**POORNIMA UNIVERSITY, JAIPUR**

**END SEMESTER EXAMINATION, APRIL 2023**

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|  | **3BT6123** | Roll No. | Total Printed Pages: 2 |
| **3BT6123** |  |
| B. Tech. III Year VI- Semester (Main/Back) End Semester Examination, April 2023  **(CE)** | |
| **BCE06107 / BCE06108 : Mobile Computing** | | | |

# Time: **3** Hours. Total Marks: **60**

Min. Passing Marks: **21**

*Attempt* ***five*** *questions selecting one question from each Unit. There is internal choice from Unit I to Unit V. Marks of each question or its parts are indicated against each question / parts. Draw neat sketches wherever necessary to illustrate the answer. Assume missing data suitably (if any) and clearly indicate the same in the answer.*

Use of following supporting material is permitted during examination for this subject.

# **1.--------------------------Nil--------------------** **2.------------------Nil-----------------------**

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|  |  | **UNIT-I (CO1)** | **Marks** | **Bloom Level** |
| **Q.1** | **(a)** | With neat Diagram explain the working of simplified reference model for communication? | **(6)** | **Remember** |
|  |  |  |  |  |
|  | **(b)** | Differentiate between analog and digital data transmission | **(6)** | **Understanding** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
|  |  |  |  |  |
| **Q.2** | **(a)** | How does mobility Management is done in a mobile communication? Explain with the help of suitable diagram? | **(6)** | **Apply** |
|  |  |  |  |  |
|  | **(b)** | Why do we need Multiplexing of data? Explain different types of multiplexing techniques used in mobile communication? | **(6)** | **Apply** |
|  |  |  |  |  |
|  |  | **UNIT-II (CO2)** |  |  |
|  |  |  |  |  |
| **Q.3** | **(a)** | Explain the architecture of DECT with the help of suitable example? | **(6)** | **Understanding** |
|  |  |  |  |  |
|  | **(b)** | Write Short notes on:  1) TDMA 2) SDMA 3) CDMA | **(6)** | **Create** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
|  |  |  |  |  |
| **Q.4** | **(a)** | Differentiate between DECT and GSM technology of mobile management? | **(6)** | **Understanding** |
|  |  |  |  |  |
|  | **(b)** | Explain Architecture and working of GSM technology with suitable diagram? | **(6)** | **Apply** |
|  |  |  |  |  |
|  |  | **UNIT-III (CO3)** |  |  |
|  |  |  |  |  |
| **Q.5** |  | Demonstrate different characteristic of MANET with suitable example? Also differentiate between VANET and MANET | **(12)** | **Create** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
|  |  |  |  |  |
| **Q.6** | **(a)** | Differentiate Traditional TCP and classical TCP also explain what improvement was given in classical TCP and how that improvement effect the communication? | **(6)** | **Apply** |
|  |  |  |  |  |
|  | **(b)** | Classify different types of mobile adhoc network explain with suitable example? | **(6)** | **Understanding** |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  | **UNIT-IV (CO4)** |  |  |
|  |  |  |  |  |
| **Q.7** | **(a)** | Demonstrate the significance of L2CAP Layer of Bluetooth Protocol with suitable example and diagram? | **(6)** | **Create** |
|  |  |  |  |  |
|  | **(b)** | Differentiate between WTP and WTLS with suitable example and diagram? | **(6)** | **Remember** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
|  |  |  |  |  |
| **Q.8** | **(a)** | Describe different Bluetooth layers of the Bluetooth protocol with suitable example? | **(6)** | **Evaluate** |
|  |  |  |  |  |
|  | **(b)** | Explain working of WAP gateway how does it transfer the request from WAP stack to internet protocol stack? | **(6)** | **Understanding** |
|  |  |  |  |  |
|  |  | **UNIT V (CO5)** |  |  |
|  |  |  |  |  |
| **Q.9** |  | Explain components of Satellite Communication with Diagram and how each component communicate with each other explain in brief? | **(12)** | **Understanding** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
|  |  |  |  |  |
| **Q.10** | **(a)** | Write a Case study in any application area of Satellite communication? | **(6)** | **Understanding** |
|  |  |  |  |  |
|  | **(b)** | Write short notes on GEO, LEO, MEO? Also draft a difference between them? | **(6)** | **Create** |