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Eighth Semester B.E. Degree Examination, July/August 2022
Mobile Computing

Time: 3 hrs.

Max. Marks: 100

Note: *Answer any FIVE full questions, choosing ONE full question from each module.*

Module-1

1   a. Illustrate the stepwise call routing procedure between two entities in GSM. **(10 Marks)**
    b. Describe GSM entities with its architecture along with a neat diagram. **(10 Marks)**

OR

2   a. What are the abstract functions of the three-tier architecture for mobile computing? Illustrate with a neat diagram. **(10 Marks)**
    b. What is the importance of IP Header with respect to mobile IP? Draw the frame structure of IP header along with its fields. **(10 Marks)**

Module-2

3   a. Bring out the differences between GSM and 3G. **(10 Marks)**
    b. Illustrate the attachment and detachment procedure in GPRS network operation with a neat diagram. **(10 Marks)**

OR

4   a. What are the design constraints in applications for handheld devices. **(10 Marks)**
    b. Explain : i) GPRS protocol stack diagram ii) Protocol architecture of GPRS. **(10 Marks)**

Module-3

5   a. Illustrate the salient features of smart client architecture with a neat diagram. **(10 Marks)**
    b. Brief the importance if the Palm OS architecture with a neat diagram. **(10 Marks)**

OR

6   a. Demonstrate the development cycle using device emulators with a neat diagram. **(10 Marks)**
    b. Illustrate the wireless architecture with direct connectivity to wireless carrier and using a wireless ISP. **(10 Marks)**

Module-4

7   a. Bring out the stages of a wireless internet request with a neat diagram. **(10 Marks)**
    b. Explain the WAP architecture and its relationship to the OSI model with a neat diagram. **(10 Marks)**

OR

8   a. Bring out the differences between XHMTL based and XHTML-MP. **(10 Marks)**
    b. With a WML code for inventory sample. **(10 Marks)**

Module-5

9   a. Describe the states in a player's lifecycle of a media player. **(10 Marks)**
    b. Explain the security considerations in MIDP. **(10 Marks)**

OR

10 a. Explain the MIDlet lifecycle. **(10 Marks)**
    b. Write a short note for the following: i) CDC   ii) CLDC. **(10 Marks)**

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