

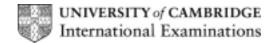
UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS International General Certificate of Secondary Education

0448 PAKISTAN STUDIES

0448/02

Paper 2

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.





CAMBRIDGE INTERNATIONAL EXAMINATIONS International General Certificate of Secondary Education

MARK SCHEME for the May/June 2013 series

0448 PAKISTAN STUDIES

0448/02

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 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.

	2	Mark Scheme		Syllabus	N.
		IGCSE – May/June 201	3	0448	
(a) (i)	For each of it falls.	f the following cities state th	ne maximum	Syllabus 0448 rainfall and the month	mbrio
	Peshawar	68/69mm, August			3
	Lahore	201/202 mm, July			
	Murree	340 mm, July			[3]
(ii)	Compare th monsoon s	he amount and pattern of rai	infall in Laho		
	Lahore more rain/hi	igher maximum			
	increase the				
		imum/max in July			
	tails off more	-			
	comparative	e figures (other than those fror	m (i))		
	<u>Peshawar</u>				
	Credit comp	parison of above			[3]
(iii)	Explain how	w the monsoon winds bring	rainfall to no	orthern Pakistan.	
	from the sea	a/Bay of Bengal/Indian Ocean			
		es the moisture content			
	rise over lan	าป			
	air cools				
	condensatio	าท			[4]
(iv)	Suggest <u>tw</u>	<u>/o</u> reasons why Murree has a	a higher rain [.]	fall than Lahore and Pesha	awar.
	higher altitud	de/mountainous			
	more thunde				
	more wester	rn depressions			
	windward slo				
	more vegeta				[2]
	Circle three	e of the phrases below that o	describe a se	emi-arid climate.	
(b) (i)		-			
(b) (i)		OTRANSPIRATION			
(b) (i)	HIGH EVAP				

Page 3	Mark Scheme	Syllabus Syllabus
	IGCSE – May/June 2013	Syllabus 0448
	low rainfall.	vegetation show that this is an area

<u>Vegetation (res. 1)</u> scattered, e.g. sparce/scanty lack of greenery/pale brown/not green low bushes/shrubs/scrub/not tall adaptations seen in photograph, e.g. thorns/thin leaves etc.

[4]

(c) Explain the benefits and problems of high rainfall on <u>either</u> farming <u>or</u> road travel.

FARMING

Benefits (res. 2): increased water supply/less need for irrigation alluvium from floods reduces salinity better plant growth higher yield/income benefit to animals

Problems (res. 2):

flooding waterlogging water is not absorbed soil erosion/gullying leaching risk of pests/disease damage at harvest, e.g. cotton, wheat intensity can damage plant loss of income (do not credit twice)

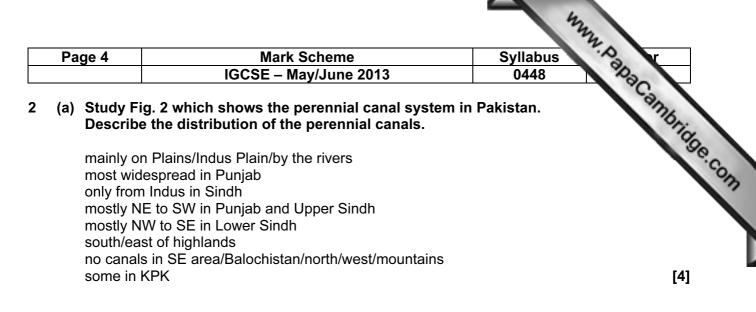
ROAD TRAVEL

Benefits (res. 2): lays the dust water to cool engine

Problems (res. 2):

flooding blocks roads/restricts access washes away surface destroys bridges danger of lightning danger to driving, e.g. slippery

[6]



(b) Name <u>three</u> types of irrigation, other than perennial canals, used in Pakistan. Explain briefly how each type works.

Allow one mark for a brief description and the second mark for more detail inundation canals from rivers + details tubewells from groundwater + details Karez from foothills + details others including ponds, tanks, charsa, shaduf and modern methods, e.g. sprinkler, tanker [6]

(c) Explain how a perennial supply of water can damage farmland.

too much water/waterlogging watertable rises evaporates causes salinity/salts accumulate on surface/surface crust

[4]

(d) Study Fig. 3 which shows the main users of water in the Punjab. Name <u>two</u> conflicting users of water supplies in the Punjab shown on Fig. 3. Explain briefly why each user thinks that they should have more water.

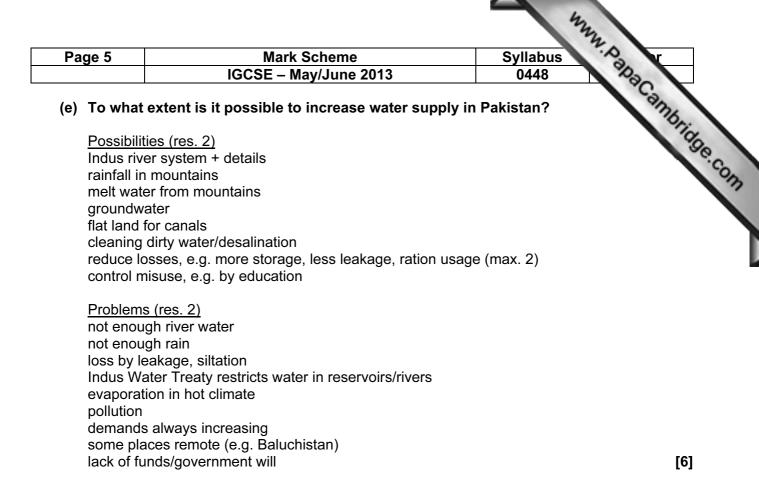
2 conflicting users (one mark), e.g. farmer, industrialist, home-owner, power industry

Reasons for wanting more water (two marks each)

e.g. farmer wants it for higher yields – more food for growing population, income for himself, irrigation, example of high usage, e.g. rice and sugarcane.

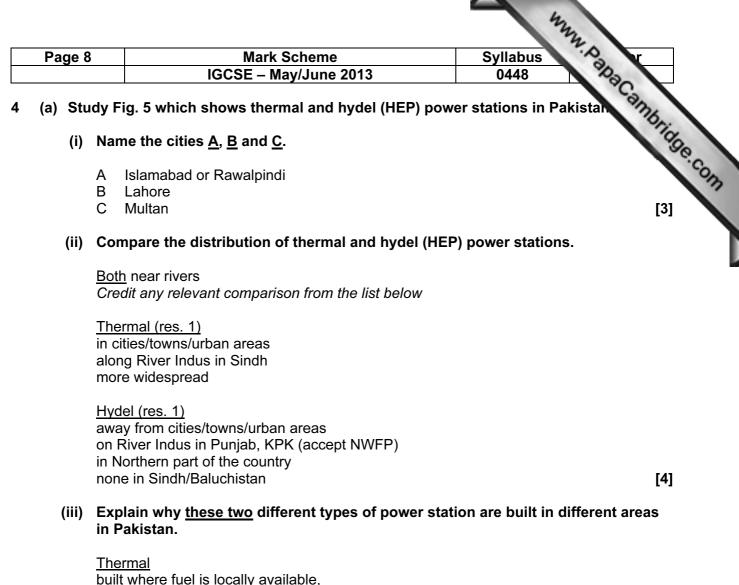
e.g. industrialist wants it for bigger/better output – increase trade, exports, income for himself, example of high usage, e.g. drinks, chemicals.

e.g. home owner wants it for domestic use – better hygiene, food preparation, healthy living, example of high usage, e.g. washing, drinking. [5]



				444	
	Page 6			Mark Scheme Syllabus	
\vdash				IGCSE – May/June 2013 0448	
3	Study Pho		'hotc	ographs B, C and D (Insert)	76.
	(a) (i) Na		Nam	ne the crops shown in each photograph and give a use of each within Pakh	1990
			B ric C co	Mark Scheme Syllabus IGCSE – May/June 2013 0448 ographs B, C and D (Insert) 0448 me the crops shown in each photograph and give a use of each within Pakk e mark for correct name + use ce – for food otton – for cloth, seeds for oil ugar cane – for food, allow by products	[3]
	((ii)	With	h reference to <u>one</u> of the crops named in <u>(a)(i)</u> explain the meaning of cash p farming.	L~.
			grow use	<u>mark for repeating the name of a crop</u> wing a crop for sale (res. 1) of good quality inputs, fertiliser, HYV/GM seed, modern machinery	[2]
	(b)			ce the following processes in the correct order WING SEEDS, PLOUGHING, HARVEST, WEEDING	
			plou	ughing, sowing seeds, weeding, harvest	[1]
	(h reference to your answer to <u>(b)(i)</u> explain how rice is grown on small-scale ns in Pakistan.	•
			anim seec trans care	nual labour/little machinery/hand tools (max. 2) nal/draft power ds planted in nurseries splanted into flooded fields e during growth – weeds, pests, maintaining water levels etc. (max. 3) er drained before harvest	[6]
	(c)	Stu	dv F	ig. 4 which shows sugar cane production in Pakistan.	
			2	at was the highest annual production, and in which year did it occur?	
			Proc	duction – 64 <u>million tonnes.</u> Year – 2008	[2]
	(ii) By how much			how much did production decrease between 2008 and 2010?	
			15 <u>n</u>	<u>million tonnes</u>	[1]
	(ii	-		plain why the production of agricultural crops varies from year to year.	
			rainf e.g. irriga high pest qual	peratures vary fall varies, floods, drought, extreme events ation water may be short n winds ts/disease/virus lity of inputs depends on last year's profit nan factors, e.g. sickness	
				nges in government policies	[4]
			char	nges in government policies	[4]

Page 7	Mark Scheme	Syllabus Syllabus
	IGCSE – May/June 2013	0448
distribu	extent could the improvement of road, rail tion of food supplies in Pakistan?	Syllabus 0448 il and air transport improve
general	<u>ments (res. 2)</u> comments, e.g. quicker, further, use for emerg	rgencies (max. 2)
	for perishable food for bulky goods	
	es everywhere, door-to-door	
Problem	<u>s (res. 2)</u>	
	nsive	
air expei		
roads co		



built where fuel is locally available, e.g. coal at Quetta, Potwar plateau oil/gas at Sui, N Punjab oil/coal imported at Karachi near demand in cities/towns

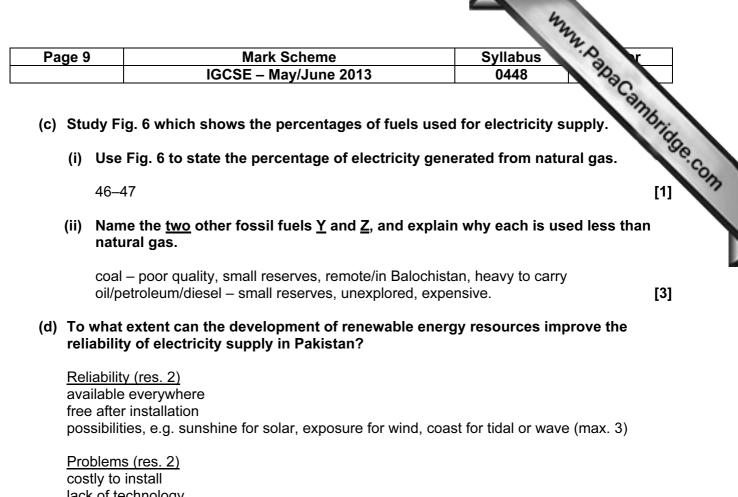
<u>Hydel</u> needs large volume of water in river high rainfall deep/steep-sided valley only available in North/in mountains

(b) Explain why the supply of electricity is not reliable in many parts of Pakistan.

shortage due to lack of oil, gas, coal less water in reservoirs due to silting, less melting of glaciers damage to grid/transmission long transmission lines theft poor maintenance/old machinery/breakdowns demand exceeds supply/increasing demands/load shedding lack of investment in new power stations/alternative energy

[4]

[4]



costly to install lack of technology lack of skills low output variable output, e.g. wind, sun

[6]

Page 10		Mark Scheme Syllabus IGCSE – May/June 2013 0448 ig. 7 which shows a population pyramid for Pakistan. 0448 at is the age range of the shaded portion of the population? 000000000000000000000000000000000000		
a) Stu) Study Fig. 7 which shows a population pyramid for Pakistan.			
(i)	Wha	at is the age range of the shaded portion of the population?	190	
	65 –	over 75/over 65	[1]	
(ii)	Estii	mate how many people there are in this sector of the population.		
	5 <u>mil</u>	llion	[1]	
(iii)	Why	<i>is this figure likely to increase in the next 20 years?</i>		
	longe bette highe	er death rate er life expectancy er healthcare/pensions etc. er birth rate/more babies being born er infant mortality	[2]	
(iv)	Wha	at pressures will this increase put on the working population?		
	less	er taxes jobs nple of costs, e.g. medical care, pensions, care homes, food	[2]	
(b) (i)	Esti	mate how many children aged under 5 are shown on Fig. 6.		
	19–1	19.8 <u>million</u>	[1]	
(ii)	Expl	lain why the birth rate of Pakistan is very high.		
	lack <u>fema</u> early high religi pride famil	of knowledge of family planning/consequences of a high population of contraception <u>ale</u> illiteracy y marriage infant mortality rate ion/children will be provided for e in large families ly labour/sent out to work re for sons	[4]	
(iii)		lain how better health and education provision can reduce the birth rate in istan.		
	use o unde ema chan	<u>cation</u> of contraception/family planning erstand overpopulation incipation of women/delayed marriage nge of religious views hanised/progressive farming		
	lowe use (<u>Ithcare</u> er infant mortality so fewer births of contraception ess to family planning clinics	[6]	

D 44		MAL MAL
Page 11	Mark Scheme	Syllabus r
	IGCSE – May/June 2013	0448
• •	dy Fig. 8 which shows the calories and grams o in Pakistan. Compare the increase in food calorie intake wit consumption from 1980 to 2010.	oride
	protein increases more	

- (c) Study Fig. 8 which shows the calories and grams of protein consumed per pe day in Pakistan.
 - (i) Compare the increase in food calorie intake with the increase in protein consumption from 1980 to 2010.

protein increases more calories constant/slight increase 2000-2010 comparative figures (protein 61–71 grams, calories 2300–2400 per day) comparison of decades (max. 1)

(ii) The United Nations (UN) has predicted that the population of Pakistan may double from 2010 to 2050.

To what extent can Pakistan increase its food supply for this large population?

Increase by more fertiliser better seed more pesticides irrigation mechanisation more land brought into cultivation more fishing education/professionals/colleges investment/loans more imports foreign aid better transport system linked to better distribution or less food spoilt better storage facilities

Problems lack of money lack of education lack of experts too many people lack of water political problems war etc.

[6]

[2]