



Cambridge O Level

BANGLADESH STUDIES

7094/02

Paper 2 Environment and Development of Bangladesh

May/June 2023

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.

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This document consists of **27** 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 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.

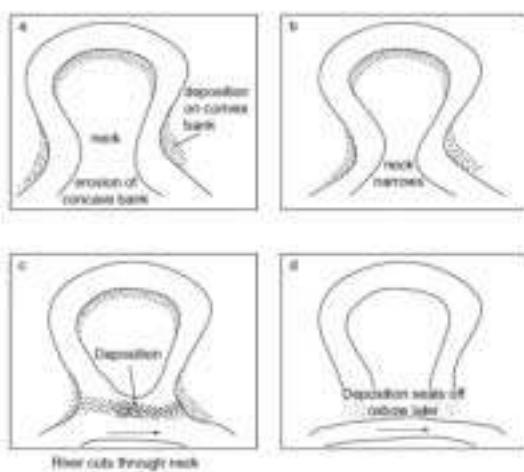
GENERIC MARKING PRINCIPLE 5:

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) | <p>Study Fig. 1.1 (Insert), which shows a satellite image of part of south-east Bangladesh.</p> <p>Identify the following:</p> <p>city <u>A</u></p> <p>Chattogram / Chittagong</p> | 1 |
| 1(a)(ii) | <p>river <u>B</u></p> <p>Karnaphuli / Karnafuli</p> <p>Allow alternative spelling</p> | 1 |
| 1(a)(iii) | <p>river feature <u>C</u></p> <p>Meander</p> <p>= 0 bend river channel</p> | 1 |
| 1(a)(iv) | <p>hydro-electric power (HEP) dam <u>D</u></p> <p>Kaptai</p> | 1 |
| 1(a)(v) | <p>hills <u>E</u></p> <p>Chittagong (Hill Tracts) / Rangamati / Khagrachhari / Bandarban</p> <p>= 0 CHT</p> | 1 |

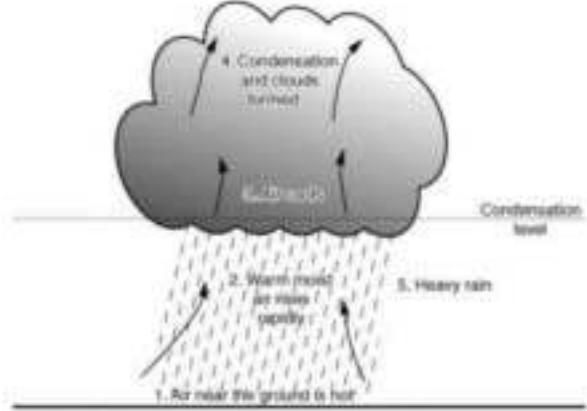
| Question | Answer | Marks |
|----------|--|-------|
| 1(b) | <p>Draw labelled diagrams to explain how an ox-bow lake is formed.</p>  <p>Erosion on concave / outer banks / outside of meander Deposition on convex / inner banks / inside of meander Meander becomes more pronounced / circular Neck narrows River cuts through neck / breaks through / river flows straight At time of flood / peak discharge Deposition seals off meander to create ox-bow lake</p> <p>Reserve 1 = diagram</p> <p>Award marks for explaining, e.g. erosion, deposition, neck narrows, breaking through.</p> <p>Do not credit correct labelling of features, e.g. concave bank.</p> | 4 |
| 1(c) | <p>Why is location D in Fig. 1.1 a suitable site for hydro-electric power (HEP)?</p> <p>Steep slopes / hilly Heavy rainfall Fast flowing river / constant river flow Away from settlement</p> <p>= 0 River (on own)</p> | 3 |
| 1(d)(i) | <p>What is meant by the term aquaculture?</p> <p>Breeding and growing fish / fish farming</p> | 1 |

| Question | Answer | Marks |
|-----------|--|-------|
| 1(d)(ii) | <p>Why are coastal areas, such as that shown in Fig. 1.1, suitable for aquaculture?</p> <p>Warm / tropical water Many nutrients in water From silt brought down by rivers Lack of strong currents Continental shelf / shallow water</p> <p>Brackish water = 0</p> | 3 |
| 1(d)(iii) | <p>Use Fig. 1.2 to describe the trends in aquaculture production in Bangladesh.</p> <p><u>Overall</u> Increase From 0.65 to 2.4 million By 1.75 million</p> <p>Steady / slow increase 2000 to 2004 or 2005 to 2009 Decrease 2004 to 2005/6 Rapid increase 2009 to 2018</p> <p>Must have units (million) Allow 0.65 to 0.67 million Allow 1.73 to 1.75 million</p> <p>Only allow increase once unless qualified (slow / steady / rapid). Allow years in between dates given.</p> | 4 |

| Question | Answer | Marks |
|----------|--|-------|
| 1(e)(i) | <p>'The benefits of increasing aquaculture for the people of Bangladesh outweigh the problems it can cause for the environment.'</p> <p>Give <u>one</u> benefit of aquaculture for the people of Bangladesh.</p> <p><u>Benefits for people</u></p> <p>Jobs</p> <p>Full time and part time</p> <ul style="list-style-type: none"> • fish farming • processing – freezing, canning, drying, salting • packing • transportation <p>Jobs provide income to support families / reduce poverty Can afford food, housing, health care, education, etc. For better quality of life / standard of living</p> <p>Provides large amount of fish / source of food Cheaper fish available Fish are an important source of protein 80% of protein intake of Bangladeshi people Helps food security</p> <p>= 0 Growing population</p> <p>= 0 New breeds / more variety Exports Foreign exchange GDP [as question is about people]</p> | 1 |

| Question | Answer | Marks |
|-----------|---|-------|
| 1(e)(ii) | <p>Give <u>one</u> problem of aquaculture for the environment of Bangladesh.</p> <p><u>Problems for environment</u></p> <p>Water pollution</p> <p>Fish diseases from</p> <ul style="list-style-type: none"> • overstocking • overfeeding • monoculture • poor management <p>Deforestation</p> <p>Especially for shrimp farming</p> <p>Along coast, e.g. Cox's Bazar</p> <p>Chakoria / Sundarbans deforested</p> <p>In 1972, 19 000 hectares of mangrove forest</p> <p>Salinity increases</p> <p>Shrimp enclosures damage forests</p> <p>Soil fertility reduced</p> | 1 |
| 1(e)(iii) | <p>Do you think that the benefits of increasing aquaculture for the people of Bangladesh outweigh the problems it can cause for the environment? Give reasons for your answer.</p> <p>No marks for stating yes or no, only for giving reasons.</p> <p>Accept answers that give support to both points of view.</p> <p>Points can be taken from those in (i) and (ii) and developed further.</p> <p>Use REP.</p> | 3 |

| Question | Answer | | | | | | | Marks | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|---|--------------|--------------|--------------|--------------|----------------|--|----------|----------------------|--|--|--|--|--|----------------|--------------|--------------|--------------|--------------|----------------|----------|---|--|--|--|--|--|-------|--|--|---|--|--|--|-------------|--|--|--|--|---|--|--------|--|---|--|--|--|--|--------|--|--|--|--|--|---|---|
| 2(a)(i) | <p>Complete Table 2.1 by adding ticks (✓) to show the annual rainfall at the locations shown in Fig. 2.1. One location has been completed for you.</p> <table border="1"> <thead> <tr> <th rowspan="2">location</th> <th colspan="6">annual rainfall (mm)</th> </tr> <tr> <th>less than 1500</th> <th>1500 to 1999</th> <th>2000 to 2499</th> <th>2500 to 2999</th> <th>3000 to 3499</th> <th>3500 and above</th> </tr> </thead> <tbody> <tr> <td>Rajshahi</td> <td>✓</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Dhaka</td> <td></td> <td></td> <td>✓</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Cox's Bazar</td> <td></td> <td></td> <td></td> <td></td> <td>✓</td> <td></td> </tr> <tr> <td>Khulna</td> <td></td> <td>✓</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Sylhet</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>✓</td> </tr> </tbody> </table> <p>3 marks for all answers correct 2 marks for 3 correct answers 1 mark for 1 or 2 correct answers If two ticks for 1 location = 0 Only 3 ticks</p> | | | | | | | location | annual rainfall (mm) | | | | | | less than 1500 | 1500 to 1999 | 2000 to 2499 | 2500 to 2999 | 3000 to 3499 | 3500 and above | Rajshahi | ✓ | | | | | | Dhaka | | | ✓ | | | | Cox's Bazar | | | | | ✓ | | Khulna | | ✓ | | | | | Sylhet | | | | | | ✓ | 3 |
| location | annual rainfall (mm) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | less than 1500 | 1500 to 1999 | 2000 to 2499 | 2500 to 2999 | 3000 to 3499 | 3500 and above | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rajshahi | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dhaka | | | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cox's Bazar | | | | | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Khulna | | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sylhet | | | | | | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2(a)(ii) | <p>What problems does drought cause for the people who live in Rajshahi district?</p> <p>Scarcity of drinking water / dehydration Lack of <u>clean</u> water increases disease, e.g. cholera, malaria, typhoid Lack of water for washing / domestic use Risk of death [allow deaths] Crops fail / die Famine / malnutrition / lack of food Lack of fodder Livestock die Loss of income / livelihood Price of food rises / high prices Arsenicosis (deeper wells for groundwater) Irrigation problems Land dries up <u>so</u> becomes infertile, cultivation becomes impossible = 0 Plants die / animals die Needed crops die Livestock die</p> | | | | | | | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Question | Answer | Marks |
|-----------|--|-------|
| 2(b)(i) | <p>During which months does Bangladesh receive most rainfall from thunderstorms?</p> <p>Summer / May to October / monsoon</p> <p>= 0</p> <p>Single month</p> <p>Credit any 3 or more consecutive months between May to October</p> | 1 |
| 2(b)(ii) | <p>State <u>three</u> types of weather that occur in thunderstorms.</p> <p>Thunder / lightning</p> <p>Heavy rain</p> <p>Hail</p> <p>Strong winds [allow heavy winds]</p> <p>Cloudy</p> <p>= 0</p> <p>Rain (on own)</p> | 3 |
| 2(b)(iii) | <p>Draw a labelled diagram to explain how thunderstorms develop.</p>  <p>(On hot, humid days) air near ground heated up / air near ground is hot</p> <p>BOD</p> <p>Warm (moist) air (expands) rises</p> <p>Rising air cools</p> <p><u>Water vapour</u> condenses</p> <p>On nuclei</p> <p>Droplets grow larger</p> <p>By collision / coalescence</p> <p>Forming cumulonimbus clouds</p> <p>When droplets are heavy enough, they fall</p> <p>Reserve 1 for diagram</p> <p>= 0</p> <p>Air condenses</p> <p>Condensation level</p> <p>Heavy rain</p> | 4 |

| Question | Answer | Marks | | | | | | | | | | |
|-------------|---|-------|---|------|----|------|-----|-------------|-----|------|-----|---|
| 2(c)(i) | <p>Complete Table 2.2 with information from Fig. 2.2.</p> <table border="1"> <thead> <tr> <th>year</th> <th>oil consumption (barrels per day, million)</th> </tr> </thead> <tbody> <tr> <td>2009</td> <td>72</td> </tr> <tr> <td>2012</td> <td>110</td> </tr> <tr> <td>2016</td> <td>140</td> </tr> <tr> <td>2019</td> <td>170</td> </tr> </tbody> </table> | year | oil consumption (barrels per day, million) | 2009 | 72 | 2012 | 110 | 2016 | 140 | 2019 | 170 | 2 |
| year | oil consumption (barrels per day, million) | | | | | | | | | | | |
| 2009 | 72 | | | | | | | | | | | |
| 2012 | 110 | | | | | | | | | | | |
| 2016 | 140 | | | | | | | | | | | |
| 2019 | 170 | | | | | | | | | | | |
| 2(c)(ii) | <p>Using Fig. 2.2, state <u>one</u> year in which oil consumption declined between 2009 and 2019.</p> <p>2013 / 2019</p> <p>Accept 2012–3 / 2018–9</p> | 1 | | | | | | | | | | |
| 2(c)(iii) | <p>State <u>two</u> of the main uses of oil in Bangladesh.</p> <p>Transport / vehicles / cars Electricity / power plants Petro chemical industry / plastics / chemicals / synthetic materials Machinery or an example of, e.g. power tiller Cooking / food</p> <p>= 0 Heating Industry</p> | 2 | | | | | | | | | | |

| Question | Answer | Marks |
|----------|--|-------|
| 2(d)(i) | <p>'To meet the increasing demand for oil in Bangladesh, the government should develop new oil fields rather than increase oil imports.'</p> <p>Give <u>one</u> argument why Bangladesh should develop new oil fields.</p> <p><u>Arguments for developing new oil fields</u></p> <p>Natural gas non-renewable / will run out Proven gas reserves will run out in 10–12 years</p> <p>Growing population needs more energy</p> <p>Energy needed for electricity production as electricity consumption exceeds production Bangladesh has oil reserves Titas, Haripur and Rashidpur gas fields have small reserves of oil Offshore oil exploration in Bay of Bengal</p> <p>Creates jobs / reduces unemployment Jobs provide income / reduce poverty Can afford food, housing, health care, education, etc. For better quality of life / standard of living</p> <p>Domestic oil production increases GDP In long run, oil will be cheaper Helps self sufficiency Saves import cost Oil import prices fluctuate / oil crisis Oil can be exported Earns foreign exchange Improves Balance of Payments</p> <p>Demand for oil increasing = stem = 0</p> | 1 |

| Question | Answer | Marks |
|-----------|--|-------|
| 2(d)(ii) | <p>Give <u>one</u> argument why Bangladesh should increase oil imports.</p> <p><u>Arguments for increasing oil imports</u></p> <p>Energy needed for electricity production as electricity consumption exceeds production</p> <p>Natural gas is non-renewable so will run out</p> <p>Less pollution compared to domestic production</p> <p>Development of its reserves may trigger international opposition</p> <p>Need to conserve / protect Bangladesh's oil reserves</p> <p>Can be argued is cheaper than domestic production</p> <p><i>Do not credit idea used from (i)</i></p> <p>= 0</p> <p>It is cheaper (on own)</p> <p>To meet increasing demand for oil = stem = 0</p> <p>= 0</p> <p>Foreign exchange</p> <p>Increases GDP</p> | 1 |
| 2(d)(iii) | <p>Do you think that it is better to develop new oil fields in Bangladesh or increase oil imports to meet the increasing demand for oil in Bangladesh? Give reasons for your answer.</p> <p>Allow arguments against developing new oil fields and against increasing oil imports.</p> <p>Developing new oil fields needs:</p> <ul style="list-style-type: none"> • capital • FDI • expertise • oil reserves <p>Oil imports:</p> <ul style="list-style-type: none"> • expensive – global price of oil increasing / unstable • reliance on other countries • balance of payments / foreign exchange <p>No marks for stating which is better, only for giving reasons. Accept answers that give support to both points of view. Points can be taken from those in (i) and (ii) and developed further.</p> <p>Use REP.</p> | 3 |

| Question | Answer | Marks |
|-----------|--|-------|
| 3(a)(i) | <p>The HDI is made up of information about the health, education and wealth of a country.</p> <p>Suggest a <u>different</u> development indicator which can be used to measure each of these.</p> <p>Examples such as:</p> <p>Health Life expectancy Birth rate Death rate Infant mortality rate Number of patients per doctor etc.</p> <p>Education Literacy rate % of children in primary / secondary education School enrolment Number of years in school etc.</p> <p>Wealth % below poverty line / poverty rate GDP GNP PCI etc.</p> <p>Reserve 1 each for health, education, and wealth</p> <p>= 0 Poverty (on own)</p> | 3 |
| 3(a)(ii) | <p>What is the overall trend shown in Fig. 3.1?</p> <p>Increases / goes up / improves</p> | 1 |
| 3(a)(iii) | <p>Using Fig. 3.1, which country has made the most progress from 1990 to 2019?</p> <p>Bangladesh</p> | 1 |

| Question | Answer | Marks | | | | | | | | | | | | | | | |
|----------|---|----------|------|------|------|------|------|------|------|------|------|------|------|--|------------|----------|---|
| 3(a)(iv) | <p>Compare the HDI of Bangladesh with Pakistan as shown in Fig. 3.1.</p> <p>Any comparison such as:</p> <p>1990 Bangladesh lower than Pakistan 2000/2010/2019 Bangladesh higher than Pakistan Both increase 1990 to 2019 Bangladesh increases more than Pakistan Bangladesh increases by 0.24, Pakistan by 0.16 / Bangladesh increases from 0.39 to 0.63, Pakistan from 0.40 to 0.56 Bangladesh biggest period of increase 1990–2000, Pakistan 2000–2010</p> <p>Must compare</p> <p>Allow accurate data: MAX 1</p> <table> <tr> <td>1990</td> <td>0.39</td> <td>0.40</td> </tr> <tr> <td>2000</td> <td>0.48</td> <td>0.45</td> </tr> <tr> <td>2010</td> <td>0.56</td> <td>0.51</td> </tr> <tr> <td>2019</td> <td>0.63</td> <td>0.56</td> </tr> <tr> <td></td> <td>Bangladesh</td> <td>Pakistan</td> </tr> </table> | 1990 | 0.39 | 0.40 | 2000 | 0.48 | 0.45 | 2010 | 0.56 | 0.51 | 2019 | 0.63 | 0.56 | | Bangladesh | Pakistan | 3 |
| 1990 | 0.39 | 0.40 | | | | | | | | | | | | | | | |
| 2000 | 0.48 | 0.45 | | | | | | | | | | | | | | | |
| 2010 | 0.56 | 0.51 | | | | | | | | | | | | | | | |
| 2019 | 0.63 | 0.56 | | | | | | | | | | | | | | | |
| | Bangladesh | Pakistan | | | | | | | | | | | | | | | |
| 3(b)(i) | <p>Complete Fig. 3.2 using the data in Table 3.1.</p> <p>2 marks for lines in correct place at 47 – 123 – 128 1 mark for accurate shading or labels</p> | 3 | | | | | | | | | | | | | | | |
| 3(b)(ii) | <p>What is meant by the term <i>dependency ratio</i> and how is it calculated?</p> <p><u>Definition</u> The proportion of the population aged 0–14 and 65 and over compared to those aged 15–64 / proportion of working and non-working / rate of people that are dependent on the working population.</p> <p>The number of dependents per 100 people of working age / economically active.</p> <p><u>Calculation</u> The sum of the young population (age 14 and under) and elderly population (age 65 and over) relative to the working-age population (ages 15 to 64), expressed as a %.</p> $\frac{\text{number 0–14} + \text{number 65 and over}}{\text{number 15–64}} \times 100$ <p>Reserve 1 for definition.</p> | 2 | | | | | | | | | | | | | | | |

| Question | Answer | Marks |
|-----------|--|-------|
| 3(b)(iii) | <p>Explain why the number of young people is decreasing in Bangladesh.</p> <p>Falling birth rate / fertility rate Improvements in health care and medicine Falling IMR More working women Improved female education / empowerment of women Later marriage Greater education <u>about</u> family planning Better access / affordability of birth control Less need for children as labour Increased economic prosperity Expense of rearing children Migration of young abroad etc.</p> <p>= 0 Education (on own) Increased DR People more aware, e.g. about population explosion</p> | 4 |
| 3(b)(iv) | <p>What will be the impact of fewer young people on the quality of life of people in Bangladesh in the future?</p> <p>Quality of life will improve Poverty will decline Smaller family size So less family to feed / clothe / educate So more likely to be able to remain in education So diet will improve So less overcrowding in homes Greater availability of maternal and child health care Less pressure on schools / hospitals / services / transport Less crowded cities Less competition for jobs</p> | 3 |
| 3(c)(i) | <p>‘The government’s priority should be to look after the increasing number of older people rather than trying to provide jobs for the increasing number of people of working age.’</p> <p>Give <u>one</u> argument why older people need government help.</p> <p><u>Help for older people</u></p> <p>Increasing demand for medical care More dependents with no / limited income Burden / reliance on family because fewer young people to support them For better quality of life / standard of living (only use once)</p> | 1 |

| Question | Answer | Marks |
|-----------|---|-------|
| 3(c)(ii) | <p>Give <u>one</u> argument why it is important to provide jobs for people of working age.</p> <p><u>Jobs for people of working age</u></p> <p>Reduces unemployment</p> <p>Jobs provide income for people / reduces poverty Can afford food, housing, health care, education, etc. For better quality of life / standard of living (only use once)</p> <p>Less crime</p> <p>More production Increases economic development / GDP</p> <p>Income for government / more taxes For education, health, etc.</p> | 1 |
| 3(c)(iii) | <p>Do you agree with the statement? Give reasons for your answer.</p> <p>No marks for stating yes or no, only for giving reasons.</p> <p>Accept answers that give support to both points of view.</p> <p>Points can be taken from those in (i) and (ii) and developed further.</p> <p>Use REP.</p> | 3 |

| Question | Answer | Marks |
|-----------|---|-------|
| 4(a)(i) | <p>Complete Fig. 4.1 using the following information:</p> <p>19% motor vehicles 18% road dust 9% soil dust</p> <p>2 marks for accurate plotting 1 mark for accurate shading</p> | 3 |
| 4(a)(ii) | <p>What is the biggest source of air pollution shown in Fig. 4.1?</p> <p>Brick kilns</p> | 1 |
| 4(a)(iii) | <p>What are the effects of air pollution on people?</p> <p>Death (13–20% linked to air pollution)</p> <p>Respiratory problems / breathing difficulty: asthma, lung cancer, emphysema</p> <p>Cardiovascular problems: heart disease / stroke</p> <p>Allergies</p> <p>Skin problems / disease: skin cancer</p> <p>Brain development disorder in children (lead)</p> <p>Major organ dysfunction (lead)</p> <p>Eye problems / disease (particulates)</p> <p>Visibility problems for drivers</p> <p>Allow 1 mark for health problems if no specifics</p> | 4 |

| Question | Answer | Marks |
|----------|---|-------|
| 4(a)(iv) | <p>Describe how the Bangladesh Government is trying to reduce air pollution.</p> <p>Planting trees / afforestation Making people more aware / education about air pollution</p> <p><u>Promoting renewable energy:</u> e.g. Renewable Energy Policy 2009</p> <p><u>Monitoring:</u> e.g. Continuous Air Monitoring Stations (CAMS)</p> <p><u>Reduce emissions from transport:</u> Four-stroke engine introduced Ban on leaded petrol Monitoring streets for polluting vehicles Action against polluting vehicles Public transport – improve, expand, promote e.g. Greater Dhaka Sustainable Urban Transport Project Construction of sidewalks e.g. part of Clean Air and Sustainable Environment project (CASE) Catalytic convertors Encourage use of bicycles Promote use of electric vehicles</p> <p><u>Reduce emissions from industry:</u> Air purification units on polluting industries Controlling illegal brick kilns e.g. Brick Manufacturing and Kiln Construction (control) Act 2013 Cordoning off construction sites Monitoring industry Legislation for industry regarding pollution levels Fining polluting industries</p> <p>Allow development</p> <p>= 0</p> <p>Air filters (on own) Prevent deforestation</p> <p><u>Legislation:</u> e.g. Clean Air Act 2019 (draft)</p> <p>National Air Quality Management Plan</p> <p><u>Reduce emissions from open burning:</u> e.g. Environment Conservation Act 1995 e.g. Environment Conservation Rules 1997</p> | 4 |

| Question | Answer | Marks |
|----------|--|-------|
| 4(a)(v) | <p>State <u>one</u> source of pollution in Bangladesh other than those shown in Fig. 4.1.</p> <p>Raw sewage / domestic waste / industrial waste / noise from traffic or industry / unsightly buildings / burning coal / burning fossil fuels / fertilisers / refrigeration / air conditioners</p> <p>Allow named sources, e.g. tanneries</p> <p>Need source NOT type: Land / sound / water = 0</p> <p>Industry on its own can be credited</p> | 1 |
| 4(b)(i) | <p>Use data from Fig. 4.2 to compare the industrial growth rate in Bangladesh with India and with Pakistan.</p> <p>Bangladesh higher than India / Bangladesh is the highest 12 to 15.9% compared to 0 to 3.9% / by 12%</p> <p>Bangladesh (much) higher than Pakistan / Pakistan is the lowest 12 to 15.9% compared to -4 to -0.1% / by 16%</p> <p>Pakistan negative growth [credit on its own if figures already given]</p> <p>Must compare</p> <p>MAX 1 for data</p> <p>% needed</p> <p>Higher growth rate than India and Pakistan = 2</p> | 3 |

| Question | Answer | Marks |
|----------|--|-------|
| 4(b)(ii) | <p>Describe the obstacles that need to be overcome for Bangladesh's industry to continue to grow.</p> <p><u>Credit points about:</u></p> <p>Skilled workers / training workers and managers / education</p> <p>Transport networks / poor road and rail transport</p> <p>Power supply / outages</p> <p>Land / space for new industry</p> <p>Poor law and order</p> <p>Strikes and hartals frequent</p> <p>Government support / subsidies / tax / licensing</p> <p>International competition / developing markets</p> <p>New technology / machinery – lack of experience and knowledge of</p> <p>Lack of investment / difficult to borrow money</p> <p>FDI / MNCs – need transparency to attract</p> <p>Allow development</p> <p>Infrastructure = 0</p> <p>Communications = 0</p> <p>Lack of raw materials = 0</p> <p>Credit what government should do, e.g.</p> <p>Provide subsidies</p> <p>Faster licences</p> <p>Reduce tax</p> | 4 |

| Question | Answer | Marks |
|----------|---|-------|
| 4(c)(i) | <p>'It is more important to encourage small-scale and cottage industries than to invest in large-scale industry for Bangladesh's continued economic growth.'</p> <p>Give <u>one</u> argument why it is important to encourage small-scale and cottage industries for Bangladesh's continued economic growth.</p> <p><u>Arguments for small-scale and cottage industries include:</u></p> <p>Limited outlay / cost / capital to set up</p> <p>Employs many people / reduces unemployment / income / reduces poverty</p> <p>Develops skills</p> <p>Employment of women</p> <p>No education necessary</p> <p>Use traditional / simple tools / can be done manually</p> <p>Increases GDP</p> <p>= 0</p> <p>Skills / training = informal</p> <p>Good for poor people</p> <p>Economic growth = stem</p> <p>Growth of economy</p> <p>BUT increase GDP is creditable</p> <p>Increased self-reliance</p> | 1 |
| 4(c)(ii) | <p>Give <u>one</u> argument why it is better to invest in large-scale industry for Bangladesh's continued economic growth.</p> <p><u>Arguments for large-scale industry include:</u></p> <p>15% employment but 80% value of output</p> <p>Add value / increase GDP</p> <p>Higher profits</p> <p>Higher wages</p> <p>Exports</p> <p>Foreign exchange</p> <p>Reduce needs for imports / meets demand for manufactured goods</p> <p>Attracts foreign investment / FDI / MNCs</p> <p>Faster productivity rate / modern machinery efficiency</p> <p>Creates jobs / reduces unemployment / reduces poverty</p> <p>Better quality = 0</p> | 1 |

| Question | Answer | Marks |
|-----------|---|-------|
| 4(c)(iii) | <p>Do you think that it is more important to encourage small-scale and cottage industries or invest in large-scale industry for Bangladesh's continued economic growth? Give reasons for your answer.</p> <p>No marks for stating which is more important, only for giving reasons.</p> <p>Accept answers that give support to both points of view. Points can be taken from those in (i) and (ii) and developed further.</p> <p><u>Arguments against small-scale and cottage industries include:</u></p> <p>80% employment but only 20% value of output</p> | 3 |

| Question | Answer | Marks |
|----------|---|-------|
| 5(a)(i) | <p>What is meant by the term <i>informal workers</i>? Include examples in your answer.</p> <p>Activities not formally regulated by the government / do not come under any legal regulatory framework</p> <p><u>Examples:</u> rickshaw pulling, barbershops on pavements, domestic service (servants, drivers, cooks), shining shoes, street traders, bamboo working, handloom weaving, etc.</p> <p>Reserve 1 for definition Reserve 1 for EG</p> | 2 |
| 5(a)(ii) | <p>Explain why the informal sector is so important in Bangladesh.</p> <p>Employs many people / up to 90% of workforce / reduces unemployment Largest contribution to GDP / 50% of GDP</p> <p>Poor cannot afford to be unemployed Enables poor to work / survive / earn a living / support family A final resort for those who cannot find work elsewhere Absorbs surplus labour Small capital to set up (in service sector) No education/training necessary</p> <p>A source of dynamism in the economy</p> <p><u>Can be argued</u> it reduces poverty</p> <p>Breaks cycle of poverty = 0 Improves standard of living / quality of life = 0 Reduces poverty = 0 Money for education, etc. = 0</p> | 3 |

| Question | Answer | Marks | | | | | | | | |
|-----------|---|-------|-----|------|-----|------|-------|------|-------|---|
| 5(a)(iii) | <p>What are the disadvantages for workers in the informal sector?</p> <p>Low or very low wages / irregular Cannot break out of Cycle of Poverty Lack of job security / not permanent Exposure to work-related risks or e.g.* No health, disability, unemployment or life insurance Uncertain legal status Few rights or benefits Lack of organisation Work long hours No pensions Child labour</p> <p>Emphasis on people not the economy = 0 A wasteful use of human resources Poor productivity Pay no taxes Insurance (on own, needs to be type of)</p> <p>*exposed to hazards, street crime, violence, drugs, sexual abuse, toxic fumes and substances, lack of adequate safety protection, carry heavy loads</p> | 3 | | | | | | | | |
| 5(b)(i) | <p>Use data from Fig. 5.2 to describe the change in the percentage of the population earning less than \$3.20 a day from 1990 to 2020.</p> <p>Declined / decreased / gone down / fewer earning less than \$3.20 per day <u>from 80% to 42.5%</u> [can be any two dates] <u>by</u> 37.5%</p> <p>Amount / rate of decrease has increased / 12%, 12.5%, 13%</p> <p>Only credit decrease once MAX 1 data from ... to ...</p> <table> <tbody> <tr> <td>1990</td> <td>80%</td> </tr> <tr> <td>2000</td> <td>68%</td> </tr> <tr> <td>2010</td> <td>55.5%</td> </tr> <tr> <td>2020</td> <td>42.5%</td> </tr> </tbody> </table> <p>Must have %</p> | 1990 | 80% | 2000 | 68% | 2010 | 55.5% | 2020 | 42.5% | 3 |
| 1990 | 80% | | | | | | | | | |
| 2000 | 68% | | | | | | | | | |
| 2010 | 55.5% | | | | | | | | | |
| 2020 | 42.5% | | | | | | | | | |

| Question | Answer | Marks |
|-----------|--|-------|
| 5(b)(ii) | <p>Explain how micro-credit helps people escape poverty in Bangladesh.</p> <p>Micro-credit gives people in poverty direct access to credit It empowers people in poverty to take direct control of their lives Helps people in rural areas Empowerment of women</p> <p>NGOs e.g. Grameen Bank, BRAC, ASA Lend <u>small</u> amounts of money To the poorest people / to poor people With no collateral At high repayment rates To enable them to set up (small) business activities Such as raising chickens / goats / buying a rickshaw / sewing machine, etc.</p> <p>Instead of lending to an individual, they lend to a group of people who collectively guarantee the loan to each individual</p> <p>On condition that if one person in the group fails to repay a loan, no-one else in the group will get a loan</p> <p>Group has a collective interest in making sure that each individual repays their loans on time</p> <p>Allow development = 0 Low interest rate</p> <p>Allow explanations of how micro-credit works</p> | 4 |
| 5(c)(i) | <p>Complete Fig. 5.3 by plotting the following <u>push factors</u> data:</p> <p>14% financial reasons 11% lack of social status 2% no hope</p> <p>2 marks for correct plotting 1 mark for accurate shading</p> | 3 |
| 5(c)(ii) | <p>What is the difference between push and pull factors?</p> <p>Push factors encourage / incite / force people to leave their home / country of origin, pull factors attract / draw people to a new destination</p> <p>= 0 Examples, e.g. jobs, poverty</p> | 1 |
| 5(c)(iii) | <p>Which is the most important <u>pull factor</u> shown in Fig. 5.3?</p> <p>Family and friends abroad</p> | 1 |

| Question | Answer | Marks |
|----------|---|-------|
| 5(d)(i) | <p>'The Bangladesh Government has prioritised international migration from Bangladesh to other countries as a development strategy.'</p> <p>Give <u>one</u> argument in favour of international migration as a development strategy.</p> <p><u>Arguments in favour of international migration</u></p> <p>International migration reduces employment pressure in Bangladesh Unemployed and underemployed Bangladeshis can earn higher incomes abroad, even for unskilled jobs Most migrant workers from Bangladesh are unskilled workers Most migrant workers from Bangladesh are from very poor rural families Money sent home / remittances Remittances sustain many poor families in rural areas Remittances bring in much needed foreign exchange Foreign exchange / remittances allow Bangladesh to pay for imports of machinery or raw materials Returning migrants have skills / make significant contributions to the Bangladesh economy</p> <p>Can reduce population Less pressure on resources DEV = points related to food, education, medical, etc.</p> <p>TV Poverty will be reduced – why Political stability Remittances will develop the economy – need what they do</p> <p>Learn new skills only credit if migrants returning with these skills</p> <p>= 0 GDP as remittances are GNP</p> | 1 |
| 5(d)(ii) | <p>Give <u>one</u> argument against international migration as a development strategy.</p> <p><u>Arguments against international migration</u></p> <p>Loss of talent / departure of skilled / professional people e.g. doctors, engineers, and other skilled professionals already in short supply Little evidence that the families in Bangladesh make use of the remittances to go into sustainable business activities Most remittances are used for consumption or buying land, which does not directly improve the output of the Bangladeshi economy Most Bangladeshis working overseas are male</p> | 1 |

| Question | Answer | Marks |
|-----------|--|-------|
| 5(d)(iii) | <p>How far do you agree that international migration can help to develop Bangladesh? Give reasons for your answer.</p> <p>No marks for stating how far you agree, only for giving reasons.</p> <p>Accept answers that give support to both points of view.</p> <p>Points can be taken from those in (i) and (ii) and developed further.</p> | 3 |