 6 mark level response. Place on the right-hand side at end of the response
NAQ	NAQ	Not answered the question set/the given response is irrelevant
REP	REP	Repetition. The same point/example given.
SEEN	SEEN	Placed on all blank pages to indicate the examiner has seen every page of the script.

Question	Answer	Marks
1(a)(i)	**Study Fig. 1.1, a map showing the locations of three deserts in southern and western Pakistan.** **Using Fig. 1.1 <u>only</u>, estimate the distance from east to west across the Kharan desert. <u>Circle</u> the correct answer.** 400 km 1 @ 1 mark	1
1(a)(ii)	**Using Fig. 1.1 <u>only</u>, identify the desert which is:** • **north-east of the Kharan desert** • **located along the international border with India** • Thal • Thar 2 @ 1 mark	2
1(a)(iii)	**Describe <u>two</u> natural features of a desert landscape in Pakistan.** • arid/dry/barren • sand(y)/dunes/pattis/tibbas • bare rock/rocky/stony • uneven/rugged/hills/ridges/dissected terrain/badlands/undulating/rolling/ flat land/plain <u>land</u> • no/sparse/scattered/scanty vegetation/small amount of vegetation • rakh/scrub woodland/thorny bushes/cacti/vegetation is low to the ground • oasis/dhands 2 @ 1 mark	2
1(a)(iv)	**Give <u>two</u> reasons why it is difficult to live in a desert in Pakistan.** • extreme temperatures/hot/intense heat/cold nights • it is dry/arid/lack of rainfall/lack of water • sandstorms/strong winds/dusty • lack of fertile soil/difficult to grow crops/irrigate land/food is scarce • lack of vegetation <u>for grazing/livestock</u> • remote/far from large settlements/lack of roads/railway • hard to build on uneven land/sand • difficult to access power supply/utilities • few job opportunities/lack of income 2 @ 1 mark	2

Question	Answer	Marks
1(b)(i)	**Study Figs. 1.2 and 1.3 (Insert), photographs of two different types of forest in Pakistan.** **Using Figs. 1.2 and 1.3 only, identify two differences between the forests shown.** • types of tree: alpine/coniferous/evergreen vs mangroves • heights/shapes of tree: tall/high/long/thin/ vs short/stunted/rounded/ bushy/Fig. 1.2 are tall<u>er</u>/Fig. 1.2 are thin<u>ner</u> • trunk: thick trunk vs thin trunk • leaves: needles vs leaves • roots: in the soil/underground/on (dry)land vs on wetland/submerged/ flooded/in water/sea/river/aerial/ exposed/stilt roots • distribution of trees: spread apart vs clustered/close together/Fig. 1.2 are furth<u>er</u> apart 2 @ 1 mark	**2**

1(b)(ii)	**Explain two physical factors that can affect the distribution of forests in Pakistan. You should develop your answer.**
	
	• altitude: fewer trees at high altitude as soils are frozen/only alpine/ coniferous/evergreen forest grow/more trees grow at lower altitudes as warmer **OR**
	   • above 4000 m; few trees can survive above the snowline/only <u>alpine</u> forest
	   • 1000—4000 m; <u>coniferous/evergreen</u> trees can survive
	   • below 1000 m; deciduous trees are more abundant
	
	• precipitation/aridity/amount of rainfall; some trees require large amounts of water (due to high evapotranspiration)/some have waxy leaves/ needles to conserve water/have sloping branches to prevent snow accumulation
	• temperature/hot/cold; rakh/mangrove can survive in hot temperatures/ coniferous/evergreen/alpine forests can survive in low temperatures
	• sun/daylight available; in northern areas less light in winter/some slopes have less sunshine so trees adapt by growing taller/having few low branches
	• relief; fewer types of forest found on rugged land/some trees have adapted roots to hold firm on sloped ground
	• soil; alpine/coniferous/evergreen forest can grow in thin soils/fertile soils support wider diversity of forests
	• access to water(bodies); mangroves are found along the coast/riverain/ bela found along rivers/on land that floods
	
	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.
	
	Note: Max. 2 marks if no development.
	
	2 @ 2 marks
		4

Question	Answer	Marks
1(b)(iii)	**Describe the importance of forests to people living in Pakistan.** • timber <u>for</u> building materials/furniture/industries • fuelwood/firewood (for fuel/heating/cooking) • provide shade/cooling effect for people • medicinal plants • food/fruits/wild meat/fish • scenic beauty for tourism/leisure/relaxation/to enjoy • absorb CO_2/produce oxygen/cleaner air/reduce air pollution/reduces climate change/global warming • flood prevention/typhoon/tsunami defence • eucalyptus trees reduce waterlogging/salinity • reduce soil erosion/landsliding/siltation in reservoirs/dams • provide jobs/income 2 @ 1 mark	**2**
1(c)(i)	**Define 'deforestation'.** (large scale) removal/cutting/clearance of forest/trees 1 @ 1 mark	**1**
1(c)(ii)	**State <u>three</u> effects of deforestation in Pakistan.** • loss of forest products/food/named example • loss of shade increases temperatures • loss of scenic beauty/less attractive landscape • loss of habitat/species/ecosystems/food chains • <u>increased</u> CO_2/<u>reduced</u> oxygen/<u>increased</u> air pollution/causes climate change/global warming/<u>decreased</u> rainfall • <u>increased</u> flooding/flood risk • <u>causes/increases</u> soil erosion/<u>decreases</u> soil fertility • <u>causes/increases</u> siltation in reservoirs/dams • <u>higher risk</u> of/<u>more</u> landslides/avalanches • <u>higher risk</u> of/<u>more</u> coastal damage from typhoons/tsunamis 3 @ 1 mark	**3**

Question	Answer	Marks
1(d)	**Read the following two methods to improve sustainability of forests in Pakistan:** • **method 1: planting more forest areas using afforestation schemes** • **method 2: protecting existing forest areas using laws and regulations** **Which method do you think would be more effective? Give reasons to support your answer and refer to examples you have studied. You should consider method 1 <u>and</u> method 2 in your answer.** **Levels marking** No valid response **0** **Level 1** **1–2** Simple point referring to one view (1) Simple points referring to any view (2) **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) **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) **Content guide** method 1: planting more forest areas is more/less effective: • provides a sustainable supply of trees for economic gain and limits environmental damage • counters/prevents soil erosion/silting/flooding • expanding forests areas could support creation of jobs e.g. fuelwood trade generates Rs 11.3 billion a year • many industries rely on forest resources e.g. paper mills/sports goods • expensive/achievable only on a small scale • some areas of land are unsuitable for forestry • takes a long time/benefits are not immediate • land could be better used/higher demand for other uses method 2: protecting existing forest areas is more/less effective: • relatively cheap to protect forest areas • job creation e.g. rangers • immediate benefits; maintains transpiration/shade • large areas of forest already exist and can be protected • can be difficult to enforce laws/legislation • large numbers of people rely on fuelwood need an alternative • many industries rely on wood, need a sustainable supply • need to expand forestry to help the economy/environment	**6**

Question	Answer	Marks
2(a)(i)	**Study Fig. 2.1 (Insert), a map of southern Pakistan.** **Name the cities labelled <u>X</u>, <u>Y</u> and <u>Z</u> on Fig. 2.1.** • X = Quetta • Y = Hyderabad • Z = Karachi 3 @ 1 mark	3
2(a)(ii)	**Using Fig. 2.1 <u>only</u>, describe the distribution of barrages shown.** • uneven/scattered • follow/along/in rivers/Indus/Sutlej/Ravi/tributaries • most/many are/cluster in Punjab/in the NE • (only) found in Sindh <u>and</u> Punjab • more in Punjab <u>than</u> in Sindh/7 are in Punjab <u>and</u> 3 are in Sindh • more in East <u>than</u> West/closer to Indian boundary (than Iran/Afghanistan boundary) • <u>4/5/cluster/group/several</u> near/around/100–150 km from Multan • found between 25 °/26 °– 30 °/31 °/32 °N **or** between 68 °/69 °–74 °/75 °E 3 @ 1 mark	3
2(a)(iii)	**Give <u>one</u> reason for building a barrage and <u>one different</u> reason for building a dam.** barrage: • the land is low/flat/plain • to control the flow of water/regulate river levels • to create a reliable/constant water supply • flood control/prevention • to divert water into areas of need/to farmland/into canals/for irrigation dam: • the land/valley is steep/narrow • to generate (hydro)electricity/HEP/hydel power • flood prevention/reducing flood damage/hold back rivers/meltwaters • to create reservoirs/to store water/to create a water supply (for irrigation/ drinking) 2 @ 1 mark	2

Question	Answer	Marks
2(b)(i)	**Study Fig. 2.2, a bar graph showing the minimum water requirements for selected crops in Pakistan.** <u>Complete</u> **Fig. 2.2, using the information in the table.** correctly plotted bar at 410mm wheat 1 @ 1 mark	**1**
2(b)(ii)	**Calculate the difference between the minimum water requirements for sugar cane and rice.** 570 (mm) 1 @ 1 mark	**1**
2(b)(iii)	<u>Complete</u> **Fig. 2.3 by using arrows to match the type of irrigation with the correct description. An example has been done for you.** karez = a method that directs groundwater via underground tunnels perennial canal = a channel linked to dams or barrages that supplies water throughout the year Persian wheel = a draught-powered system that raises water from a well tubewell = a pump that brings water from a well to the surface 3 correct = 2 marks 1 or 2 correct = 1 mark	**2**

Question	Answer	Marks
2(b)(iv)	**Explain <u>two</u> ways agricultural practices can damage the natural environment. You should develop your answer.** • using pesticides/herbicides/insecticides; can seep into the water supply, contaminate drinking water/cause water pollution • using fertilisers; seep into rivers polluting water/(creates algae) causing eutrophication/killing aquatic life • over-irrigation/seepage from unlined canals; causes waterlogging/causes salinity and the soil to be unusable • deforestation/farmers clear trees; for grazing land can lead to soil erosion/causes reduction in biodiversity/increasing CO_2 in the atmosphere • overgrazing; hooves and grazing of all vegetation causes soil erosion/desertification occurs • use of high-yield varieties (HYVs) /over cultivation/planting same crop every year; exhaust the soil quickly/reduce soil fertility/reduce soil quality as nutrients are depleted by crops • tractors/combine harvesters/farm machinery; cause <u>air</u> pollution/run on fossil fuels/compact the soil/damage soil structure • livestock farming releases methane; contributes to global warming **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. **Note:** Max. 2 marks if no development. 2 @ 2 marks	4
2(c)(i)	**What is 'land reform'?** • law stating the amount of land a person can own/hold • law/policy/rules reallocating land/changing of ownership of land/changing the amount of land a person can hold • land consolidation into larger plots/small plots into larger plots/land divided into smaller plots • fairer distribution of land • protection of tenants from eviction/landowner rights 1 @ 1 mark	1

Question	Answer	Marks
2(c)(ii)	**Suggest how land reforms could increase agricultural production in Pakistan.** • if you own the land more likely to farm it/invest in it/improve it • previously wasted land is farmed/<u>more</u> total area farmed • larger areas of land are easier to use machinery/named example of machinery/larger areas can be more efficiently farmed/can be used to test out new techniques • economies of scale created • cooperatives/groups/farmers can share costs of machinery/seeds/ fertilisers/irrigation methods • easier to get loans for large farms to buy equipment • <u>more</u> people/(subsistence) farmers/poor/previously landless people will be able to produce food • possible increased diversification/variety of crops (if more individual landowners) 2 @ 1 mark	**2**

Question	Answer	Marks
2(d)	**Read the following two views about initiatives that have been implemented to increase agricultural production in Pakistan:** **A: Education and training have had the most impact on agricultural production.** **B: Improved seeds have had the most impact on agricultural production.** **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.** **Levels marking** No valid response **0** **Level 1** **1–2** Simple point referring to one view (1) Simple points referring to any view (2) **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) **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) **Content guide** Education and training have/have not had the most impact: • literacy allows farmers to access information e.g. online/via mobile phones • educated to use and repair modern machinery • educated on efficient/modern irrigation methods • awareness of new power sources to increase efficiency e.g. solar power • uneven access to education/training • hard to train all farmers/illiteracy levels are high • farmers may not have time to be educated/attend training • expensive for government to provide/farmers may not have enough money for training/education Improved seeds have/have not had the most impact: • high-yielding varieties (HYV)/genetically modified (GM) crops can increase production • better drought resistance/reducing crop failures • pest-resistance is improved • faster growing times allows for multiple harvests • farmers need education to be able to use improved seeds correctly	**6**

Question	Answer	Marks
2(d)	• expensive/farmers may not have enough money for seeds • some HYVs require more water/need more irrigation • some HYVs are hard to source/unavailable in some areas	

Question	Answer	Marks
3(a)(i)	**Study Fig. 3.1 (Insert), a map of average wind speeds in southern and western Pakistan. The locations labelled <u>U</u>, <u>V</u>, <u>W</u>, <u>X</u>, <u>Y</u>, <u>Z</u> on Fig. 3.1 are possible sites for generating wind power.** **Identify the <u>two</u> possible sites with the least potential for generating wind power.** • V • Z 2 @ 1 mark	2
3(a)(ii)	**Using Fig. 3.1 <u>only</u>, describe the distribution of areas with very high wind speeds.** • widespread/uneven/scattered/clustered • close to coast/Arabian Sea/along the coast • mainly in SE/S/SW/W • <u>cluster/small</u> area in NE/N • <u>small areas/clusters/linear pattern</u> in central area • close to/along Afghanistan/India/Iran border/international boundary • (mainly) found between 23 °/24 °–31 °/32 °N • (mainly) found between 62 °/63 °–70 °/71 °/72 °E 3 @ 1 mark	3
3(a)(iii)	**Describe <u>two</u> advantages of using wind power to generate electricity in Pakistan.** • it is renewable/will not run out/infinite • does not produce CO_2/harmful gases/<u>air</u> pollution/ environmentally friendly/ecofriendly/green energy • Pakistan has many/large areas suitable for wind power/many windy days • low running costs (after initial investment/set up) • do not need to be connected to a national grid • can help remote/rural locations (generate their own power) • creates jobs to <u>manufacture/sell/install/maintain</u> turbines • reduces reliance on fossil fuels/non-renewables 2 @ 1 mark	2

Question	Answer	Marks
3(a)(iv)	**Study Fig. 3.2, a diagram showing how wind power is used to generate electricity.** **Complete the labels on Fig. 3.2 in the spaces provided.** top arrow: blade(s)/rotor blades middle arrow: turbine/generator/gear box bottom arrow: pylon(s)/(electricity) tower(s)/transmission/cables/power lines/ national/electricity/power grid 3 correct = 2 marks 1 or 2 correct = 1 mark	2
3(b)(i)	**Oil is a non-renewable fuel. Name one other non-renewable fuel.** • coal/anthracite/bituminous/coke/lignite/peat • (natural) gas/liquid natural gas (LNG)/liquid petroleum gas (LPG)/butane/ethane/methane/propane • uranium 1 @ 1 mark	1
3(b)(ii)	**Describe how crude oil is extracted.** • a survey is done/oil(field) is located/found • feasibility studies are done • derrick/oil rig is built/used • drill is used/oil is drilled for/a well/shaft/bore/hole is drilled/sunk • pipes are installed/used • oil is pumped out/valves used to pump out the oil • water is used/pumped down (to force out (remaining) oil) 3 @ 1 mark	3
3(c)(i)	**State two methods used to transport oil over land in Pakistan.** • pipeline • road tanker/truck/lorry • rail tanker/truck/wagon 2 @ 1 mark	2

Question	Answer	Marks
3(c)(ii)	**Explain why it is necessary to import large amounts of oil to Pakistan. You should develop your answer.** • demand for oil/many uses of oil; due to rising/large population/increasing economic development/to fuel vehicles on the road/industry/machinery runs on oil • limited oil/reserves not suitable/depleting reserves; most accessible sources of oil have already been used up • difficulties with remaining oil reserves/low quality of oil; makes exploration/drilling too expensive/impractical/not profitable/more time consuming/importing is faster than extraction • limited supply of skilled oil workers/labour; investment needed in education/foreign workers require higher wages • limited specialist equipment to drill/refine oil; importing machinery is expensive/getting equipment to inaccessible sites is impossible • low capacity of refineries to process oil/types of oil needed are not produced; amount does not meet demand/need to import refined products or example of • domestic finance not always available for further oil extraction/refining; it is cheaper to import • foreign investment in Pakistan is unreliable; so potential reserves are not fully exploited **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. **Note:** Max. 2 marks if no development. 2 @ 2 marks	**4**

Question	Answer	Marks
3(d)	**Pakistan's energy consumption is growing rapidly at around 5% a year. Read the following statement:** **'The use of solar power is better than wave and tidal power to help meet increasing demand for electricity in Pakistan.'** **To what extent do you agree with this statement? 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.** **Levels marking** No valid response **0** **Level 1** **1–2** Simple point referring to one view (1) Simple points referring to any view (2) **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) **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) **Content guide** The use of solar power is better than wave and tidal power because: • solar power is relatively affordable • solar power can be done on a small-scale (households/businesses) • solar does not need to be connected to the national grid unlike wave/tidal • solar power is already being used whereas wave/tidal is not • there are limited areas of coastline for wave and tidal • wave/tidal power could obstruct shipping lanes/fishing • wave/tidal power requires large investment • wave/tidal needs specialist equipment/workers The use of wave and tidal power is better than solar power because: • Pakistan has 1000 km coastline for wave/tidal power • (Makran) coast has strong wave energy for wave power • wave power could be active 24 hours a day; solar power is limited to daylight hours • wave/tidal power has potential to provide power to rapidly developing coastal cities e.g. Gwadar • solar power requires skilled maintenance • there are areas of Pakistan with shorter daylight hours • there are areas that experience much cloud cover e.g. in winter • solar panels need cleaning/get covered with dust/snow	**6**

Question	Answer	Marks
4(a)(i)	**Study Fig. 4.1, a line graph showing information about population change in Pakistan from 1950 to 2020.** **Using Fig. 4.1 only, identify the:** • **birth rate in 1950** • **death rate in 2010** • **year with the highest rate of natural increase** • birth rate = 41 (per 1000 people) • death rate = 7.5 (per 1000 people) • 1988 3 @ 1 mark	3
4(a)(ii)	**State how the rate of natural increase is calculated.** birth rate/BR – death rate/DR (= natural increase) (natural increase) is the difference between the birth rate/BR and the death rate/DR 1 @ 1 mark	1
4(a)(iii)	**State two impacts of an increasing percentage of older dependents (people aged 60 and over) in Pakistan's population structure.** • older/experienced people to guide younger population • older people can help care for children/provide childcare so parents can work • increased pressure/burden on working age/young people (to support elders/to earn more)/greater costs/time taken to individuals/families for looking after older dependents • increased cost to state of pensions/need to increase taxes • pressure/burden on healthcare services/more hospitals/medical staff/ carers needed • pressure on housing/higher demand for housing/more care homes • pressure on food resources/higher demand for food/water • retirement age increases/older people stay in work longer 2 @ 1 mark	2
4(b)(i)	**Study Fig. 4.2, a bar graph showing the net migration rate for Pakistan between 1981 and 2021.** **Using Fig. 4.2 only, identify:** • **a year where there were more immigrants than emigrants** • **the net migration rate in 2011** • 1981 • –30.8 (minus 0.8) 2 @ 1 mark	2

Question	Answer	Marks
4(b)(i)	**Study Fig. 4.2, a bar graph showing the net migration rate for Pakistan between 1981 and 2021.** **Using Fig. 4.2 only, identify:** • **a year where there were more immigrants than emigrants** • **the net migration rate in 2011** • 1981 • –30.8 (minus 0.8) 2 @ 1 mark	2
4(b)(ii)	**Explain two reasons why people may emigrate from Pakistan. You should develop your answer.** • for employment/to find work; to earn higher wages/possibility of sending remittances to family • for study/education; gain qualifications/improve job prospects/attend (well-known/named) school/university/for specific course • to join others/friends/family who have previously migrated; attracted to areas with an established Pakistani community • in search of different life opportunities/standard of living/quality of life; to provide access high quality services e.g. hospitals • due to natural disasters/flooding/drought/desertification/land reform; to find safety/land to farm/a reliable food or water supply • forced migration; deportation of international migrants who overstay visa **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. **Note:** Max. 2 marks if no development. 2 @ 2 marks	4
4(c)(i)	**Circle the province in Pakistan with the highest population density.** Punjab 1 @ 1 mark	1

Question	Answer	Marks
4(c)(ii)	**State <u>two</u> physical and <u>two</u> economic factors which affect population density.** physical: • topography/relief/slope • climate/temperature/rainfall • natural hazards or an example of • mineral/forest resources or an example of • soil/land • rivers/coast/sea • water supply economic: • energy/power supply • housing • transport or an example of • communications or an example of • jobs/employment/wages/income/industries or an example of • education or an example of • healthcare or an example of **Note:** Max. 2 marks for physical factors and max. 2 marks for economic factors 4 @ 1 mark	**4**

Question	Answer	Marks
4(c)(iii)	**Choose <u>one</u> physical factor that you identified in <u>(c)(ii)</u> and describe how it affects population density.** <u>flat</u> relief/lowland topography • high population density • as land is easier to build on <u>low</u> temperature • low population density • as people restricted to working indoors <u>extreme</u> climate • low population density • as water for drinking is sparse <u>abundant</u> mineral reserves • high population density • as industries provide jobs <u>fertile</u> soil/land (for farming) • high population density • as food supply can be grown <u>reliable</u> water supply • high population density • industries locate near water/essential for domestic use **Note:** credit other accurate descriptions of how physical factors affect population density 2 @ 1 mark	**2**

Question	Answer	Marks
4(d)	**Read the following two views about migration and economic development in Pakistan.** **A: Migration of people within Pakistan has the most impact on its economic development.** **B: International migration has the most impact on Pakistan's economic development.** **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.** **Levels marking** No valid response **0** **Level 1 1–2** Simple point referring to one view (1) Simple points referring to any view (2) **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) **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) **Content guide** Migration of people within Pakistan has/does not have the most impact: • rural-urban migration leads to shortages of labour in rural areas which can reduce agricultural output • rural-urban migration can lead to overcrowding in cities and can lead to competition for housing/jobs/services • rural-urban migration increases labour supply in cities which promotes the growth of industry • expansion of secondary sector industries manufacturing high value goods has been the main driver of economic growth • economic development is being supported through international trade links rather than internal movement of people • emigrants make a significant contribution to GDP through remittances International migration has/does not have the most impact: • international migrants often send remittances which account for around 8.6% of Pakistan's GDP • international migrants often study abroad and then bring their skills back to Pakistan	**6**

Question	Answer	Marks
4(d)	• international migration can lead to some educated people leaving Pakistan which may cause skill shortages • urban, industrial growth and manufacturing of high value goods is generating economic growth • Special Economic Zones can increase exports and employment which can generate economic growth • government policies to support education are important for developing a skilled workforce within Pakistan	

Question	Answer	Marks
5(a)(i)	**Study Fig. 5.1, a divided bar graph showing the percentage of total employment in different sectors in Pakistan in 2009 and 2019. Complete Fig. 5.1 for 2009, using the information in the table and the key.** • accurate completion of secondary sector dividing line at 64% • accurate completion of shading for secondary sector (shaded/solid colour) • accurate completion of shading for tertiary sector (diagonal lines in the correct direction) **Note:** Max. 1 mark (for shading) if not plotted in the same order as the key 2 @ 1 mark	**2**
5(a)(ii)	**Using Fig. 5.1, identify the percentage of the population working in the primary sector in 2019.** 37 1 @ 1 mark	**1**
5(a)(iii)	**Identify <u>two</u> jobs in each sector. In the table, tick (✓) <u>two</u> boxes in each column.** primary = farmer, doctor secondary = carpet weaver, steel worker tertiary = call centre worker, doctor 5 or 6 correct = 3 marks 3 or 4 correct = 2 marks 1 or 2 correct = 1 mark 3 @ 1 mark	**3**

Question	Answer	Marks
5(a)(iv)	**Give <u>three</u> reasons for the increase in employment in the secondary sector in Pakistan between 2009 and 2019.** • (new) industries/factories/manufacturing areas built/ establishment of industrial estates/zones/more industrialisation/industrial growth • mechanisation of agriculture/primary industry/job losses in primary • pay is higher than in primary/pay has increased/better working conditions • <u>higher amount/more</u> of skilled/educated labour available • <u>higher/more</u> revenue from manufactured products /demand for manufactured products • government policies to support industries/for increasing domestic manufacturing/for import reduction/offering loans for setting up industries • foreign investment/TNCs have set up • <u>improved/more/new</u> road/rail networks for workers to reach jobs/for materials to reach industries/markets • <u>improvement</u> in power/electricity supply for industries • international trade links make exporting manufactured goods attractive 3 @ 1 mark	3
5(b)(i)	**Study Figs 5.2 and 5.3 (Insert), photographs showing industries in Pakistan.** **Using Figs. 5.2 and 5.3 <u>only</u>, describe <u>one</u> similarity and <u>one</u> difference between the industries shown.** Similarities: • both are by-hand/manual/hand tools/no machinery used • both secondary sector/manufacturing • both are cottage industries/in people's homes • both using traditional skills/handicraft/craft industries • both are small-scale • both labour intensive/takes a long time to make each product • both products left out to dry/stacked up Differences: • different products being produced/ tiles vs. baskets • using different raw materials/ceramics/pottery/clay vs. willow/straw • different tools/techniques used/painting vs. basket making/weaving • indoor vs. outdoor • individual worker/male vs. group/family/2/3/4 workers/both genders • different sized work areas/tiles more compact/baskets are more spread out 2 @ 1 mark	2
5(b)(ii)	**Define 'manufactured'.** making of products using raw materials/finished goods/final product/a processed product/goods/made in a factory/workshop/with machinery/with tools/by hand 1 @ 1 mark	1

Question	Answer	Marks
5(b)(iii)	**State <u>two</u> raw materials used by the surgical instruments industry in Pakistan.** • steel/stainless steel/metal(s) • titanium/nickel/aluminium/platinum/tantalum/palladium/tungsten • chemicals • water • ceramics • plastic/cardboard/packaging • rubber/latex 2 @ 1 mark	2
5(b)(iv)	**Describe <u>one</u> factor that influences the location of the surgical instruments industry.** • <u>flat/large</u> land/site (to easily build factory on) • supply of raw materials/steel • <u>close to/access</u> to market • <u>close to/access</u> transport system/roads/railway • <u>close to/access</u> airports • <u>close to/access</u> dry ports/seaports • <u>close to/access</u> to skilled labour • reliable power/energy supply • in area/zone with policies/incentives 1 @ 1 mark	1

Question	Answer	Marks
5(c)	**Suggest two factors that could affect the potential to develop tourism in an area of Pakistan. You should develop your answer.** • temperature; tourists will be deterred by extreme hot/cold areas/will be attracted to areas that are more temperate • heavy rainfall/snow; flooding/avalanches can destroy hotels/roads/pylons/ tourists may be attracted for skiing • topography/steep/rugged/flat land; influences building of roads for access/construction of hotels/resorts • areas of scenic beauty/unspoilt locations; tourists will be attracted to take photographs/to relax • water/air/land pollution/deforestation; can ruin the natural beauty of an area so tourists do not want to visit • heritage/cultural attractions; visit historic/religious buildings to learn • airports/roads/railways/(public) transport system; for tourists to get there comfortably/safely/quickly/for better accessibility • hotels/resorts; need accommodation options/tourists expect high standard/accommodation with good food/clean water/internet, etc. • power/electricity; for air conditioning/heating for comfort • availability of workforce; to do jobs in hotels/tour guides/security, etc. • investment; government grants/policies/foreign companies/tour operators developing/advertising regions/areas • seasons/seasonal work; tourists not attracted in some parts of the year/ visitors only come in a particular season limiting income for businesses **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. **Note:** Max. 2 marks if no development. 2 @ 2 marks	**4**

Question	Answer	Marks
5(d)	**It is estimated that, by 2027, Pakistan could employ around 4.8 million people in the tourism industry.** **Evaluate the importance of formal and informal employment for the tourism industry in Pakistan. 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.** **Levels marking** No valid response **0** **Level 1** **1–2** Simple point referring to one view (1) Simple points referring to any view (2) **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) **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) **Content guide** the importance of the formal sector tor Pakistan's tourism industry includes: • enables the investment required to build attractions and services • generates stable employment/reduces unemployment • generates tax that can be reinvested in the tourist industry • enhances international reputation of Pakistan • improves infrastructure • formal services will be regulated e.g. covered by insurance the importance of the informal sector for Pakistan's tourism industry includes: • provides employment for unskilled workers • provides opportunities for business/entrepreneurship • supports the development of skills/could lead to formal employment later • can meet demand not met by the formal sector • adapts quickly to new or temporary trends/demands in tourism • adds to cultural experience for tourists	6