Cambridge Assessment International Education

Cambridge O Level

PAKISTAN STUDIES **2059/02**

Paper 2 Environment of Pakistan **May/June 2020**

MARK SCHEME

Maximum Mark: 75

Published

Students did not sit exam papers in the June 2020 series due to the Covid-19 global pandemic.

This mark scheme is published to support teachers and students and should be read together with the question paper. It shows the requirements of the exam. The answer column of the mark scheme shows the proposed basis on which Examiners would award marks for this exam. Where appropriate, this column also provides the most likely acceptable alternative responses expected from students. Examiners usually review the mark scheme after they have seen student responses and update the mark scheme if appropriate. In the June series, Examiners were unable to consider the acceptability of alternative responses, as there were no student responses to consider.

Mark schemes should usually be read together with the Principal Examiner Report for Teachers. However, because students did not sit exam papers, there is no Principal Examiner Report for Teachers for the June 2020 series.

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

Cambridge International is publishing the mark schemes for the June 2020 series for most Cambridge IGCSE™ and Cambridge International A & AS Level components, and some Cambridge O Level components.

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.

Question	Answer	Marks
1(a)(i)	A = Islamabad B = Lahore C = Faisalabad 3 @ 1 mark	**3**
1(a)(ii)	D = River Indus 1 @ 1 mark	**1**
1(a)(iii)	Ideas such as: In the south west of the city; South of river; On/along main road/railway; Direction from any named feature/location within the map boundary; Distance from any named feature/location within the map boundary. **Note:** Max 2 marks for direction and Max 2 marks for distance. 3 @ 1 mark	**3**
1(a)(iv)	Ideas such as: Some cannot gain basic education/entry qualifications; Cost/fees are too expensive; Many in rural areas cannot access higher education; More university places are needed; People are needed to care for family members; People are needed to work in the family business/earn money for the family; etc. 2 @ 1 mark	**2**
1(b)(i)	Has <u>assets less than Rs 10 million</u> (excluding loan, land and building); <u>Up to 10 hired labour</u> can be employed in addition to family labour. 2 @ 1 mark	**2**
1(b)(ii)	Ideas such as: Near university for skilled labour; Links with university for research/agglomeration; Near Model Town for work force; Can locate anywhere/footloose; Lots of available space to build/expand on; etc. 2 @ 1 mark	**2**

Question	Answer	Marks
1(b)(iii)	Ideas such as: <u>Degree-level qualifications</u> Skilled workforce; (will be attractive to international businesses); Will reduce unemployment; (more people earning a living wage/higher wages); Will improve social services such as schools and hospitals; (improve HDI so more attractive internationally/reduce economic emigration/more trained doctors/teachers); Specialised courses according to the requirements of the industry; (meets the employment needs of the company); Training for managers at all levels; (reduces the need for people from outside Pakistan to take these roles/money stays in Pakistan); etc. <u>Use of telecommunications</u> Enables companies/businesses to communicate instantly around the world; (no need to wait for meetings/travel abroad); Will attract international companies to have headquarters/branches located in Pakistan; (will improve the balance of payments); Ease of use of mobile phones; (able to conduct business from anywhere/work from home); Ability to message/email/skype/meet remotely; (information obtained and shared instantly/instant messaging/decisions made quickly and easily); Able to set up websites/advertise globally/TV and radio/internet; (increased trade/competition with international markets); Increased market opportunities/e-commerce; (able to trade around the world/development of on-line banking/reduces costs/overheads); Enhanced ability to compete in the global market; (increasing GDP); 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**
1(c)	Ideas such as: Development of export processing zones; Restrictions on exports; Development Trade Development Authority of Pakistan (TDAP); Developing named infrastructure - roads/railways/airports/ports); Developing telecommunications/named examples; Training and education; Advertising nationally and/or internationally; Providing incentives for new businesses/named examples; etc. 2 @ 1 mark	**2**

Question	Answer	Marks
1(d)	Levels marking <u>Level 1</u> (1–2 marks) Simple point referring to one view (1) Simple points referring to any view (2) <u>Level 2</u> (3–4 marks) Developed point referring to one view (3) Developed points referring to both views (4) <u>Level 3</u> (5–6 marks) 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: <u>IT may reduce unemployment because</u> More entrepreneurs are generated; Will reduce the need for managers to be brought in from businesses abroad; New businesses will open; Can train future generations; Further development of tertiary and/or quarternary sectors; Many people own smart phones; Can have basic skills to use a phone or computer to set up a business from home; Can be carried out in any language; etc. <u>IT may not reduce unemployment because</u> Equipment and training can be expensive; Not all students/families can afford to go to university and develop IT expertise; Many IT graduates emigrate so Pakistan does not always benefit from them; Not all areas have a reliable electricity supply; etc.	**6**

Question	Answer	Marks
2(a)(i)	A = Muree B = Quetta 2 @ 1 mark	**2**
2(a)(ii)	City B plot <u>and</u> line completed accurately on climate graph (Fig. 2.2) 2 @ 1 mark	**2**

Question	Answer	Marks
2(a)(iii)	Ideas such as: A has more rain than B; B has higher summer temperatures than A; Both have low winter temperatures; A has a rainy season during summer months whereas B has a rainy season during the winter months; Total rainfall is higher in A than B; Annual temperature range in B is 24 °C whereas in A it is 16 °C; Highest rainfall in A is 342 mm in July whereas in B it is 58 mm in March (could accept lowest); Highest temperature in A is 21 °C in June whereas in B it is 28 °C in July (could accept lowest); etc. **Note:** Opposites accepted but cannot be double credited. 3 @ 1 mark	**3**
2(b)	Ideas such as: Altitude Temperatures decrease as altitude increases– or vice versa; (City A/Muree at higher altitude/2167 m so has cooler temperatures than city B/Quetta at lower altitude/1600 m which has higher temperatures); etc. Latitude Temperatures decrease with distance from the equator as latitude increases – or vice versa; (City A/Muree is at a higher latitude/34 °N so has cooler temperatures than City B/Quetta at lower latitude/30 °N)/(low angle of the sun brings lower temperatures in winter/high angle of sun in summer brings warmer temperatures in both cities); 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)	During the post-monsoon season; In northern and north west areas; In the summer. **Note:** If four boxes ticked Max 2 marks, five boxes ticked Max 1 mark, six boxes ticked Max 0 marks. 3 @ 1 mark	**3**
2(c)(ii)	Monsoon Winds/Arabian Sea; The Western Depressions; Convectional currents; Relief rainfall; (Tropical) Cyclones. 3 @ 1 mark	**3**

Question	Answer	Marks
2(c)(iii)	Ideas such as: Destroys crops/orchards/or named examples; Roofs of houses can be damaged; Electricity can be cut off; Telecommunications can be disturbed; etc. 2 @ 1 mark	**2**
2(d)	Levels marking <u>Level 1</u> (1–2 marks) Simple point referring to one view (1) Simple points referring to any view (2) <u>Level 2</u> (3–4 marks) Developed point referring to one view (3) Developed points referring to both views (4) <u>Level 3</u> (5–6 marks) 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: <u>Severe flooding can be managed</u> Afforestation; Enlarging river channel; Building embankments; Building extra channels to remove floodwater from cities; Building reservoirs Not building on flood plains; Publicizing flood warnings; Evacuation procedures; etc. <u>Severe flooding can be difficult to manage</u> Very expensive to introduce man-made structures; Can only be done in certain areas; One off extreme events cannot always be planned for; Flood prevention measures for every eventuality is not cost effective; Cannot always accurately predict areas that may be affected by flooding; Land is sometimes needed for other uses so cannot always be used for afforestation/reservoirs; etc.	**6**

Question	Answer	Marks
3(a)(i)	Cable; Cage; Coal seams; Winch. 4 @ 1 mark	**4**
3(a)(ii)	130 (allow tolerance of between 120 and 140) 1 @ 1 mark	**1**
3(a)(iii)	Shaft mining 1 @ 1 mark	**1**
3(b)(i)	<u>Type</u> Anthracite; Bituminous/steam coal; Bituminous/coking coal; Lignite. <u>Characteristics</u> Anthracite – best quality coal/hardest with highest hydrocarbon content/ burns quietly with good heat; Bituminous/steam coal – superior black, hard coal. Burns readily with great heat/less hydrocarbon content than anthracite; Bituminous/coking coal – coking coal is burnt to produce coke/a hard grey porous material/used in blast furnaces for the extraction of iron from iron ore; Lignite – lower quality coal/high moisture and ash content/low heating value. 1 @ 1 mark + 1 @ 1 mark 1 @ 1 mark + 1 @ 1 mark	**4**
3(b)(ii)	Ideas such as: Industrial processes or example e.g. cement or brick manufacturing/ electricity generation/domestic heating; etc. 1 @ 1 mark	**1**
3(c)(i)	Ideas such as: Uses the force of flowing water to spin the turbines; The turbine in turn causes the shaft to spin rapidly inside a magnetic field in the generator; The generator creates electricity; The electric current is regulated by the transformer; Electricity is sent through the power line to where it is needed; etc. 4 @ 1 mark	**4**

Question	Answer	Marks
3(c)(ii)	Ideas such as: Water is a renewable resource; (will not run out/can be used over again); HEP is referred to as white coal; (because it doesn't have to burn anything/ is environmentally friendly); Can be developed in highland areas; (where there are steep slopes and adequate supply of rainfall/very little else can be developed in these areas); Once HEP stations have been set up running costs are low; (saving money in the long term); 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**
3(d)	Levels marking <u>Level 1</u> (1–2 marks) Simple point referring to one view (1) Simple points referring to any view (2) <u>Level 2</u> (3–4 marks) Developed point referring to one view (3) Developed points referring to both views (4) <u>Level 3</u> (5–6 marks) 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: <u>A: Continue to make use of its fossil fuels</u> Agree because: Already have power stations set up to use coal/oil/gas; Uses existing skills and technology; Cheaper than setting up alternatives from scratch; Do not have know-how to set up alternatives; Alternatives (or named examples) are not 100% reliable all of the time; etc <u>B: Prepare for the future and further develop its renewable energy resources</u> Agree because: Environmentally friendly; Once set up running costs are low; No air pollution; Creates employment opportunities; More sustainable; Pakistan has a lot of sunshine – good for solar power; Remote rural areas can use solar power; etc **Note:** Reverse arguments are also acceptable e.g. against A or B but the same point cannot receive double credit.	**6**

Question	Answer	Marks
4(a)(i)	Fruit A = date Fruit B = mango Fruit C = apricot 3 @ 1 mark	**3**
4(a)(ii)	Ideas such as: In east/central Sindh; South west Balochistan; East of river Indus etc. 3 @ 1 mark	**3**
4(a)(iii)	Ideas such as: B is in two provinces whereas C is in one/B is in Punjab and Sindh whereas C is in Balochistan; B is further north and south than C; B is further east than C/C is further west than B; C is located over the border in another country whereas B is not; etc. 2 @ 1 mark	**2**
4(b)	Temperature; (frost-free/humid and hot/temperature range 27–29 °C); Rainfall; (average annual rainfall 850–1050 mm required); Soil; (deep/at least 50 cm/fertile/loamy/well-drained/high water holding capacity); Sunshine; (high number of sunshine hours required). **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)	Farming for own use/to meet the needs of the family/not for sale 1 @ 1 mark	**1**
4(c)(ii)	Human inputs Draft power; Equipment/examples; Fertiliser; Irrigation; Labour; Seeds; Natural inputs Climate/examples; Manure; Seeds; Soil type; Topography/relief; Water availability. **Note:** do not double credit 'seeds'. 4 @ 1 mark	**4**

Question	Answer	Marks
4(c)(iii)	Ideas such as: May not grow enough food to eat/only small amounts grown; May not produce enough surplus crop to sell/earn money; Labour intensive; Reliant on the weather/crop could fail; etc. 2 @ 1 mark	**2**
4(d)	Levels marking <u>Level 1</u> (1–2 marks) Simple point referring to one view (1) Simple points referring to any view (2) <u>Level 2</u> (3–4 marks) Developed point referring to one view (3) Developed points referring to both views (4) <u>Level 3</u> (5–6 marks) 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: <u>Strategies to increase agricultural production</u> Ways waterlogging and salinity is being overcome/improved; Irrigation systems; Mechanisation; Improved seeds/examples/HYVs; Loans for farmers; Education/training; Modernisation; etc. <u>Strategies may not always succeed because</u> Programmes may be restricted to specific areas/not nationwide; Climate/relief may reduce effectiveness of strategies in some areas; Many farmers use traditional methods; Some farmers cannot afford to take loans; Mechanisation may lead to unemployment; etc.	**6**

Question	Answer	Marks
5(a)(i)	Accurately drawn bar for males aged 60–64 1 @ 1 mark	**1**
5(a)(ii)	17.4% 1 @ 1 mark	**1**

Question	Answer	Marks
5(a)(iii)	Ideas such as: 0–4 age group has highest percentage of population; Predominantly young population/widest bars are below age 30; Bars start to decrease after age 34; Sharper decrease in bars after age 59; Lower percentage of population in older age groups; etc. 3 @ 1 mark	**3**
5(a)(iv)	Ideas such as: To see how many young dependents there are; (so that the number of school places required can be determined/vaccinations/healthcare); To identify how many old dependents there will be; (so that the amount to spend on healthcare/care homes/medicines/pensions/hospitals can be estimated); To know how many economically active there are; (so the amount potentially earnt in taxation can be estimated); To estimate the total number of population; (so that the quantity of new houses/building/services/facilities needed can be predicted/named examples); 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(b)(i)	Ideas such as: Enough people to work in the future; Can pay more taxes; Can support families when are older; Provides a growing market for manufactured products; etc. 3 @ 1 mark	**3**
5(b)(ii)	Ideas such as: Introduction/wider availability of contraception; Family planning centres/clinics; Educating women; Population policy; Improved healthcare; etc. 4 @ 1 mark	**4**
5(c)(i)	Overpopulation is a result of <u>too many</u> people and <u>too few</u> resources **Note:** Both answers must be given for one mark 1 @ 1 mark	**1**

Question	Answer	Marks
5(c)(ii)	Ideas such as: Limited food supply; Famine/starvation; Overcrowding/too few houses; Development of squatter settlements; Shortage of essential services or named examples; Limited clean water; Excess waste/pollution; Pressure on infrastructure; Unemployment; etc. 2 @ 1 mark	**2**
5(d)	Levels marking <u>Level 1</u> (1–2 marks) Simple point referring to one view (1) Simple points referring to any view (2) <u>Level 2</u> (3–4 marks) Developed point referring to one view (3) Developed points referring to both views (4) <u>Level 3</u> (5–6 marks) 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: <u>A: Unchecked high fertility rates will hinder future economic development</u> Agree because: Too many people and not enough resources or named examples e.g. food, water, houses etc; May lead to high levels of unemployment; Increased pressure on services such as healthcare and education; Higher taxes required to pay for services needed by young dependents; People will have to work longer; Investment in infrastructure or named examples may be reduced/limited as excess capital is diverted to support the young; etc. **Note:** Conversely candidates may argue against View A and refer to examples of how high fertility rates may aid future economic development by creating a larger workforce that can contribute through taxes etc. <u>B: Reducing the fertility rate will hinder future economic development</u> Disagree because: There will be more mouths to feed; More pressure on land for housing/farming/industry; Higher unemployment/not enough jobs to go around; There will be more pressure on services such as healthcare and education; Water, electricity, transport infrastructure is already stretched; etc.	**6**

Question	Answer	Marks
	Note: Conversely candidates may argue in favour of View B and refer to examples such as: China adopted an ante-natal population policy and later experienced an ageing population with too few economically active people, there may be natural checks to population (Malthus theory) e.g. war/famine etc.	