UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

GCE Ordinary Level

MARK SCHEME for the October/November 2006 question paper

2059 PAKISTAN STUDIES

2059/02 Paper 2, maximum raw mark 75

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All Examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

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UNIVERSITY of CAMBRIDGE
International Examinations

Question 1

Study Photograph A (Insert) of a rural area in Hyderabad District.

(a) (i) What is this man doing?
Ploughing / cultivating / tilling **[1]**

(ii) Why is the soil at X a different colour from the soil at Y?
it has been ploughed / turned over
it has not dried out **[1]**

(iii) Name three inputs for farming other than soil that can be seen on the photograph.
bullocks/ cattle/cows/oxen (not buffalo)
plough
(manual) labour **[3]**

(iv) Describe <u>three</u> other processes that may be carried out before the crop is harvested.
A short sentence about
Sowing seeds
Fertilising to provide extra nutrients
Weeding to give plants space to grow
Irrigation / watering to provide water
Spraying pesticide to kill insects / virus / weeds etc. **[3]**

(b) (i) What is subsistence farming?
Producing food for ones self / family (that it not for sale) **[1]**

(ii) Name <u>two</u> other animals other than those on photograph A that may be kept by a small-scale subsistence farmer.
Goats
Sheep
Buffalo
Chickens / poultry
Mules
Donkeys **[2]**

(iii) For each of the two animals you have named in (b)(ii), explain how it is important to the farmer and his family.
This depends on the animal chosen, accept any appropriate product, e.g. Skin for leather, eggs for eating, milk for drinking
Milk
Milk products
Eggs
Meat
Nutrition
Skin / hide
Haulage / carrying
Allow sale of excess product / barter
(res. 1 for each animal, repetition max. 1) **[4]**

(c) (i) Why does the output of a small-scale subsistence farm vary from year to year?
Variable rainfall / monsoon / water supply *(flooding max. 1)*
Pests and diseases
Uses own seed / not HYVa
(any line can be developed to 2) **[4]**

(ii) If a farmer has a good crop and can sell some in the market, how may he use the money (capital) he earns to improve his yield (production) for the next year?
Better seed – HYV, GM, disease/pest resistant
Fertiliser – to provide nutrients
Pesticides – to kill insects, viruses etc.
New animals – younger, better breeding
New tools/implements – better/faster work
Repairs – to machinery, irrigation system, storage etc.
Etc.
(any line can be developed to 2) **[4]**

(iii) Give <u>two</u> ways in which a small-scale subsistence farmer can supplement his income.
Carpenter
Blacksmith
Shoe-maker/cobbler
Driver
Etc. **[2]**

Question 2

Study Fig. 1, a map of Pakistan.

(a) (i) name the dam A,
Mangla

(ii) name the river B,
Jhelum

(iii) state the number in degrees East of the line of longitude C,
68

(iv) name the city D,
Sukkur

(v) name the range of hills shaded at E.
Sulaiman **[5]**

(b) Study Photograph B (Insert) showing an area in Hyderabad District damaged by waterlogging and salinity.

(i) Describe the appearance of the area S in Photograph B.
bare / no vegetation
cracks / cracked mud
pools of water
saline water
(mineral) salts
white / mustard colour
edged with black / grey **[3]**

(ii) What are perennial canals, and how may they lead to problems such as those in area S?

definition (*res.* 1)
canals that can supply water all year round
from reservoirs / barrages
via link canals

problems (*res.* 1)
too much irrigation water *leading to*
evaporation in hot, dry climate
rise of water table
rise of salts to surface **[4]**

(iii) How can these problems be reduced?

Lined canals to prevent infiltration
Culverts to drain excess water from canals
Surface drains to flush out salt from soil
Tubewells to lower water table
Eucalyptus trees plants to reduce water underground
SCARP - government programme + details *(max* 4)
WAPDA - to carry out projects + details *(max* 4)
(N.B. a good account of WAPDA or SCARP scheme could get 4 *marks)* **[4]**

Read the extract Fig. 2

Pakistan is a water-deficit country. The rainfall is neither sufficient nor regular, and does not meet the growing needs of water. Agriculture is a major user, and good yields depend on the adequate availability of water at the right time. The increasing pressures of population and industrialisation have already placed great demands on water supplies and there are an ever increasing number of local and regional conflicts over water availability and use.

(c) (i) Why do the writers refer to Pakistan as a 'water-deficit country'?

insufficient rainfall
growing needs
(quote of second sentence 2 marks) **[2]**

(ii) Using examples, explain why there are conflicts over water availability and use.

Examples of conflicting users (max 2):
Farming v industry v domestic v food processing v HEP v other
India v Pakistan 1947 – 1960
NWFP and Punjab v Sindh
Development of Kalabagh dam
(1 mark for a pair of conflicting users)

Explanation:
Irrigation for more agriculture
Industrialisation – water for washing, cooling, processing
Hygiene - need to keep clean
Population growth – need for more
Electricity for modem technology
– because there is not enough (max 1)
(1 named user + their need = I mark)
(up to 3 uses can be credited) **[7]**

Question 3

(a) (i) Locate an oil refinery near the coast, and give one reason why it is there.

Refinery:
Karachi / Keamari / Bin Qasim

Reason:
Imported oil
Demand from named area
Oilfields in Southern Sindh (1+1) **[2]**

(ii) Locate an oil refinery in the province of Punjab, and give one reason why it is there.

Either:
Mahmood Kot / PARCO
Pipeline from Karachi / port
Demand from named area / Multan

or:
Attock / Morga
Local oilfield in Potwar plateau
Demand from named area / Islamabad / Rawalpindi **[2]**

b) State <u>two</u> ways in which refined oil can be transported in Pakistan, and give an advantage and disadvantage of each.

<u>Pipeline</u>
Bulk transfer / large quantities
Cheap (after cost of building)

But – only to a few big centres
Costly to build and maintain
Problem of leakage
Only a single product (e.g. Diesel)

<u>Railway</u>
Can go to more places than pipeline
More products can be carried

But – smaller quantities
Expensive
Chance of accidents (NOT explosion)

<u>Tanker / Lorry</u>
Can go anywhere by road
More products can be carried

But – expensive
Heavy / can only carry small amounts
Chance of accidents
Theft 1 + 1 + 1 for each of 2 ways **[6]**

Study Fig. 3 which shows some examples of the four main uses of oil.

(c) (i) Name another by-product A.
wax / synthetic rubber / detergent / pharmaceutical products / furnace oil / etc. **[1]**

(ii) Name the fourth main use of oil B.
fuel **[1]**

(iii) With reference to Fig. 3 and using your own knowledge, explain how oil products are important to <u>either</u> farming <u>or</u> manufacturing.
<u>farming</u>
fuel for machines
fuel for transport
electricity generation – for power
fertiliser – for growth }
pesticides – for healthy growth } raw material
tarmac for better roads / metalled roads
lubricants for machines
etc.

<u>manufacturing</u>
fuel for machines
fuel for transport vehicles
electricity generation – for power / heat / light
fuel for heating
raw material for named product
tarmac for better roads / metalled roads
etc. *(the candidate may choose to link this answer to Fig. 3)*
(credit ONLY farming OR manufacturing, general answer max. 2) **[6]**

(d) (i) Which gas field produces most natural gas in Pakistan?
Sui **[1]**

(ii) Name <u>two</u> industries in Pakistan that use natural gas as a raw material.
fertiliser
cement
chemical
(not power) **[2]**

(iii) Why is natural gas an important fuel in Pakistan?
Can reach remote areas in cylinders
Easier to transport than coal
Alternative to oil in vehicles
Used in power stations
Cleaner than oil or coal
Reduces dependence on imported fuels
Shortage of coal and / or oil in Pakistan
Cheaper <u>compared to another named fuel</u> **[4]**

Question 4

Study Fig. 4, a map of the road network in Pakistan in 2002.

(a) (i) Name the cities X, Y and Z.

X Quetta
Y Multan
Z Hyderabad **[3]**

(ii) For each of the roads leading to A and B, state the country to which they are going, and the name of the pass through which it goes.

A to China, through the Khunjerab Pass
B to Afghanistan, through the Khyber Pass 2 + 2 **[4]**

(b) (i) Describe the ways in which the road network of Punjab is different from the road network of Sindh.

Punjab more dense – Sindh less dense
Sindh 'other roads' more dense in S – Punjab all over (none in SE)
More areas in Sindh with few / no roads
More foci – fewer centres / foci
Sindh 2 main roads follow R. Indus then W to Karachi – Punjab spread out
Motorway in Punjab, not Sindh
(credit use of comparative word e.g.. more, less, fewer) **[3]**

(ii) Give reasons for your answer to (b)(i).

ideas linked to the following:
one river in Sindh – 5 in Punjab – roads follow these routes
more desert in Sindh – less habitable
large areas of low population density in Sindh –- less need
fewer major cities in Sindh – less need
ideas linked to industrial development (max 2) **[4]**

(iii) Explain why there are few roads in the area north of the line P-P shown on Fig. 4.

Mountains
Steep slopes
Landslides
Snow
Avalanches
Floods
Ice / snow/ stones damage road surface
Lack of demand **[4]**

(c) What factors hinder the development of air transport in the area north of the line P-P?

Bad weather / snow / ice / fog / heavy rain / floods
Lack of flat land for runways / airports
Lack of good roads to airports
Lack of passengers / freight
Problem of blocked radio signals
(any line can be dev. to 2) **[4]**

(d) Why was the first motorway in Pakistan built between Islamabad and Lahore?

2 large centres of population
passed by other populated areas
to promote growth of industrial estates
large volume of traffic / ease congestion / save other roads
better for lorries / large vehicles
link from Lahore to Karakoram Highway
(answers must relate to motorway, not just roads) **[3]**

Question 5

Study Fig. 5, which shows types of employment in rural and urban areas.

(a) (i) In which area is the proportion of those employed in the primary sector highest?
Rural **[1]**

(ii) What is the main type of employment in the primary sector in rural areas?
Farming/agriculture **[1]**

(iii) Why is this type of employment probably under estimated?
Family labour / disguised unemployment **[1]**

(b) Why is there unemployment and underemployment in rural and urban areas?
(res. 1 each for rural and urban areas)
Mechanisation of farming
Lack of skills for work
Lack of jobs
Seasonal employment e.g. sugar cane factories
Lack of jobs for women
Poor health, nutrition, medical care for sick and injured
Computerisation in offices
(any line max 2) **[5]**

(c) Why is the sector of tertiary employment likely to increase more in urban areas than in rurual areas?
Ideas such as:
Rural – urban migration
Increase in literacy / more jobs for the educated
Growth of services / more demand in cities
Economic prosperity / people have more money to spend
More transport / shops / offices (named jobs to max 1 without any explanation)
Growth of informal sector / pavement services
Etc.
(any line max. 2) **[6]**

(d) (i) Name a city in Pakistan where sports goods are manufactured.
Sialkot or Lahore **[1]**

(ii) How may the presence of the sports industry in this area

A increase employment opportunities?
Labour intensive
Work contracted out to small scale and cottage industries
Growth of administrative jobs
Growth of transport jobs
Growth of tertiary industries with increased prosperity
Dry port (related to employment)
EPZ

B improve the local infrastructure?
Power / electricity supply
Roads / railway
Airport
Better water supply
Telecommunications (up to 2 examples explained)
Dry port (related to infrastructure

Example to illustrate A or B (max 1)- not reserved
(reserve 1 mark for each of A and B, float of 3) **[5]**

(e) How does industry in cities pollute the environment?

Ideas such as:
Effluent in river – effect on fishing, drinking water, irrigation
Effluent in sea water – effect on fishing e.g. Indus delta, mangroves
Smoke / gases in the air – health problems, acid rain (global warming etc. max 1)
Traffic 1 congestion in urban areas
Waste from factories and people
Traffic / congestion in urban areas
Loss of scenery by construction
Etc.
Be prepared to take what comes, examples of polluted areas / industries max 2
(Named disease max 2 if different cause) **[5]**