GEOGRAPHY

Higher Level

Wednesday 3 November 1999 (morning)

Paper 3 2 hours

This examination paper consists of three Sections.

Section A consists of one compulsory question.

Section B consists of four questions.

Section C consists of two questions.

The maximum mark for each question is 20.

The maximum mark for this paper is 60.

INSTRUCTIONS TO CANDIDATES

Do NOT open this examination paper until instructed to do so.

Section A: Answer question 1.

Section B: Answer ONE question.

Section C: Answer ONE question.

Illustrate your answers where appropriate with sketch maps and diagrams.

EXAMINATION MATERIALS

Required:

None

Allowed:

A simple translating dictionary for candidates not working in their own language Millimetre square graph paper Ruler divided into millimetres

889-028

SECTION A

TOPOGRAPHIC MAPPING

Answer ALL parts of the question in this section.

The map extract shows an area of eastern England.

Although Great Yarmouth was important historically as a fishing port, this function has long been replaced by tourism as the main economic activity. In addition to its attractions as a seaside resort, Great Yarmouth also serves an area known as the Norfolk Broads which specialises in sailing and nature holidays on the waterways to the west of the town.

The scale of the extract is 1:25 000 and the contour interval is 5 metres.

1. (a) Calculate the average gradient of Hobland Road from the junction near Decoy Farm (497/013) to spot height 17 m near Hobland Hall.

[3 marks]

(b) What map evidence is there to show that longshore drifting has occurred?

[2 marks]

(c) What geographical conditions shown on the map might have led to the decline of Great Yarmouth as a fishing port?

[3 marks]

- (d) Draw a large sketch map of the area shown in the aerial photograph and mark on it:
 - (i) the land use (residential, commercial, industrial and agricultural)

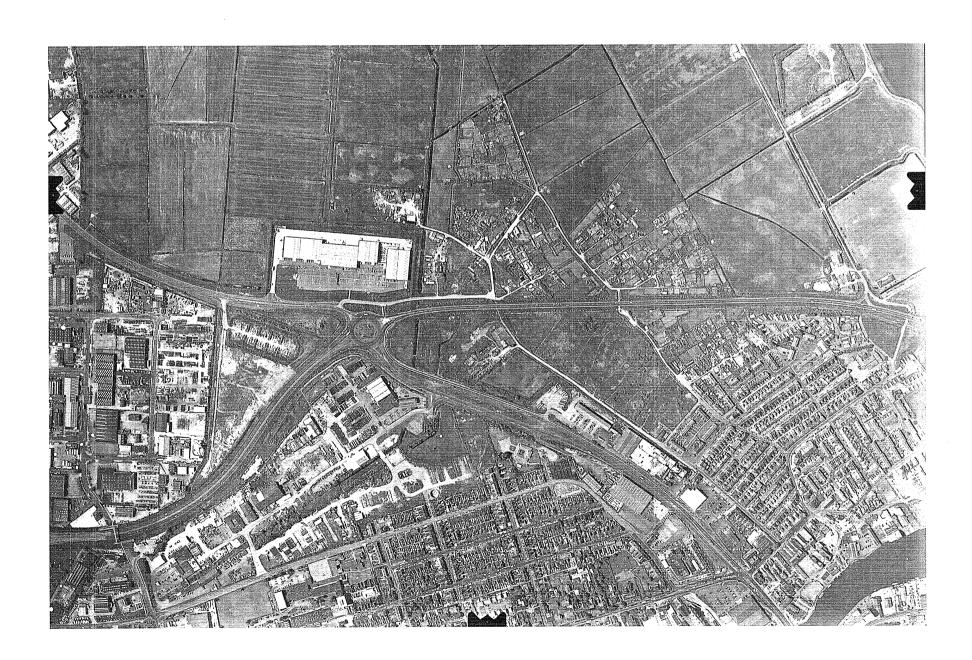
[5 marks]

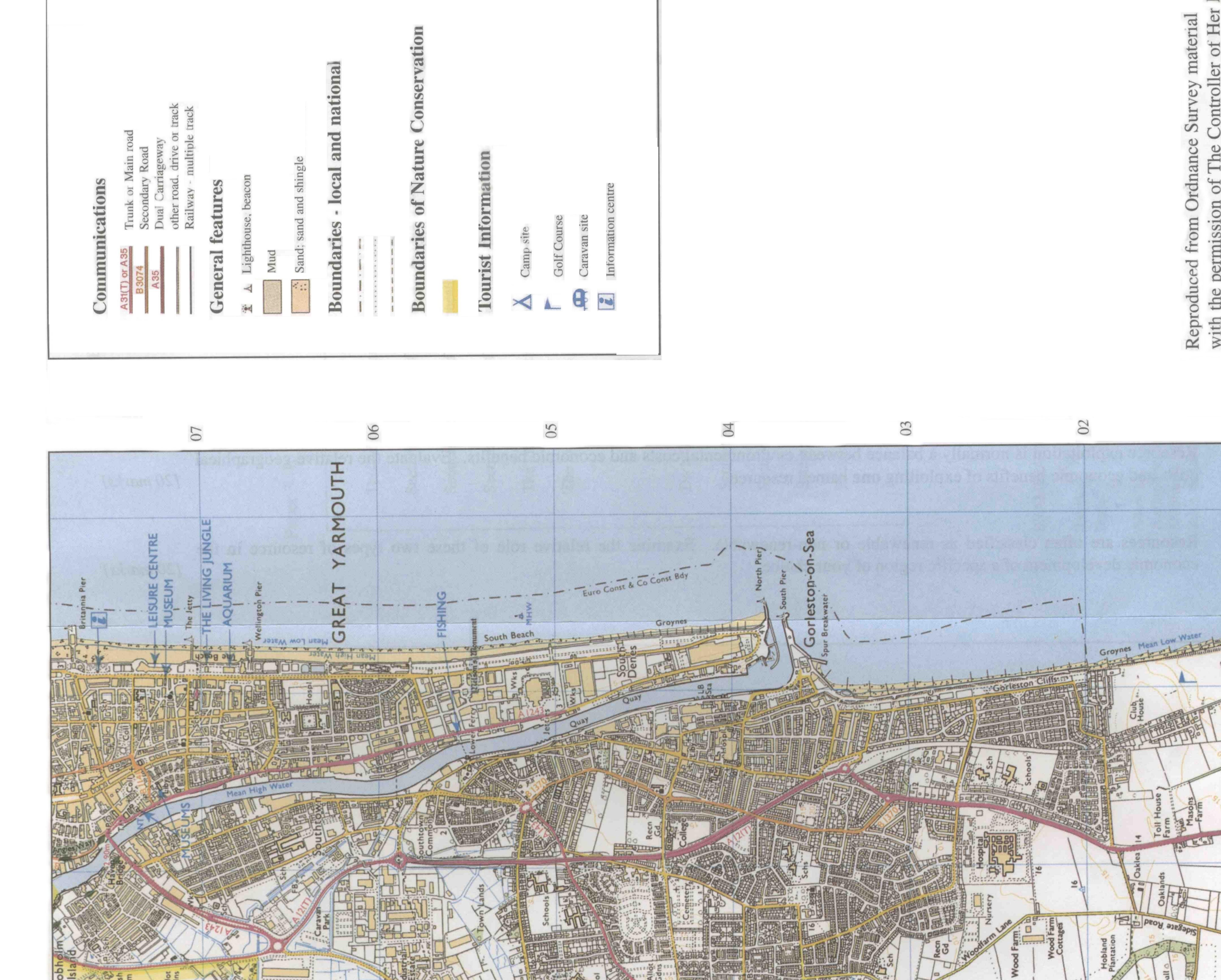
(ii) the grid references of the North-East and South-East corners

[2 marks]

(e) The large building in the centre of the aerial photograph shows an out-of-town shopping centre. Using the evidence shown on both the aerial photograph and the map, comment on the advantages and disadvantages of this location and site for such a shopping centre.

[5 marks]





Turn over

[15 marks]

SECTION B

THE NATURAL ENVIRONMENT

Answer ONE question from this section.

[12 marks] Outline the main physical processes which are at work on hill slopes. 2. [8 marks] Explain the ways in which human activity may lead to slope failure. (b) [20 marks] What types of information would a hydrologist need to collect about a drainage basin in order to manage the risk of flooding? 3. [20 marks] Outline the factors that are responsible for temperature variations on either a local or a continental scale. 4. [5 marks] What do you understand by the term environmental pollution? 5. (a)

SECTION C

With reference to specific examples, describe how pollution may interfere with the natural functioning of an ecosystem.

RESOURCES

Answer ONE question from this section.

(b)

- 6. Resource exploitation is normally a balance between environmental costs and economic benefits. Evaluate the relative geographical costs and economic benefits of exploiting one named resource.

 [20 marks]
- 7. Resources are often classified as renewable or non-renewable. Examine the relative role of these two types of resource in the economic development of a specific region of your choice.

 [20 marks]