UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS **GCE Ordinary Level**

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for the guidance of teachers

2059 PAKISTAN STUDIES

2059/02

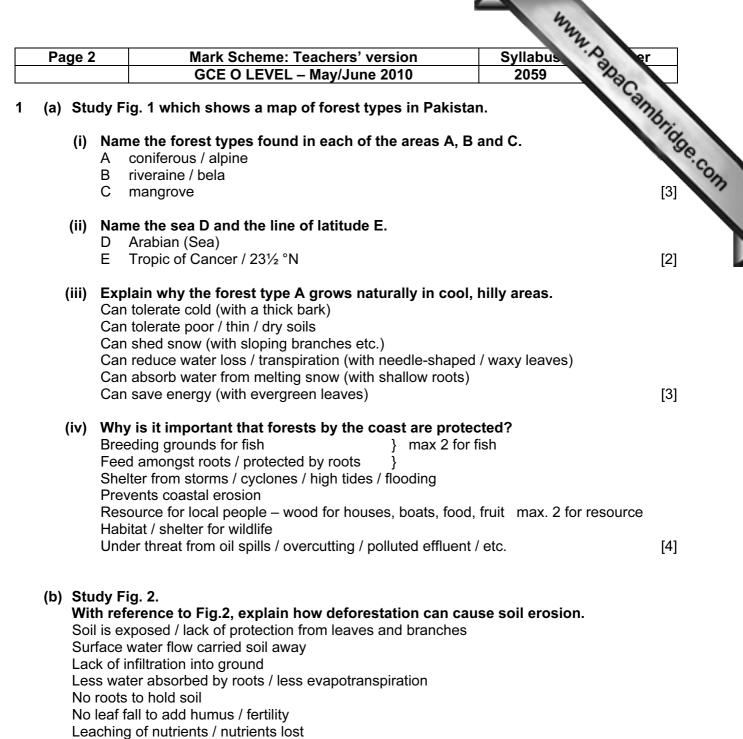
Paper 2 (Environment of Pakistan), maximum raw mark 75

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 must be read in conjunction with the question papers and the report on the examination.

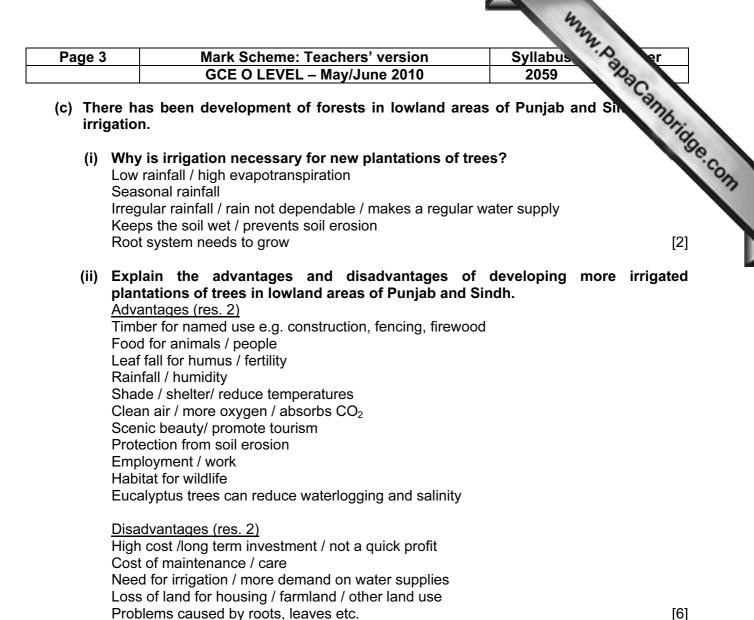
CIE will not enter into discussions or correspondence in connection with these mark schemes.

CIE is publishing the mark schemes for the May/June 2010 question papers for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.



No new plants grow

[5]



[6]

Page 4	Mark Scheme: Teachers' version Syllabus	er
	GCE O LEVEL – May/June 2010 2059	
(a) Stu	dy Fig.3, which shows the areas of cultivation for four main crops in Pakis	amb
(i)	Mark Scheme: Teachers' version Syllabus GCE O LEVEL – May/June 2010 2059 dy Fig.3, which shows the areas of cultivation for four main crops in Pakis Which crop covers the greatest area? Wheat What is the area covered by this crop? 8 450–8500 (000 bectares)	105
(ii)	What is the area covered by this crop? 8,450–8500 (000 hectares)	[1]
(iii)	Name <i>two</i> other food crops grown in Pakistan not shown on the graph. Millet / jawar / bajra / sorghum Pulses / mung / mash / grams / masoor Oil seed Named fruit e.g. banana / apple / apricot / date / mango / almond / grape	
	(apply list rule) Named vegetable e.g. tomato / cabbage / carrot	[2]
(b) (i)	Describe the methods of cultivation of wheat on barani (rain-fed) lands. when the rain falls in winter / October-November seed sown harvested when ripe / after 3–6 months / January–March / 90–120 days ploughing/preparation of soil fertiliser pest control / bird scaring / pesticides weed control / weeding / hoeing allow collection of rainfall in ponds / tanks allow levelling of land / terracing / embankments to conserve water	[5]
(ii)	Explain the advantages and disadvantages to wheat farmers of modern immethods such as perennial canals and tubewells. <u>Advantages (res. 2)</u> Fills rainfall gap / water when needed / reduces dependence on rainfall Can be controlled / steady supply (not in heavy showers) All year round Provides <u>more</u> water / irrigates large lands Increases yield Double cropping possible Needed for HYVs Less labour required Tubewells can lower the water table / reduce water-logging and salinity Disadvantages (res. 2)	igation
	Disadvantages (res. 2) Cost of installation / expensive Problems / cost of maintenance / requires fuel or electricity Shortages / canals may run dry / competition with other users Lack of technology for pumps/wells Lack of electricity / power cuts Causes waterlogging and salinity + explanation (can go to 2 marks)	[5]

Page 5	Mark Scheme: Teachers' version	Syllabus er
	GCE O LEVEL – May/June 2010	Syllabus 2059 Babac
(c) Waste products from food crops such as straw fro cane have some uses. Explain the importance of w may refer to those crops shown in Fig. 3 or others. bagasse for paper / cardboard / packaging bagasse for chipboard, molasses / bagasse for chemical industry straw for bedding / roofing / strawboard animal food composted		ereals and bagasse from the products such as thes

[3]

[3]

(d) Read the extract below.

Etc.

The farming land in barani areas such as the Potwar Plateau is subjected to soil erosion, overgrazing, and desertification due to poor farm management. This leads to low crop productivity, poor quality livestock and low farm incomes.

(i) What reasons does the writer give for the low farm incomes in barani areas? soil erosion, over grazing, desertification

(ii) Explain these, and other causes of low farm incomes.

Cheaper than fossil fuels etc. / electricity

Explanation of those reasons stated in (i). This may include those given in the last sentence of the extract.

E.g. Soil erosion means poor root growth and small crop output Overgrazing means lack of food for animals and soil erosion / desertification Desertification causes climatic change and a lack of water Low crop productivity means low incomes leading to less money for better seed, fertiliser etc.

Poor quality livestock produces less milk, meat etc.

Little money to spend on better seed, fertiliser etc. because of low farm incomes

Also candidates may be given marks for explaining Traditional farming methods give low yields Small farms so little mechanisation Oppressive landlords (Zamindari) so high rents, no chance of improvement Poor climate so difficult to grow good crops Storms and flooding / pest attacks (e.g. locusts, weevils) destroy crops Illiteracy / lack of education so no improvements Rural – urban migration so able-bodied men leave Waterlogging and salinity reduces cultivable area / yield Lack of government support / investment

[5]

	age 6		Syllabus S	er
		GCE O LEVEL – May/June 2010	2059 2030	
(a)	(i)	Name <i>three</i> ways by which coal is mined.	Syllabus 2059 ality?	2
(4)	(')	Shaft, adit / drift, open cast		1000
				19
	(ii)	Why is coal produced in Pakistan described as low qua	ality?	
		Lignite Low burning temperature / produces less energy		
		Low carbon content / more impurities / more smoke		
		High ash content		
		High sulphur content		[3]
(b)		dy Photograph A (Insert 1), which shows a brickwor		istan
		teau. Describe the main features of the brickworks sho	wn in the photograph.	
		nace / Kilns mney(s)		
		<u>ck</u> smoke / pollution		
		intakes below ground		
		rd /flat working area		
		es of finished bricks		
		tern of small hummocks <u>od</u> / Pucca road / tarred road / highway		
		ctricity pylon/ Telephone poles / lines		
		ulds		
	Un	derground entrance		[4]
	Un	derground entrance		[4]
(c)		derground entrance dy Fig. 4, which shows the location of Pipri steelworks.		[4]
(c)	Stu	dy Fig. 4, which shows the location of Pipri steelworks.		[4]
(c)		dy Fig. 4, which shows the location of Pipri steelworks. Name <i>three</i> raw materials used in production of steel.		[4]
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Page 7	Mark Scheme: Teachers' version	Syllabus	er er
	GCE O LEVEL – May/June 2010	2059	Da

(d) Read the extract below.

Cambridge.com Imports of steel increased by 37% from 2004 to 2005 as a growing amo machinery and industrial steel products flowed in. This is more than any govern predictions.

Explain the advantages and disadvantages of increasing steel production in Pakistan Advantages (res. 2)

Cheaper supplies (than imports)

Saves foreign currency / improves balance of payments / reduce imports Can be used for development / industrialisation e.g. construction, machinery

(max 2 examples of use)

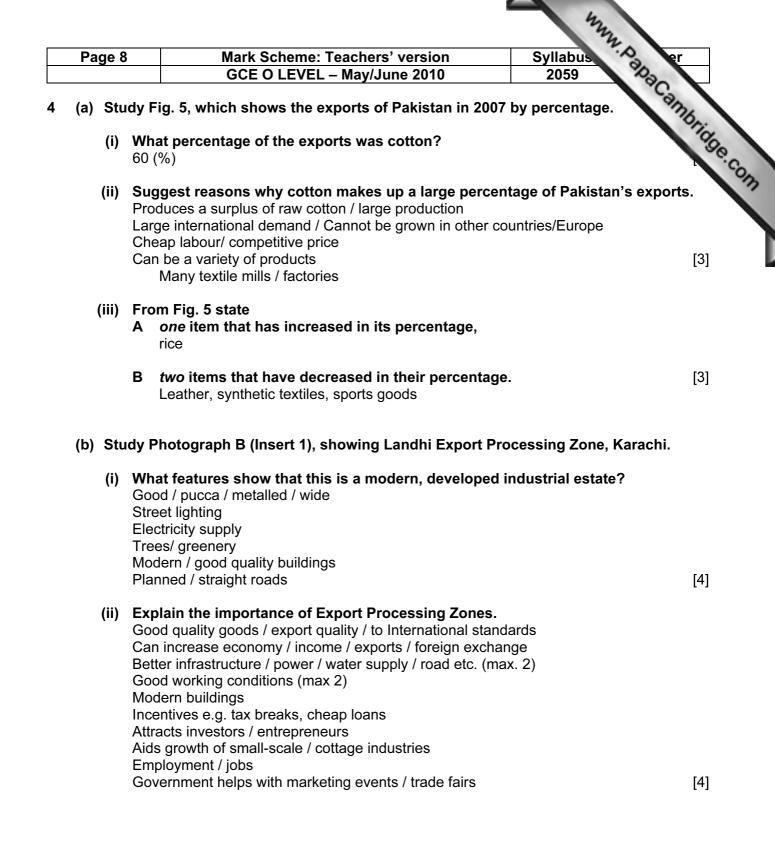
Larger GNP / GDP / national income Independence from other countries

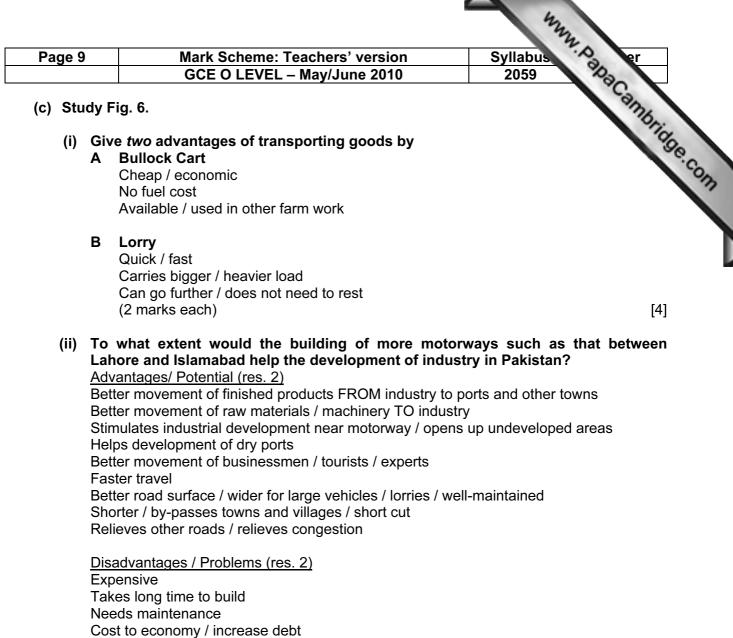
More work / employment

Disadvantages

Lack of raw materials/imported High cost of imported iron / other raw materials Burden on economy / less development Cost / Lack of machinery / technology / set-up costs Cost / Lack of infrastructure / power supplies / roads etc. Lack of skilled labour More waste / named pollution (max 2.) May encourage rural-urban migration

Accept 'increases balance of payments' if opposite not given in advantages [6]





Only connects large centres

Will not go to many small towns / rural areas / anywhere

Not only motorways help development / other factors influence industrial development [6]

Га	ge 1	0 Mark Scheme: Teachers' version Syllabus	· A er
	-	GCE O LEVEL – May/June 2010 2059	No.
(a)	Stu	idy Fig. 7. The desert climate of Nok Kundi.	re and ra
	(i)	With reference to Fig. 7 describe the yearly distribution of temperature	re and rai
		in a desert climate.	
		Res. 1 mark each for temperature and rainfall	
		<u>Temperature</u>	
		Rises to max. in June / July	
		Falls to min. in December / January	
		Rainfall	
		Wetter in winter than summer / reverse	
		Decreases Jan – May	
		Variable May – November	
		Increases in December	
		<u>Figures</u>	
		Allow up to 2 marks for correct figure or range of figures with month(s) from	<u>n graph</u> [5]
	(ii)	Explain how the climate of desert areas affects agricultural a	
	· ·	Explain non the omnate of accort arous anotic agricultural a	nd industrial
		development.	nd industrial
		•	nd industrial
		development.	nd industrial
		development. Agriculture (res. 1)	nd industrial
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(ii)	Which age group is the largest percentage? 10–14 years	[1]
(iii)	What is the percentage of people over 60 years old? 7 / 6.5–7.5 %	[1]
(iv)	Which age groups are called 'the dependent population'? under 15	

over 60 years old (accept other old ages e.g. 65)

[2]

		2.
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(c) Study Fig. 8 again.

- Cambridge.com (i) How is the shape of the population pyramid likely to change from 2006 to 2020 Narrow base / shorter bars / fewer children under 15 years / young dependants / few young children Wider middle / longer bars / more 15-59 years / more working population / more independents Wider top / longer bars / more over 60s / more old dependants / more old people [3]
- (ii) The changing shape of the population pyramid affects Pakistan's workforce both now, and for the future. Explain the advantages and disadvantages of the changes.

Advantages (res.2) fewer children to look after / more money for development more workers for developing the country / less burden on the economy more young workers / more energetic / innovative young more likely to be educated / more room in schools more old to give advice to young

Disadvantages (res. 2) more old to look after more unemployment due to larger workforce loss of educated / skilled workers through emigration more taxes needed to support older people examples of needs of old e.g. health care, pensions, care homes

[6]