Mobile Computing

Total Marks: 40   Duration: 3h 0m

INSTRUCTIONS:
1. Answer all questions in this paper.
2. Use blue or black ink only.
3. Calculators are permitted.

Section A: Multiple Choice Questions

Answer all questions in this section.

Q1.1 [1 mark]

What is the Global Positioning System (GPS) based on?

A   A satellite-based radio navigation system

B   A cellular network-based system

C   A Wi-Fi based system

D   A GPS is not a real system

Section B: Short Answer Questions

Answer any 3 questions from this section.

Q2.1 [5 marks]

Explain the concept of Geo-location and its importance in mobile computing.

Answer space (Short Answer)

Q2.2 [3 marks]

What is the difference between ACCESS_FINE_LOCATION and ACCESS_COARSE_LOCATION in AndroidManifest.xml?

Answer space (Short Answer)

Q2.3 [4 marks]

What is the role of the LocationManager class in obtaining location information?

Answer space (Short Answer)

Section C: Long Answer Questions

Answer any 1 question from this section.

Q3.1 [15 marks]

Explain the steps required to create a native application in Android that uses GPS location information. Provide sample code for each step.

Answer space (Long Answer)

Q3.2 [15 marks]

What is the role of the GPSTracker class in the provided code? Explain the functionality of each method in this class.

Answer space (Long Answer)

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