

#### **Cambridge Assessment International Education**

Cambridge International General Certificate of Secondary Education

PAKISTAN STUDIES 0448/02

Paper 2 Environment of Pakistan

May/June 2019

MARK SCHEME
Maximum Mark: 75

#### **Published**

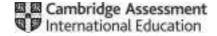
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### Cambridge IGCSE – Mark Scheme PUBLISHED

### **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 descriptors 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.

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Question	Answer	Marks
1(a)(i)	Key:  international boundary  province-level boundary  disputed territory  B  E  N  Arabian Sea  3 @ 1 mark	3
1(a)(ii)	Y = Multan Z = Hyderabad 2 @ 1 mark	2
1(b)(i)	Flat / gentle slope / gentle valley side / doab; Wide; Boggy / marshy / water meadows / waterlogged; Fertile / rich soil or minerals / alluvial terraces / alluvium / silt / gravel; Levees; Oxbow lakes / meanders / braiding.  3 @ 1 mark	3
1(b)(ii)	Farming / farmer's fields / growing crops / agriculture / cultivation; (Cattle) grazing / rearing buffalo; Fish farms / fish breeding / aquaculture; Industry; Transport or examples, e.g. roads / railways; Settlement / building / housing / homes; Irrigation / canals / drainage ditches.  2 @ 1 mark	2
1(c)(i)	Monsoon winds blow towards the heart of the continent in summer. They blow towards the sea in winter.  3 or 4 @ 2 marks 1 or 2 @ 1 mark	2

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Question	Answer	Marks
1(c)(ii)	Coming from sea / Arabian Sea / Bay of Bengal; Sun heats up in (tropical) continents (land) faster or more quickly than the surrounding oceans (water); Warm air rises; Low pressure; Attracts cool, moist air from the sea; Rain bearing winds push further inland causing (heavy) rain / brings (heavy) rain.  3 @ 1 mark	3
1(c)(iii)	Floods (any idea from below for development); Heavy rain; causes poor visibility and accidents (dev); Roads become rivers; cannot travel to work or school / towns and cities cut off (dev); Flights cancelled; negative impact on trade / tourism / business (dev); Crops destroyed; which causes food shortages / can lead to famine (dev); Water level in reservoirs or dams rises; leading to more water for irrigation / domestic / industrial use / no water shortages / HEP (dev); Businesses / markets are closed; leading to loss of income / produce / jobs disrupted (dev); Homes washed away / flooded / buildings destroyed; loss of possessions / people are homeless (dev); People are injured / killed; pressure on healthcare services / impact on mental health / impacts on business and economy (dev); Stagnant water; causes diseases (dev); Waterlogging: impacts on the economy as Pakistan is an agriculturally based country (dev); Brings rainfall to desert areas; desert blooms (dev); Replenishes groundwater; reduces water shortages (dev); Etc.  Note: One mark for identification of appropriate idea and a further mark for development (in parentheses).	4
	Note: Max. 2 marks if no development.  2 @ 2 marks	

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Question	Answer	Marks
1(d)	Levels marking	6
	No valid response 0	
	Level 1 Simple point referring to any view (1) Simple points referring to any view (2)	
	Level 2 Developed point referring to one view only (3) Developed points referring to both views (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 Answers are likely to refer to:	
	Building more flood management schemes  So many people are affected; Many people killed / injured; Homes / farms / businesses destroyed; Cost of clear up and losses on economy; Floods hinder development as constantly having to rebuild / replace infrastructure; Loss of days at school affects literacy rates / skills base; Loss of days at work has an impact on revenue and tax collected; Tax changes to cover cost of damage; Etc.	
	Allowing rivers to flood naturally Rivers provide nutrients to soil, so good for farming; Should not build on flood plain; Cost of management / flood protection is high; Flood management needs to be maintained and updated, incurring ongoing costs; Money is better spent on developing infrastructure, e.g. services, transport and industry; Flood plains can be used for fish farming; Flood plains can be used to channel water for irrigation; Etc.	

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Question	Answer	Marks
2(a)(i)	Jiwani; Gwadar; Pasni; Ormara; Sonmiani; Karachi / Keamari.	2
2(a)(ii)	Fish waste for fertiliser; Money / income / export / selling; Fish waste for poultry feed / livestock fodder; Oil / oil extracted (to provide a source of nutrition – vitamins A & D) / medicines; Food supply / white meat / consumption / eating / healthy food. 2 @ 1 mark	2
2(a)(iii)	Fish that is caught and sold for profit is known as <u>commercial</u> fishing. Many families depend on this type of fishing as their sole source of <u>income</u> . Fish that is caught by the family for their own consumption is known as <u>subsistence</u> fishing. Many people who live near the coast rely on fish as the main component of their <u>diet</u> .  3 or 4 @ 2 marks 1 or 2 @ 1 mark	2
2(a)(iv)	Traditional sailboats / wooden sailboats / small sailboats; Traditional small (rope / hand crafted) fishing nets used cannot go deep / surface fishing only catch small amount of fish; Fishing rods / lines (with hooks) / fishing poles; Trawlers / gill netters / mechanised boats / boats with engines; Modern boats can go further out up to 50–60 kms from the coast; Stay at sea for 5–15 days / one to three weeks; Traditional sailboats do not go far from coast; Radar system / sonar / radios / navigation equipment / fish finders; Large (nylon / rope) nets which go deep into the sea and catch a large amount of fish / gill nets; Dynamite / bombs / explosives.  3 @ 1 mark	3
2(b)(i)	A fish farm is a (rectangular) artificial pool / pond made for breeding / growing fish.  1 @ 1 mark	1
2(b)(ii)	Rectangular / square / circular ponds; Man-made / made by humans; Concrete or cemented impervious base; Side is edged with solidified mud / edged with concrete; Trees planted around the fish farm.  2 @ 1 mark	2

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Question	Ans	swer		Marks
2(b)(iii)	Marine fish	Inland or freshwater fish		3
	Drum	Rahu	1	
	Croaker	Palla	1	
	Catfish	Trout		
	Skate	Thalla		
	Ray	Grass carp		
		3 or 4 ( 1 or 2	@ 3 marks @ 2 marks @ 1 mark	
2(c)	Water pollution; from spillage of o Overfishing; removes young fish a (dev); Threat to mangroves; die in pollut many fish are lost / habitats lost (dev); Damage to ecosystem / ecology; become endangered / extinct (dev Air pollution; from trawlers releasing dioxide into air (dev); Nets / anchors / dynamite fishing; (dev); Using illegal nets; removes young Fish farming; chemicals run off inteutrophication (dev); Propeller blades; damage / kill fish Etc.  Note: One mark for identification of appetence of the development (in parentheses).	end causes a reduction in speed water so breeding ground dev); food chains disrupted / spec //); ng fumes / named fumes, e.g damage / erode sea bed / c ifish (dev); to soils / water leading to in (near surface) (dev);	ecies ds for ies g. carbon orals	4
	Note: Max. 2 marks if no development		@ 2 marks	

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Question	Answer	Marks
2(d)	Levels marking	6
	No valid response 0	
	Level 1 Simple point referring to any view (1) Simple points referring to any view (2)	
	Level 2 Developed point referring to one view only (3) Developed points referring to both views (4)	
	Level 3  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 Answers are likely to refer to:	
	Developing inland fish farming Greater return to fishermen / fishing industry; Increased employment; Use of technology and upgrading of skills will ensure increased fish production; Favourable impact on foreign exchange earnings; Reduces burden on crop and livestock; Etc.	
	Developing the marine fishing industry  Improved facilities are being developed along the coast for preservation and storage;  Almost all communities along the coast of Balochistan depend on fishing for their livelihood;  Infrastructure facilities provided at Gwadar, Ormara and Pasni; Ice factories and cold storage developed at Gwadar;  One fish harbour has been constructed at Pasni; Could set up fish processing for further employment opportunities / potential to catch a lot of fish;  Etc.	

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Question	Answer	Marks
3(a)(i)	Sui / Eastern Balochistan / Pirkoh / Uch / Zin / Loti; Lower Sindh / Tharparker / Thora / Tando Adam / Nazari / South Mzari Deep / Pasakhi; Northern Sindh / Mari; Northern gas region / Potwar Plateau / Meyal / Dhurnal / Adhi / Pindori / Balkassar / Fimkassar.  3 @ 1 mark	3
3(a)(ii)	Named provinces: Sindh / Punjab / KPK / Northern Balochistan; From / to named cities; Large areas are not served by natural gas via the pipeline / or named examples; Distance from any specified place or feature; Direction from any specified place or feature; Runs from the coast in the south to the tip of the Northern Regions; Forms a line down the centre of Pakistan / central Pakistan; Only a few branch lines / two branch lines to the west / east; Connects to / from all the gas producing regions.  4 @ 1 mark	4
3(a)(iii)	Method of transport:  Road / rail / cylinders; can be cooled to a very low temperature where it turns into a liquid (dev); LPG can be placed into (special) cylinders; the cylinders can then be transported to all parts of Pakistan / named example where pipelines cannot be found (dev);  Etc.  Limitation:  It is dangerous / hazardous to transport gas cylinders by road; accidents can happen causing an explosion or leakage (dev); It is more expensive to transport gas by road rather than by pipeline; less income will be earnt (dev); It takes longer to transport gas by road than through the pipeline; there could be delays on the roads leading to a gas shortage in remote areas (dev); Only small amounts can be transported; therefore may lead to a shortage of gas in remote areas (dev); Supply is not continuous; roads blocked in winter / theft (dev); Needs safety precautions in place; may increase cost of transport (dev); Etc.  Note: One mark for identification of appropriate idea and a further mark for development (in parentheses).	4
	Note: Max. 2 marks if no development. 2 @ 2 marks	
3(b)(i)	Accurate completion of bar chart for household 18%.  1 @ 1 mark	1

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Question	Answer	Marks
3(b)(ii)	Fertiliser industry / animal feed; Cement industry; Transport / CNG. 2 @ 1 mark	2
3(c)	To produce electricity in a thermal power station, fossil fuels such as coal, oil or gas are burned to make steam that moves the turbines to generate electricity. Transformers control the voltage and transfer electricity to pylons through transmission lines.  5 @ 5 marks 4 @ 4 marks 3 @ 3 marks 2 @ 2 marks 1 @ 1 mark	5

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Question	Answer	Marks
3(d)	Levels marking	6
	No valid response 0	
	Level 1 Simple point referring to any view (1) Simple points referring to any view (2)	
	Level 2 Developed point referring to one view only (3) Developed points referring to both views (4)	
	Level 3  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 Answers are likely to refer to:	
	Possibilities  More pipelines and gas fired thermal power stations could be set up; Potential for more gas fields to be found; Pipeline could be extended further to areas currently not served; Pipeline could be over-ground, doesn't have to be underground; If more gas fired thermal power stations are built, Pakistan could reduce imports of oil and coal; Finding more gas reserves would increase the domestic supply and increase the number of potential years use; Improve the lives of people in remote rural areas / provide employment opportunities; Etc.	
	Difficulties Financial constraints / loans may have to be taken out; Topography and / or climate may hinder or make difficult the building of more pipelines or further exploration; Cost of exploration and / or building thermal power stations will not be value for money / cost effective; Industries would not be built in these areas anyway as remote / not ideal locations for building further industry; Etc.	

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Question	Answer	Marks
4(a)(i)	Tertiary industry is any activity concerned with providing a service.  1 @ 1 mark	1
4(a)(ii)	35% 1 @ 1 mark	1
4(a)(iii)	Sales; Waiter; Driver; Teacher (teaching) / education; Doctor / bank clerk (banking); Guide; Hairdresser; Trading; Salon services; Maid; Tourism; Healthcare; Engineering; Security; Manager; Etc.	3
4(b)(i)	3 @ 1 mark  Domestic tourism is when people go on holiday within their own	2
	country; Foreign tourism is when people from a different country visit / go on holiday abroad.  2 @ 1 mark	
4(b)(ii)	A: UK  1 @ 1 mark  B:  Visiting friends and family living in Pakistan;	3
	On business / official meetings (classed as tourist / visitor); Attending a cultural event; Sporting event; Visiting a religious site / pilgrimage; Sightseeing / historical sites / historical ties (e.g. colonial links); Scenic beauty / nature loving.  2 @ 1 mark	

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N	Income from tourism; is usually greater than exporting raw materials (or named examples) / can help to correct the balance of payments / increase foreign exchange / money spent on areas like education and healthcare (dev);  Creates employment in local areas; examples of employment opportunities, e.g. in hotels / as tour guides (dev);  Encourages development of cottage or craft industries; handmade souvenirs are sold as profit / earn an income (dev);  Food production is increased; creation of local markets (dev);  Local people can use the tourist facilities; named examples, e.g. swimming pools / public transport (dev);  Tourist and local interaction; creates cultural awareness and understanding (dev);  Tourism is a sustainable industry; tourist attractions will be maintained /	4
	developed (dev); Improves literacy; development of language skills interacting with tourists (dev); Etc.  Note: One mark for identification of appropriate idea and a further mark for development (in parentheses).  Note: Max. 2 marks if no development.	
4(c)(ii)	Fig 4.2: beach for relaxing holidays / sunbathing / water sports / admiring scenic view of ocean from beach / cooling breeze from sea reduces heat / beach cricket or similar activities / riding camels; Fig 4.3: chairlifts (in Murree) for leisure and sightseeing / explore mountains / adventurous activities / photo opportunities / scenic viewing / greenery / admiring the scenic beauty / entertainment and thrills / aerial views; Fig 4.4: shopping / buy souvenirs (in Murree) / honeypot site for tourists / many attractions and amenities / hotels / stay in resort / market / investigating local culture / eating traditional food; Fig 4.5: experience mountains (in northern regions) /adventure tourism / mountain climbing / hiking / skiing / trekking / snowboarding; Fig 4.6: historic buildings / view architecture / to sample history / investigate culture / study traditions / sightseeing / historical sites / spiritual visit.	5

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Question	Answer	Marks
4(d)	Levels marking	6
	No valid response 0	
	Level 1 Simple point referring to any view (1) Simple points referring to any view (2)	
	Level 2 Developed point referring to one view only (3) Developed points referring to both views (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 Answers are likely to refer to:	
	Possibilities  Many impressive attractions natural / cultural / historic that could be further developed for tourism / named area, e.g. 1500 km coastline with beaches in southern Pakistan; Increased marketing and promotion of attractions using social media / TV; development of clear brand for Pakistan; The role of the Pakistan Tourist Development Board in promoting tourism;	
	Recent additions to infrastructure that help; airports / helicopter services / roads, etc.; Improved tourist activities / services; named hotels / packages; Emerging middle class with time / money to go on holiday; Visa on arrival available to 24 countries; Greater expertise in hospitality / management of tourist facilities / training for staff; Careful management of attractions would preserve and enhance cultural / natural tourist sites.	

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Question	Answer	Marks
4(d)	Difficulties  Cost of developing a tourist infrastructure; Focus is on the development of other industries; Current infrastructure; power, sewage facilities can slow the rate of development; Access to sites restricted by transport network; road / rail / air; Attracting investment; Security in some tourist areas; Some accommodation and services below international standards; Some tourist sites have been mismanaged causing soil degradation, etc.; Risk of natural disasters in tourist regions; flash flooding / landslides / earthquakes.	
	<b>Note:</b> Example may include named infrastructure / attraction / activities.	

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Question	Answer	Marks
5(a)(i)	Balochistan / Northern areas / Gilgit-Baltistan / FATA / tribal areas. 1 @ 1 mark	1
5(a)(ii)	Unevenly spread; Most people in North / North East Punjab / KPK; Densely populated in Punjab / Sindh; Most population in East Pakistan (compared with west); Most / more population centred around cities or named example from map, e.g. Islamabad / Lahore / Hyderabad / Karachi / Quetta; South West / West / North / North East Pakistan has few people / sparsely populated; Balochistan / FATA / Northern KPK / NWFP/ Gilgit-Baltistan / Northern Areas / Jammu and Kashmir are sparsely populated; Etc.  3 @ 1 mark	3
5(a)(iii)	Topography / mountainous areas / uneven terrain = fewer people / flat land = more people;  Temperature / colder areas have fewer people / hot desert areas = fewer people / moderate or tolerable or favourable temperature = more people;  Snow in Northern Areas, fewer people / lack of rainfall, arid, dry = fewer people / moderate rainfall = more people;  Soil type / rich fertile soil able to grow crops = more people / dry or sandy soils difficult to grow crops / thin soil difficult to grow crops / farm = fewer people;  Near to / adequate water supply / river attracts more people / away from rivers = fewer people;  Natural route ways = more people / lack of route ways = fewer people;  Vegetation cover = more people / less vegetation cover = fewer people;  Availability of raw materials = more people / lack of raw materials = fewer people;  Etc.  3 @ 1 mark	3
5(b)(i)	Rural to urban migration is the movement of people from the countryside / village to towns / cities.  1 @ 1 mark	1
5(b)(ii)	Decreasing 1 @ 1 mark	1

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Question	Answer	Marks
5(b)(iii)	Wider variety / higher salary jobs / better working conditions / industrial jobs; Pleasant climatic conditions / not too hot or cold; More / better educational opportunities / more schools / primary, secondary and further education available; More / better healthcare facilities / more doctors / clinics available; More reliable food supply in the cities; Better standard of living / quality of life / modern lifestyle; Better living conditions / better housing / improved sanitation / electricity supply / clean water; More entertainment / recreation / bright lights / glamorous lifestyle / shopping malls / cinema; More / better metalled roads / railways / public transport; Etc.  3 @ 1 mark	3
5(c)(i)	Unplanned growth of cities; leads to urban sprawl / growth of shanty	4
	towns (dev); More houses needed / crowded housing areas; so people build their own homes / poorly built / development of shanty towns (dev); Pressure on healthcare; more hospital beds / doctors needed, etc. (dev); Pressure on education; large class sizes / half day schooling / insufficient school places (dev); Sanitation / sewage systems overstretched; spread of diseases / raw sewage in streets (dev); Inadequate water supply; people drink polluted water / water shortages / water turned off during certain times of the day (dev); More power needed / electricity needed; power cuts during the day / leads to power theft (dev); More / high / increased unemployment; high competition for jobs / more unskilled or uneducated people / creation of more jobs required / growth of informal sector (dev); Increased traffic; leads to more air pollution / congestion / accidents (dev); Pressure on food supplies; leading to increased prices / poor diet; Etc.  Note: One mark for identification of appropriate idea and a further mark for development (in parentheses).	

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Question	Answer	Marks
5(c)(ii)	Houses are made from bricks (5.3) not material (5.2) / house (5.3) versus tents (5.2); Houses are more permanent (5.3) rather than moveable / tents (5.2); Drainage has been installed (5.3), no evidence of drainage (5.2); Cemented pavements / walkways have been built (5.3) versus mud paths (5.2); A water supply has been added as tanks are visible on roofs (5.3), no obvious water supply (5.2); Electricity / wires / cables / transmission lines have been installed (5.3), not evident in (5.2); The new housing has built doorways and windows (5.3), no doorways or windows in the tents / makeshift houses (5.2); Solid (metal / concrete) roof (5.3) versus canvas roof (5.2); Two storeys (5.3) versus single storey (5.2); Etc.	З

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Question	Answer	Marks
5(d)	Levels marking	6
	No valid response 0	
	Level 1 Simple point referring to any view (1) Simple points referring to any view (2)	
	Level 2 Developed point referring to one view only (3) Developed points referring to both views (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 Answers are likely to refer to:	
	Successful because  Many shanty settlements have been improved by the government; Self-help schemes encourage community spirit as people will work together; People take pride in their environment; Clean water prevents spread of diseases; People will be healthier; Better standard of living; Housing is permanent and secure; Have directed where housing can be built; Etc.	
	Less successful because  Not all shanty settlements have been improved / only a few have been improved;  Unplanned urban growth / sprawl continues;  Some housing is still crowded so disease spreads easily;  Rural to urban migration continues;  Some housing is cramped / too small for large families;  Some people remain living in poverty;  Etc.	

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