

UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
International General Certificate of Secondary Education

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0448 PAKISTAN STUDIES

0448/42

Paper 42

Due to a security breach we required all candidates in Pakistan who sat the paper for 0448/02 to attend a re-sit examination in June 2013. Candidates outside of Pakistan sat only the original paper and were not involved in a re-sit.



UNIVERSITY of CAMBRIDGE
International Examinations

MARK SCHEME for the May/June 2013 series

0448 PAKISTAN STUDIES

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Paper 4 (Environment of Pakistan), maximum raw mark 75

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

Cambridge will not enter into discussions about these mark schemes.

Cambridge is publishing the mark schemes for the May/June 2013 series for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level components and some Ordinary Level components.

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1 (a) Study Fig. 1, which shows the climate of Quetta.

(i) Describe the annual distribution of rainfall at Quetta.

winter maximum
 most from December to April
 second max in July and August
 none in September [3]

(ii) State two causes of rainfall at Quetta and name the months when each occurs.

western depressions December to April
 monsoon July and August [4]

(iii) What are the maximum and minimum temperatures at Quetta, and when do they occur?

maximum 28 °C July
 minimum 4 °C January [2]

(iv) Give two reasons why temperatures are higher in the summer than in the winter at Quetta.

Sun higher in the sky / higher angle of insolation
 Longer hours of daylight
 Less cloud [2]

(b) Explain how underdevelopment and disease can be made worse by water shortages.

underdevelopment (res. 2)
 effect on agriculture, livestock, industrial production

disease (res. 2)
 lack of cleanliness, sanitation and other hygiene, risk of water-borne disease, malnutrition [6]

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(c) (i) Name two types of infrastructure other than water supply.

roads, railway, electricity, gas pipes, telecommunications, buildings [2]

(ii) For each of the types of infrastructure named in (c)(i), consider the advantages and problems of improving it in Balochistan.

Advantages

Development of resources
 Industrialisation
 Employment
 Trade
 Higher living standards
 Better education
 Allow development

Disadvantages

Remoteness
 Low density of population
 Large area
 Allow development

[6]

[Total: 25]

2 Study Fig. 2, which shows a map on the coast of Pakistan.

(a) (i) Name on the map, two of the ports shown.

Any 2 correctly located from
 Jiwani, Gwadar, Pasni, Ormara, Karachi (or Port Qasim) – from west to east [2]

(ii) Name two types of fish caught in the sea near Pakistan.

shark, croaker, skate, drum, cat fish, rays, sardine (must be marine fish) [2]

(b) Study Fig. 3, which shows the contribution to Gross National Product (GNP) of the fishing industry in Pakistan.

(i) What was the contribution to GNP of the fishing industry in 2010?

56 million rupees [1]

(ii) By how much has this figure increased since 2006?

38.5 million rupees [1]

(iii) What is meant by 'over-fishing'? Why does it occur?

over-fishing is when more fish are caught than replaced naturally
 too many fish caught
 small fish caught
 too young to breed
 caught in breeding season [3]

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(c) Study Fig. 4, which shows the main districts for fish farming in Pakistan.

(i) Describe the distribution of fish farming in Pakistan.

KPK (NWFP) by rivers from mountains / in foothills
 Swat, Chitral, Dir, Malakand, Manshera, FATA
 also Dera Ismael Khan, Kohat, Mardan, Swabi, Abbottabad
 Punjab – in irrigated areas or where rainfall is sufficient
 Sheikhpura, Gujranwala, Attock
 Sindh – on the Indus foodplain
 Thatta, Badin, Dadu

[3]

(ii) Describe how fish are reared on a fish farm.

clean water
 fed
 health care
 separated according to size etc.
 removed when big enough to sell

[4]

(d) Give an example of primary, secondary and tertiary employment in the fishing industry.

fisherman / worker on a fish farm
 factory worker / canner / freezer
 lorry driver / office worker

[3]

(e) What are the benefits and problems of developing either marine fishing or inland fish farming in Pakistan?

Candidates must choose either marine fishing or fish farming

Advantages

more food
 more work
 higher incomes
 more infrastructure
 more exports (named)
 reasons for sustainability

Disadvantages

Old methods / lack of investment
 Poor infrastructure
 Lack of education / skills
 Overfishing
 Reasons for unsustainability
 Named pollution
 Danger of marine fishing

[6]

[Total: 25]

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3 (a) Study Fig. 5, which shows the climate of Multan.

(i) In which months is the temperature above 25°C?

April–October [1]

(ii) What is the maximum rainfall and when does it occur?

61 mm July [1]

(iii) Cotton is the major cash crop grown in Pakistan. Label on Fig. 5:
 – the month of sowing
 – the months of growth
 – the month of harvest

- A April and/or May
- B all months between A and C
- C October and/or November [3]

(iv) Explain why the months you have marked for growth have the best climatic conditions for cotton.

Temperature above 25 °C
 Mild night temperatures / no frost
 Less rain for harvest
 1000 mm rainfall [4]

(b) Study Fig. 6, which shows the amount of cotton produced and the area used for this in Pakistan.

(i) What was the highest annual production, and in which year did it occur?

Production 14 million bales
 Year 2006 [1]

(ii) Compare the change in cotton production with the change in area of land used between 2000 and 2010.

Production varies more
 Area changes by 0.4 m.ha, production by 5.5 m bales
 More detail
 Other comparative figures / averages etc. [3]

(c) How can the government help farmers to grow more cotton?

education
 training
 advertising
 cheap loans
 machinery on lease
 co-operatives
 land consolidation [6]

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(d) To what extent can the development of cottage and small-scale industries improve family incomes in Pakistan?

IN FAVOUR
 employment
 for women
 local demand
 international demand
 reduces migration
 local raw materials
 can use waste materials, e.g. rubber, rope
 low set-up costs / investment

BUT
 Poor quality
 Child labour
 Lack of infrastructure etc.

[6]

[Total: 25]

4 (a) (i) State what is meant by 'renewable energy' and give an example.

does not run out,
 e.g. wind, solar, HEP, wave etc.

[2]

(ii) Name a fossil fuel, and explain why it is non-renewable.

coal, oil, natural gas
 formed millions of years ago, taken out of ground

[2]

(iii) Explain how fossil fuels cause
 – air pollution
 – land pollution

A air pollution
 Create CO₂, smoke, smell
 B land pollution
 Mining, quarrying, oil spills

[2]

(b) Study Fig. 7, which shows gas and oil usage in Pakistan.

(i) State the percentages of gas and oil used for electricity production.

A gas 30
 B oil 40

[2]

(ii) Which user takes 15% of gas?

fertiliser

[1]

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(iii) Which user takes 50% of oil?

transport [1]

(iv) Explain why a larger percentage of gas than oil is used in the home.

cheaper
 more in Pakistan
 transported in pipes
 reaches other areas in cylinders / compressed gas
 less needed for other uses, e.g. transport [3]

(c) Study Fig. 8, which shows the usage of coal mined in Pakistan.

(i) Name the industry A which uses a large amount of coal produced in Pakistan.

brick making [1]

(ii) Why is only a small percentage of coal used for electricity generation?

low quality [1]

(d) Name one type of renewable energy. Explain where the most suitable areas in Pakistan would be for its development.

(NO credit for named type)
 Solar – deserts, sunshine, lack of cloud
 Wind – coast or mountains, stronger winds
 HEP – mountains, deep valleys, more rainfall
 Biomass – e.g. bagasse from sugar cane factory, other farm waste, e.g. straw
 Wave – along coast
 Tidal – along coast [4]

(e) Explain why it is important to supply electricity to rural areas. Consider to what extent it is possible.

Tubewells
 Agricultural machinery / processing, e.g. milling
 Small scale industries
 Standard of living
 Information technology
 Education
 Healthy living
 Potential of renewable sources
 BUT cost of technology, maintenance, need? [6]

[Total: 25]

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5 (a) Study Fig. 9 (insert), which shows the main towns and cities in the Punjab province.

(i) Name the cities A, B, C, and state the size of their population.

A – Lahore 4–6 million
 B – Faisalabad 2–4 million
 C – Multan 1–2 million

[6]

(ii) Describe the distribution of towns and cities with a population of over 50 000.

Mostly in the east / central area
 Where the tributaries are / Chenab, Sutlej, Ravi, Jehlum
 Few in south / near Sindh
 Few in north-west (except Islamabad/Rawalpindi) / near KPK

[3]

(b) Study Fig. 9 again.

(i) Name an area with a population density below 50 persons per square kilometre.

Any area coloured light or mid-green,
 e.g. Chitral, Tharparkar, Balochistan

[1]

(ii) With reference to physical factors only, explain why the area that you have named in (b)(i) has a low population density.

Shortage of rain
 rivers
 Extreme temperatures
 Mountains / plateaux, steep slopes
 Lack of soil / stony / barren

[4]

(c) In the last 50 years there has been a big increase in the proportion of people living in urban areas.

(i) Name two push factors that cause people to migrate from rural to urban areas.

Any two of the following:
 poverty
 unemployment
 hunger
 poor housing
 poor services, e.g. education, health
 poor infrastructure, e.g. roads, electricity
 natural disasters, e.g. floods
 disease
 danger, e.g. tribal unrest, Taliban

[1]

(ii) Explain each of the factors you named in (c)(i).

Explanation of above,
 e.g. poverty because of lack of land, high rents, large families
 unemployed because of mechanisation, lack of skills
 natural disasters, e.g. ref. to floods in 2010, earthquake etc.

[4]

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(iii) Explain two problems experienced by migrants from rural areas when they reach urban areas.

Housing – shortage, expensive, poor standard

Work – shortage, unskilled, lack of contacts

Food – shortage, unhealthy

Health – shortage of clinics/hospitals, poor living standards, overcrowding [6]

[Total: 25]