



SECTION A (52 Marks)

Answer question ONE and any other question from this section. Candidates are advised to spend not more than 50 minutes on question One.

QUESTION ONE = 36 Marks.

QUESTIONS 2 - 4 carry 16 Marks each.

1. Carefully study the Map Extract of HANANG (Series Y 742) provided and answer the following questions:
  - (a) Calculate the area of lake Balangida Gidaghangat and give your answer in square kilometres.
  - (b) Describe the relief and drainage of the area shown on the map.
  - (c) Suggest any two possible economic activities carried out in the area shown on the map. Give evidence for your suggestion.
  - (d) State the Vertical Interval of the contours.
  - (e) How much time will a helicopter take to travel twenty times the distance from Grid 650150 to 750250 if it travels at a speed of 244 kilometres per hour?
  - (f) Draw an annotated cross - profile from grid 705245 to 770245.
2. Population of a certain country in Africa.

AGE GROUP	MALES	FEMALES
0 - 4	1,559,700	1,620,400
5 - 9	1,391,220	1,412,280
10 - 14	1,066,640	1,034,800
15 - 19	840,340	877,940
20 - 24	586,580	742,520
25 - 29	610,320	703,540
30 - 34	457,540	504,790
35 - 39	439,510	446,630
40 - 44	321,480	348,700
45 - 49	320,390	311,950
50 - 54	230,610	237,000
55 - 59	172,410	165,350
60 - 64	200,000	175,180
65 - 69	124,810	116,000
70 - 74	103,000	91,000
75+	154,930	127,160

2. Cont.
  - (a) Draw the age/sex pyramid to show population structure of this country.
  - (b) Comment on the population structure as shown by the graph you have drawn.
3. Discuss possible ways of reducing errors during compass surveying. What are the main disadvantages of compass survey?
4. (a) Determine the focal length of the camera which shot an area 3900m above sea level mounted on an aircraft which stood at 6000m above the ground. Suggested scale of this photograph is 1 : 14000.
  - (b) What are the disadvantages of air photographs over maps?

SECTION B (48 Marks)

Attempt any THREE questions from this section.

(MARKS FOR ANY OF THE THREE QUESTIONS = 16 Marks)

5. What are the factors considered important in assessing soil fertility?
  6. Define Temperature, Lapse Rate and Temperature Inversion. Account for their occurrence in the atmosphere.
  7. Give an account of wave erosional features.
  8. Evaluate the factors and effects of earthquakes.
  9. Examine the drainage systems which are directly controlled by tectonic forces.
  10. "The coastal zone is undergoing constant changes". Discuss.
  11. Explain how the Mediterranean vegetation is adapted to the climatic conditions in which they thrive.
  12. What are the main types of river regimes? Explain the factors which affect river regimes.
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