UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

GCE Ordinary Level

MARK SCHEME for the October/November 2008 question paper

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.

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.

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

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CIE is publishing the mark schemes for the October/November 2008 question papers for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.

1   (a)   Study Fig. 1, a map of North West Frontier Province.

   (i)   **Name area A.**
        FATA

   (ii)   **Name the country B.**
        Afghanistan

   (iii)   **Name the river C.**
        Mastuj

   (iv)   **Name the range of mountains D.**
        Safed Koh/Waziristan Hills

   (v)   **Name the major pass through these mountains E.**
        Khyber   [5]

   (b)   Study Fig. 2, a bar chart, showing precipitation for Peshawar.

   (i)   **Describe the precipitation in the months from June to September.**
        increases June – August
        from 8mm to 68mmin
        decreases in Sept
        to 18mm
        max. in August/minimum in June

        one mark each for correct months of increase and decrease
        one mark for correct figure(s)   [3]

   (ii)   **Explain how this precipitation is caused by the monsoon winds in these months.**
        low pressure over Himalayas
        high pressure over the Bay of Bengal
        moist winds (from the E/SE)
        air rises
        cools
        vapour condenses
        droplets form   [3]

   (iii)   **Describe the precipitation in the months from October to April.**
        increases Oct – March   }
        from 10mm to 78mm   }   one mark

        decreases April to May }
        to 27mm   }   one mark

        max in March/Minimum in October
        i.e. one mark for <u>either</u> correct months <u>or</u> figure(s) for each of increase and decrease   [2]

   (iv)   **Which weather systems bring this precipitation?**
        (western) depressions
        convectional storms   [2]

   (v)   **Why does snow fall instead of rain in the winter?**
        low climatic temperatures
        high altitude   [2]

(c) Study the map Fig. 1 again

(i) **The distance in a straight line from Peshawar to Dir is about 135 kilometers. U~~~~~
this knowledge, state how far it is from Peshawar to Chitral in a straight line.**
190 – 210 kms   [1]

(ii) **What would the most suitable form of transport from Peshawar to Chitral be for**

A a rich businessman?
aeroplane/car

B the delivery of gas cylinders?
road, lorry, rail

C the transport of wool and hides?
road, pack animal, lorry, rail   [3]

(iii) **Explain the problems of maintaining infrastructure and communication in these
areas all through the year.**
snow and ice
avalanche
heavy rain
flooding
earthquake
sabotage
accidents
landslides
shortage of machinery/people
inaccessible/isolated

Candidates must explain how the factors affect maintenance.
At least 2 different factors must be explained, but up to 4 factors can be credited at one
mark each
List without explanation = 1   [4]

2 **(a) Study Fig.3, a map of environmental damage in Pakistan.**

(i) **Locate the areas most affected by deforestation.**
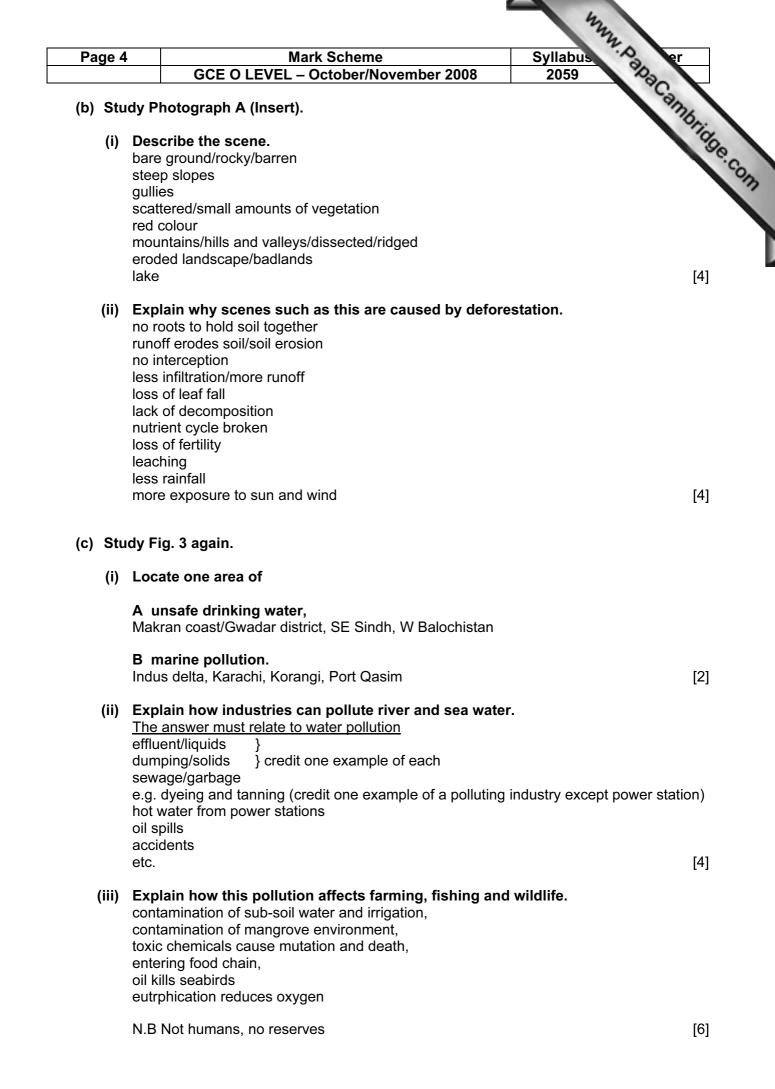NW borders
NWFP
N Balochistan
FATA   [2]

(ii) **State *three* causes of deforestation in these areas.**
firewood
industry
charcoal
road building
housing/construction
mining
dams
farming   [3]

(b) Study Photograph A (Insert).

 (i) Describe the scene.
 bare ground/rocky/barren
 steep slopes
 gullies
 scattered/small amounts of vegetation
 red colour
 mountains/hills and valleys/dissected/ridged
 eroded landscape/badlands
 lake [4]

 (ii) Explain why scenes such as this are caused by deforestation.
 no roots to hold soil together
 runoff erodes soil/soil erosion
 no interception
 less infiltration/more runoff
 loss of leaf fall
 lack of decomposition
 nutrient cycle broken
 loss of fertility
 leaching
 less rainfall
 more exposure to sun and wind [4]

(c) Study Fig. 3 again.

 (i) Locate one area of

 A unsafe drinking water,
 Makran coast/Gwadar district, SE Sindh, W Balochistan

 B marine pollution.
 Indus delta, Karachi, Korangi, Port Qasim [2]

 (ii) Explain how industries can pollute river and sea water.
 The answer must relate to water pollution
 effluent/liquids   }
 dumping/solids   } credit one example of each
 sewage/garbage
 e.g. dyeing and tanning (credit one example of a polluting industry except power station)
 hot water from power stations
 oil spills
 accidents
 etc. [4]

 (iii) Explain how this pollution affects farming, fishing and wildlife.
 contamination of sub-soil water and irrigation,
 contamination of mangrove environment,
 toxic chemicals cause mutation and death,
 entering food chain,
 oil kills seabirds
 eutrphication reduces oxygen

 N.B Not humans, no reserves [6]

3 (a) Study Fig. 4, a bar chart showing the percentage of urban population in Pa... province.

   (i) **Which province has the highest percentage of urban population?**
        Sindh   [1]

   (ii) **Name *two* cities in this province.**
         Karachi, Hyderabad, etc. (2 cities for 1 mark only)   [1]

   (iii) **Explain the *pull* factors that attract people from rural areas.**
          more jobs for the unemployed   {
          better pay/more skilled for the educated   { jobs max. 2
          expectation of better quality of life compared to rural areas
          reliable food supply for nutrition, health
          entertainment/bright lights not in rural areas with example
          clean water and sanitation for health
          better education from more schools
          better medical facilities in modern hospitals

          List = 1   [5]

   (b) (i) **Why do many people who move to cities have difficulty in finding a job?**
             illiterate,
             untrained/mismatch of labour
             lack of jobs,
             too many people
             no relatives to help   [3]

        (ii) **What is meant by the phrase 'the informal sector of employment'?**
              self-employed,
              little machinery
              poor wages/no regular wages
              temporary/seasonal work
              no legal protection/low standards/not government registered
              no tax paid
              irregular working hours   [3].

        (iii) **Using examples, explain the advantages *and* disadvantages of informal employment to people living in cities.**
               THE POOR PEOPLE OF THE CITY
               Reserve one mark for an example of a job.

               Advantages (res. 1)
               money
               something to do
               needed by other people
               to gain respect/religeon expects them to work
               need not be educated/skilled

               Disadvantages (res. 1)
               low paid
               child labour
               demeaning
               dangerous
               illegal/not registered
               temporary/seasonal   [5]

OR CANDIDATES MAY TAKE ANOTHER APPROACH – THE OTHER RESIDENTS

Advantages
cheaper/can bargain
doorstep service/delivery
'open all hours'

Disadvantages
unskilled work/poor quality
poor quality goods (goods may be illegal, past sell-by date)
no guarantees or return of goods
dubious supply (may be stolen)   [5]

(c) Study Fig. 4 again.

   (i) Which province has the lowest percentage of urban population?
   NWFP   [1]

   (ii) Name the largest city in this province.
   Peshawar   [1]

   (iii) Explain why there is less urban development in this province.
   mountainous land
   distance from Indus Plain
   cold/harsh/unpleasant climate
   poor infrastructure e.g. roads, power, telecommunications etc (max. 2)
   poor services e.g. schools, hospitals, water, etc. (max. 2)
   lack of industrial/business development
   less government investment/government interest/neglect of area
   problem of terrorism/border control/etc
   isolated in winter/by poor roads/lack of trade (max 2)
   influence of landlords/tribes   [5]

4   Study Fig. 5, a pie chart showing rice production in Pakistan by province.

   (a) (i) Name the provinces A and B where most rice is grown.
   Punjab and Sindh   [1]

   (ii) What percentage of total rice production comes from these two provinces?
   88% or 89% OR
   46% A and 43% B   [1]

   (iii) Name a variety that has doubled rice production.
   Irripak/IR8   [1]

(b) (i) Explain why the cultivation of rice is labour intensive. Refer in your ans
work done from planting the seeds to harvest.

Each of these needs a phrase as below
nursery for seeds
repairing bunds for water
prepare fields by plouging/weeding
flooding/irrigation
transplanting seedlings
fertiliser for nutrients/good growth
pesticid to kill pests/for better growth
drain water
cutting/harvesting ripe crop [5]

(ii) Name a type of machine that can be used for rice cultivation instead of human
labour.

tractor, harvester, mechanical irrigator (not thresher for cultivation) [1]

(iii) What are the advantages *and* disadvantages of using this machine?

Credit answer in full even if **(ii)** is incorrect.

Advantages (res.1)
quicker
more efficient/less tiring
learn mechanical skills
needs less labour

Disadvantages (res.1)
expensive (max. 1)
can break down
cause unemployment
needs larger fields
causes compaction
needs skilled workers
cannot be used on a small farm [4]

(c) Study the list below:

SOIL	FERTILISER	RAIN	IRRIGATION	SEEDS
SUNSHINE	PESTICIDES	DRAINAGE	KNOWLEDGE	

(i) Choose *two physical* inputs from the list above. Explain how these can increase
rice yields.

soil – best clay/clay and loam, provides nutrients, needs water retention, can be drained
rain – needs a minimum of 1270mms, preferably 2000mms, at the correct time of year,
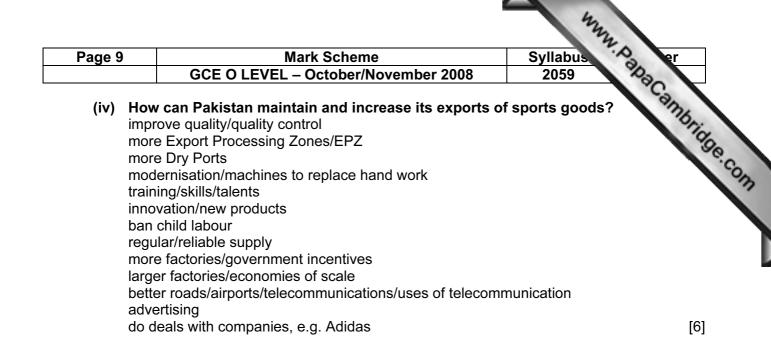   at start of monsoon, gentle showers, none during harvest
sunshine – for warmth, ripening, photosynthesis
drainage – water retention, slope to prevent waterlogging or flooding

Two marks for correctly named inputs
Two marks each for explanation [6]

(ii) **Choose** *two human* **inputs from the list above. Explain how these can im**
yields.
fertiliser – better than dung, provides nutrients, rice exhausts soil
irrigation – enough water, at correct time, fills the gap of rainfall
pesticides – kills pests, targeted at pest, used at correct time, examples
seeds – GM, HYV, new strains developed to increase yield, grow faster, shorter straw,
    pest resistant
knowledge – better cultivation methods, management, skills for machinery, examples
drainage – controlled/better water supply/correct amounts

Two marks for correctly named inputs
Two marks each for explanation [6]

5 (a) (i) **What is the main raw material used in the production of**
A footballs?
leather/plastic

B cricket bats?
wood [2]

(ii) **Which city in the northern Punjab is a centre of sports goods manufacturing?**
Sialkot/Lahore [1]

(iii) **Why have small-scale industries such as sports goods developed in this area?**
easy to set up, no expensive machinery, low capital input
labour – local skills, increases employment opportunities, work for women, higher local
incomes
raw materials available
airport at Sialkot/Sambrai and Lahore
roads and rail north (KKH), south to Karachi, west to Islamabad etc
power supply good in Punjab
Punjab is the most industrialised province
supply tourists
dry port at Sialkot/Lahore
(max 2 any line) [4]

(b) **Study Fig. 6, a graph showing the value of sports goods exports.**

(i) **What was the value of sports goods exports in 2005?**
18,000 (million rupees) [1]

(ii) **By how much did the value of sports goods exports increase from 1995 to 2005?**
10,000/8000 – 18000 (million rupees) [1]

(iii) **Why is a large proportion of the production of this industry exported?**
to make capital/improve trade balance/lessen debt/raises GDP
to earn foreign exchange
demand from abroad
popularity of sports in the world
competitive price/good quality
good reputation of Pakistan
less need in Pakistan/greater need abroad [4]

    (iv) **How can Pakistan maintain and increase its exports of sports goods?**
improve quality/quality control
more Export Processing Zones/EPZ
more Dry Ports
modernisation/machines to replace hand work
training/skills/talents
innovation/new products
ban child labour
regular/reliable supply
more factories/government incentives
larger factories/economies of scale
better roads/airports/telecommunications/uses of telecommunication
advertising
do deals with companies, e.g. Adidas [6]

(c) **Sports and other manufactured goods are transported by air, sea and road both in Pakistan and across the world.**

Name *two* **methods of transport uses for the export of sports goods from Pakistan. For** *each* **method, explain its advantages** *and* **disadvantages.**

Sea
Advantages
Cheap, good for bulky goods, use of dry ports, long distance
Disadvantages
Slow, problem of getting goods to and from coast, damage, delivery may be delayed

Air
Advantages
Fast, safer, preferred by managers, long distance
Disadvantages
Expensive, few airports, have to get goods to airport, only light or high value goods

Road
Advantages
Accessible/goes everywhere, lorries easily available
Disadvantages
Only within Pakistan (mostly), accidents, damage, theft, needed to get to port

No marks for named method
Max 4 marks for one method to include at least one advantage and one disadvantage [6]