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PAKISTAN STUDIES **2059/02**

Paper 2 Environment of Pakistan **October/November 2017**

MARK SCHEME

Maximum Mark: 75

Published

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This document consists of **19** printed pages.

Question	Answer	Marks
1(a)(i)	Irregular pattern / arrangement; Crowded / closely built / high density; No open space / garden / small yards; Two storey / single storey / low buildings / houses; Small buildings / houses; Flat roofs; Brick built; Water containers on roofs; Power cables / transmission lines / telephone lines; Not glass windows / not many windows; Lack of vegetation; Narrow roads / pavements. 3 @ 1 mark	3
1(a)(ii)	Considered a temporary living area; To be closer to work / to find work / more jobs available / high wages; To be closer to shops / entertainment / bright lights; To move in with relatives; Cannot afford higher quality housing / low rent or cheaper housing / low land tax; Lack / shortage of higher quality housing provision by authorities; Better housing than in squatter settlements / katchi abadis; Close to / improved transport links; Close to / improved education facilities; Close to / improved medical facilities; Close to services, e.g. electricity, water, gas, sewage, etc. 4 @ 1 mark	4
1(b)(i)	Pests / crop disease; Storms / floods / heavy rain / frost / drought; Overcultivation / overgrazing; Waterlogging and salinity; Desertification / soil erosion / infertile soil; Inheritance laws / farm / plot size too small; Cannot afford named agricultural input, e.g. seeds; Mismanagement / neglect / landlords lack incentive; Increasing population growth / high population; Lack of education – farming methods / farming practices / traditional methods; Lack of irrigation. 2 @ 1 mark	2

Question	Answer	Marks
1(b)(ii)	Increase production of fodder crops; Provide more land for grazing; Improve feed / better food / healthy food / hygienic food; Improve veterinary facilities / number of vets; Vaccinations / vitamins / medicines / treatment; Provide shelter from elements / weather in winter / living in hygienic conditions; Government support / agricultural development funds / loans; Education for farmers on animal health/husbandry / disease prevention / selective breeding / cross breeding; Investment from multinational companies in poultry / milk processing; Introduction of machines, e.g. milking machines. 3 @ 1 mark	3
1(c)(i)	9.5/000 / 9.5 per 000 – UNIT required (allow 9.3–9.5) 1 @ 1 mark	1
1(c)(ii)	Decreased / fallen / lowered / gone down / declined 1 @ 1 mark	1
1(c)(iii)	Better / more healthcare / medicines / clinics; More / better trained doctors / nurses / midwives; More widespread vaccinations / prevention of named diseases, e.g. malaria, cholera, typhoid; Improved hygiene / access to clean drinking water / sewage; Improvement in food production / supply; Better education or advice on what to eat / improved diet / healthy lifestyles / stopping smoking / more exercise. 1 @ 1 mark	1

Question	Answer	Marks
1(c)(iv)	Population increases (pressure on named resource / increased crime / qualified pollution / specified congestion); More elderly to share experience / give advice / training (and so improve skills of working population); More elderly to offer family support (allowing more parents to work); Decreased infant mortality (pressure on healthcare / education); More people to contribute to labour force / more economically active (improves family income / greater productivity); Strain on families to support elderly; more dependents / higher dependency ratio (meaning more people who have to be supported by smaller share of working population / who do not contribute to the economy / financial burden); Strain on government / local authorities (to provide named services such as pensions / homes for elderly / healthcare / schools); High cost of supporting elderly (causing taxes to be raised / longer working hours for wage earners / increase in pension age); More people of working age (more competition for jobs / increased unemployment / increased crime). ETC. **Note:** One mark for identification of appropriate idea and a further mark for development (in parentheses). **Note:** Max. 2 marks if no development. 2 @ 2 marks	**4**

Question	Answer	Marks
1(d)	**Levels marking**	**6**
	No valid response (0 marks)	
	Level 1 (1–2 marks) Simple point addressing any view (1) Simple points addressing any view (2)	
	Level 2 (3–4 marks) Developed point(s) explaining one view (3) Developed point(s) explaining both views (4) No evaluation	
	Level 3 (5–6 marks) Well-developed points explaining both views. Evaluation giving clear support to one view or appropriate example (5) Well-developed points explaining both views. Evaluation giving clear support to one view and appropriate example (6)	
	Content Guide	
	Answers are likely to refer to:	

	View A
	For
	    Self-help schemes;
	    Schemes to renovate houses;
	    Projects to build permanent housing / new low-cost housing;
	    Loans to build own housing;
	    Infrastructural development;
	    Successful examples in Pakistan (e.g. Orangi Pilot Project, Karachi).	

	Against
	    High cost of building materials / construction;
	    Huge size of the problem – some slums are very large / makes projects very costly / long term;
	    May attract more rural migrants;
	    Local / community resistance to change.	

	View B
	For
	    Rural electrification / transmission lines;
	    Other named infrastructure improvements, e.g. sewerage, roads;
	    Build new settlements along roads;
	    Schemes to support agriculture / cottage industries;
	    Schemes to provide services – healthcare / education.	

	Against
	    Pull factors of urban areas too great to prevent migration from rural areas;
	    Push factors of rural areas more large-scale / widespread;
	    Control of landlords / loss of land;
	    Remoteness of rural areas makes it difficult to improve.
	ETC.	

Question	Answer	Marks
2(a)(i)	In space LHS of diagram: limestone / gypsum (calcium sulphate) / clay / shale / chalk 1 @ 1 mark	**1**
2(a)(ii)	Primary – job related to mining raw materials (coal, limestone, gypsum) / mine / quarrymen; Secondary – job related to manufacturing product, packing / bagging product / factory worker; Tertiary – job related to lorry driving / sales / advertising / cleaning / maintenance. 3 @ 1 mark	**3**
2(a)(iii)	Employed / not self-employed / registered with government / legal; Trained / skilled workforce; Uniform / dress code; Improved working conditions / named example – pension; Regular working hours / fixed working hours; Fixed / regular / higher wages; More likely to use machines / equipment / not labour intensive; Purpose-built office / factory; Less likely to be female / child labour. 3 @ 1 mark	**3**
2(b)(i)	[Crude / refined] oil / petroleum; Coal [briquettes]. 2 @ 1 mark	**2**
2(b)(ii)	Discourages development of Pakistan's own natural resources sector / renewable energy sector (creating fewer job opportunities) (preventing growth of national economy); Dependent on other countries (which might restrict imports due to trade embargoes / worsening political relations / political instability); Dependent on trade in basic commodities (therefore vulnerable to changes / fluctuations in world supply / market prices); Limited international transport links for importing minerals (e.g. few road border crossings with Afghanistan / Iran / China / India) (e.g. Karachi Port too congested) (e.g. Gwadar Port not fully developed); Air / water pollution from international transport (e.g. oil spillage at Karachi beach). ETC. **Note:** One mark for identification of appropriate idea and a further mark for development (in parentheses). **Note:** Max. 2 marks if no development. 2 @ 2 marks	**4**
2(c)(i)	A = Quetta B = Hyderabad 2 @ 1 mark	**2**

Question	Answer	Marks
2(c)(ii)	EITHER Balochistan / Tharparkar / Thar Desert / Kharan Desert / Zhob Desert / Cholistan Desert / Chagi Desert / Makran Desert; OR a named district in Balochistan: Awaran / Barkhan / Bolan / Chagi / Dera Bugti / Gwadar / JhalMagsi / Kachi / Kalat / Kech / Kharan / Khuzdar / Kohla / Lasbela / Loralai / Mastung / Musa Khel Bazar / Nushki / Panjgur / Piskin / Sherani / Qila A Saifullah / Sibi / Wazuk / Ziarat / Zhob; OR a named mountain range: Suleiman Range / Chaghi Range / Central Brahui Range / Toba Kakar Range / Makran Range / Kharan Range / Pab Range / Kirthan Range. 1 @ 1 mark	1
2(c)(iii)	Few / poor / little trade / transport routes / named transport infrastructure; Lack of education / healthcare; Lack of job opportunities / unemployment; Poor / lack of named infrastructure other than transport, e.g. electricity / water supply / sewerage; Poor / lack of access to food / essential supplies; Unrest / security issues; Nomadic lifestyle; Barren area / deforestation / soil erosion. 3 @ 1 mark	3

Question	Answer	Marks

2(d)	**Levels marking**
	
	 No valid response (0 marks)
	
	 Level 1 (1–2 marks)
	 Simple point addressing any view (1)
	 Simple points addressing any view (2)
	
	 Level 2 (3–4 marks)
	 Developed point(s) explaining one view (3)
	 Developed point(s) explaining both views (4)
	 No evaluation
	
	 Level 3 (5–6 marks)
	 Well-developed points explaining both views. Evaluation giving clear support to one view or appropriate example (5)
	 Well-developed points explaining both views. Evaluation giving clear support to one view and appropriate example (6)
	
	 Content Guide
	
	 Answers are likely to refer to:
	
	 View A
	 For
	      Industrial policy / taxation;
	      Investment;
	      Infrastructure / power projects;
	      Training in skills / examples of;
	      Services to industries.
	
	 Against
	      Mismanagement;
	      Inconsistency of government policy / changes of government;
	      Delay in / cancellation of government projects.
	
	 View B
	 For
	      Shortage of electricity generation and problems with supply;
	      Natural disasters divert national funds away from industry;
	      Security issues / unrest.
	
	 Against
	      Destruction / damage can stimulate construction industry;
	      Cost of building earthquake-proof buildings is high;
	      Cost of emergency shelters during floods;
	      Cost of security.
	 ETC.
		6

Question	Answer	Marks
3(a)(i)	A 　Trout: brown / rainbow / Palla / Thalla / Catfish; 　Carp: Mahseer (Mahasher) / rahu / grass / silver / catla / mrigal. 　 1 @ 1 mark B 　Animal / poultry feed; 　Local consumption / sold in local markets / fulfil requirements / food supply; 　Source of protein; 　Fish oil extracted / used in medicine; 　Fish fertiliser / manure; 　Export; 　Breeding / saving species from extinction. 　 2 @ 1 mark	3
3(a)(ii)	Rectangular / man-made ponds; 　Lined / concrete base / cemented endings; 　Fill pond with water; 　Add fish or stock / nursery/ different fry, juveniles, etc.; 　Selective breeding programme; 　Trees planted on farms [to prevent losses from evaporation / for shade]; 　Water enriched with nutrients / fertilised with manure / from poultry droppings [for growth of plankton]; 　Feed added to water / food provided; 　Water filtered / changed / refilled / health and hygiene checked or maintained / chemicals or medicine to prevent disease. 　 3 @ 1 mark	3
3(b)(i)	1980 1 @ 1 mark	1
3(b)(ii)	**Changes** Under 5 / (74 to 89) increases 5–20 / (24 to 10) decreases 21 and over / (2 to 1) decreases/halved 2 @ 1 mark	2

Question	Answer	Marks
3(b)(iii)	**Reasons** | Under 5 / (74 to 89)	Increasing sub-division of family plots because of inheritance laws Increasing population causing pressure on land
5–20 / (24 to 10)	Redistribution of landlord holdings / land reform reducing landlord holdings / consolidation of holdings
21 and over / (2 to 1)	Continues to represent a minority of farms in Pakistan / agriculture in Pakistan primarily subsistence | 1 @ 1 mark	1

3(b)(iv)	For smaller farms: accept converse for larger farms:
	    Higher proportion wastage / longer time to harvest (since less able to use machinery / difficult to manoeuvre machinery);
	    Shorter / restricted / reduced harvest time (as more likely to / can only afford to rent rather than buy machinery / tractors);
	    Less able to grow crops for sale / less able to produce quality crops (as large land needed for monocultures / efficient / economic production);
	    Less able to invest in development of farm (as less likely to be able to obtain loans);
	    Crops less well irrigated and lower yields (as cannot afford / do not have modern irrigation / tubewells);
	    Higher yields / output per ha (since farming is intensive / intensive use of labour);
	    Small farms – smaller amount of crop produced than larger farms (mainly subsistence, so less for sale).
	
	For larger farms:
	    Farming inefficient or not all of land cultivated (Zamindari system provides less incentive as large landlords are absent / workers are landless);
	    Larger farms – larger amount of crop can be produced than smaller farms.
	ETC.
	
	Note: One mark for identification of appropriate idea and a further mark for development (in parentheses).
	
	Note: Max. 2 marks if no development.
	
	2 @ 2 marks
		4

Question	Answer	Marks

3(c)(i)	A Millet / jowar / bajra
	
	 B
	
	      Will grow in dry / semi-arid / barani areas / few irrigation facilities;
	      Will grow in poor / sandy soil;
	      Has a short growing season;
	      Flat land available / on marginal land.
	
	 C Soil – one of: well drained, light, sandy, alluvial, loamy, not waterlogged
	
	      Climate – one of: warm / 21–30 °C, frost free, low rainfall / 200–1000 mm
	
	                                               3 @ 1 mark
		3

3(c)(ii)	Rapid increase in population; Increase in per capita consumption of sugar; Export of (raw) sugar; Raw material for other industries – waste material – Bagasie (cardboard / chipboard / paper animal feed) / molasses (cattle feed / citric acid) 2 @ 1 mark	**2**

Question	Answer	Marks

3(d)	**Levels marking**
	
	No valid response (0 marks)
	
	Level 1 (1–2 marks)
	Simple point addressing any view (1)
	Simple points addressing any view (2)
	
	Level 2 (3–4 marks)
	Developed point(s) explaining one view (3)
	Developed point(s) explaining both views (4)
	No evaluation
	
	Level 3 (5–6 marks)
	Well-developed points explaining both views. Evaluation giving clear support to one view or appropriate example (5)
	Well-developed points explaining both views. Evaluation giving clear support to one view and appropriate example (6)
	
	Content Guide
	
	Answers are likely to refer to:
	
	Possible
	    Leaving part of the land fallow;
	    Line / temporary closure of canals;
	    Install tubewells;
	    Planting eucalyptus trees;
	    Digging surface / sub-surface drains;
	    Removing salts by adding gypsum;
	    Salinity Control and Reclamation Project;
	    Cultivating salt tolerant crops / use saline land for livestock.
	
	Not possible
	    Cost of maintaining / replacing tubewells / other measures;
	    Farmers continue to over-irrigate;
	    SCARP projects date from 1958 and large public tubewells deteriorating / reaching end of their life;
	    Lack of access to / cannot afford water;
	    Massive investment needed.
	ETC.
		6

Question	Answer	Marks
4(a)(i)	A 64°E B Hab C Thal 3 @ 1 mark	3
4(a)(ii)	Flat or gentle sloping land; Lower Indus Plain / low altitude; Flood plain / active floodplain (bet) / old floodplain; Delta; Limestone cliffs at Hyderabad (Ganjo Takkar Hills) / escarpment / cuesta; Doab / sand dunes (tibbas); Piedmont plains with alluvial fans. 3 @ 1 mark	3
4(a)(iii)	Heavy (high) rainfall / monsoon rainfall; Monsoon winds (strong wind) / SW monsoon / weather pattern from India / Arabian Sea; Rapid snow melt (in Himalayas / Karokoram / Hindu Kush / Tibet); Melting of glaciers (in Himalayas / Karokoram / Hindu Kush / Tibet). 2 @ 1 mark	2
4(b)(i)	How roads are interconnected / joined / distributed / spread out across an area / linkage of roads / road pattern 1 @ 1 mark	1
4(b)(ii)	Bar drawn at 7 for number of roads (allow 6–8) 1 @ 1 mark Correctly shaded using key 1 @ 1 mark	2
4(b)(iii)	Rugged / steep slopes / high / hilly terrain (making road building difficult) or (more expensive to build – embankments / cuttings / tunnels / bridges); Unstable land – landslide / rock falls (dangerous); Remote / uninhabited / low population density areas / few people live in these areas (so less demand for roads / so hard to supply equipment / lack of labour to build roads); Groups who live in these areas may be traditional in outlook (and therefore oppose areas being opened up by roads / are resistant to modernisation); Long distance to cover between towns (making road projects expensive); Lack of investment; Extreme weather / extremely cold / snow / frost (roads blocked by snow). ETC. **Note:** One mark for identification of appropriate idea and a further mark for development (in parentheses). **Note:** Max. 2 marks if no development. 2 @ 2 marks	4
4(c)(i)	One of: babul, shisham, acacia, coniferous / spruce / fir, eucalyptus, jhand, tamarisk, fruit trees. 1 @ 1 mark	1

Question	Answer	Marks
4(c)(ii)	Rainfall – in sufficient quantity / distributed throughout the year / arid areas only thorn or scrub / wetter areas for evergreen / broad-leafed; Temperature – mild / warm for non-coniferous / cool / cold for coniferous; Extent of water supply other than rainfall – oases / aquifer at surface, river banks, sea / estuary / delta for mangroves / tolerates salt; Soil – alluvium for mangrove / riverain / soil type influences density of forest; Altitude – types of forest vary with altitude / only up to treeline at 4000 m / coniferous 1000–4000 m / thorn / scrub / riverain below 1000 m. 3 @ 1 mark	**3**

Question	Answer	Marks

4(d)	**Levels marking**
	
	No valid response (0 marks)
	
	Level 1 (1–2 marks)
	Simple point addressing any view (1)
	Simple points addressing any view (2)
	
	Level 2 (3–4 marks)
	Developed point(s) explaining one view (3)
	Developed point(s) explaining both views (4)
	No evaluation
	
	Level 3 (5–6 marks)
	Well-developed points explaining both views – benefits and problems with reference to people or environment with evaluation giving clear support to one view or appropriate example (5)
	Well-developed points explaining both views – benefits and problems with reference to people or environment with evaluation giving clear support to one view and appropriate example (6)
	
	Content Guide
	
	Answers are likely to refer to:
	
	<u>Benefits</u>
	     Quicker / cheaper long distance travel for passengers / goods;
	     More developed public transport network means less need for / expense of car ownership;
	     Employment in named transport industry / building motorways;
	     Greater mobility of labour / university students;
	     Greater ability to transport bulky / low value goods / freight / minerals;
	     Rail development reduces number of cars / lorries on the roads and amount of air pollution / fumes from road vehicles;
	     Development of industrial estates / settlements alongside new roads.
	
	<u>Problems</u>
	     Rail not door-to-door / trains only stop at stations;
	     Fumes from diesel trains cause air pollution / very polluting;
	     Noise pollution;
	     Railway tracks / motorways use up / divide farmland;
	     Railway tracks / motorways destroy / disturb / divide natural habitat;
	     Relocation of people / loss of homes / reduces value of property.
	ETC.
		6

Question	Answer	Marks
5(a)(i)	Season / seasonal; Seasonal wind / weather pattern; Short period of heavy rain / a wet season (Jul to Sept). 1 @ 1 mark	1
5(a)(ii)	Rainfall concentrated in Jul–Sept / wet season Jul–Sept; Little rainfall Oct–Jun / dry season Oct–Jan / Apr–May; High annual temperature / 30 °C–34 °C; Highest temperature in Jun just before wet season starts. 2 @ 1 mark	2
5(a)(iii)	July low pressure on land / central Asia. December high pressure on land / central Asia or July lower pressure on land / central Asia than December; July moist air / rain bearing winds from sea / Indian Ocean / Bay of Bengal: December dry winds blow from land to sea / winds reverse from July SW to December NE; July tail end of monsoon winds reach northern / north-eastern Pakistan / December little moisture reaches eastern / north-eastern Pakistan; July has high (higher, warmer) temps with more humidity / December has low (lower, cooler) temps with less humidity. 2 @ 1 mark	2
5(b)(i)	Statement 3: 'A greater % of males are working than females' Statement 4: 'A greater % of people are working in rural than urban areas' 2 @ 1 mark	2
5(b)(ii)	Higher proportion of women work in agriculture in rural areas / in general, higher percentage of population work in agriculture in rural areas than in urban areas; Higher proportion of women work in cottage industries and small-scale industries in rural areas; More male than female labour migrates from rural areas to urban areas; Mismatched of labour / skills for work in urban areas; Traditional / cultural values less likely to accept women working outside home / women stay at home; Traditional / cultural values mean males more likely to be seen as 'bread winners' in urban areas; In urban areas males paid more than females; Employment in rural areas is more labour intensive than in urban areas / less labour intensive in urban areas. 3 @ 1 mark	3

Question	Answer	Marks
5(b)(iii)	Quicker / more efficient (allowing greater production / profitability); Fewer workers needed (saving labour costs); Standardisation of products (improving quality for export); Reduces / replaces child labour (increasing trade opportunities / lifting embargos with countries previously not trading with Pakistan because of this issue); Increases skills (and therefore more competitive in global market); Costs per unit will decrease (increase profits). ETC. **Note:** One mark for identification of appropriate idea and a further mark for development (in parentheses). **Note:** Max. 2 marks if no development. 2 @ 2 marks	4
5(c)(i)	Quetta / Gilgit 1 @ 1 mark	1
5(c)(ii)	Difficulty with cost of obtaining heating fuel / gas; Unable to farm / grow crops / less income from agriculture / transhumance; Difficulty travelling by road / rail / air due to named adverse weather, e.g. snow / fog / landslides / ice / slippery roads; Loss of telecommunications / electricity due to heavy snowfall; Isolated / cut off from lowland areas; Danger of death from cold / hypothermia, especially for elderly / children; Requires adaptations to clothing / housing; Income from named tourist opportunities, e.g. mountaineering, rock climbing; Fewer mosquitoes / biting insects / diseases, e.g. malaria; Encouragement of small-scale cottage industries. 4 @ 1 mark	4

Question	Answer	Marks

5(d)	**Levels marking**
	
	No valid response (0 marks)
	
	Level 1 (1–2 marks)
	Simple point addressing any view (1)
	Simple points addressing any view (2)
	
	Level 2 (3–4 marks)
	Developed point(s) explaining one view (3)
	Developed point(s) explaining both views (4)
	No evaluation
	
	Level 3 (5–6 marks)
	Well-developed points explaining both views. Evaluation giving clear support to one view or appropriate example (5)
	Well-developed points explaining both views. Evaluation giving clear support to one view and appropriate example (6)
	
	Content Guide
	
	Answers are likely to refer to:
	
	View A
	For
	      High population;
	      Large demand for passenger travel;
	      Global airline companies more likely to fly new routes to largest cities / provincial capitals;
	      Large international airport already present;
	      Cheaper to expand at current site than construct at a new site as air traffic control / multiple terminal buildings already exist;
	      Headquarters of Pakistan International Airlines;
	      Shorter distance to travel to Middle East / Gulf states than interior such as Sialkot;
	      Large industrial city;
	      Good (named) infrastructure facilities present.
	
	Against
	      Increase in noise / air pollution at Jinnah site;
	      Increase in traffic congestion to and from airport;
	      Uneven development.
		6

Question	Answer	Marks

5(d)	<u>View B</u>
	<u>For</u>
	    Shorter distance to travel to Iran / Afghanistan / China / India;
	    Demand for trade in local manufactured items;
	    Even development of air transport infrastructure over country;
	    Bring in tourists / income from tourism.
	
	<u>Against</u>
	    Cost of providing air facilities at new sites;
	    Serve smaller populations – less likely to generate large numbers of passengers / profit;
	    Nok Kundi very remote;
	    Difficulties in building in Balochistan due to climate.
	ETC.	