Code No. : 7749 Sub. Code : ZCIE 33

M.Sc. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2023

Third Semester

Computer Science with Artificial Intelligence — Elective

MOBILE COMPUTING

(For those who joined in July 2022 onwards)

Time : Three hours Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. The examples of wireless communications are _____

   (a) Mobiles (b) Wi–Fi

   (c) Both (a) and (b) (d) None

2. A mobile computing environment, in general, can be considered as a type of a _____ environment as well.

   (a) AdHoc computing

   (b) Distributed computing

   (c) Grid computing

   (d) None

3. In _____, we use voice.

   (a) VUI (b) GUI

   (c) Both (a) and (b) (d) None

4. Which of the following mobile apps is commonly used for social networking _____?

   (a) Google Maps (b) Face book

   (c) Google Drive (d) Dropbox

5. What is mobile device WiFi _____?

   (a) A device that can be used for mobile communication

   (b) A device that can make phone calls.

   (c) A wireless technology used for Internet connectivity

   (d) None

6. Which of the following mobile operating systems is developed by Apple _____?

   (a) Android (b) Windows Phone

   (c) iOS (d) Black Berry OS

7. Transport layer protocols TCP and UDP used for _____

   (a) Ensuring that the data packets arrive accurately and reliably

   (b) Path chosen purpose

   (c) Both (a) and (b)

   (d) None

8. _____ refers to any technology that manages data traffic to reduce packet loss, latency and jilter on a network.

   (a) CDMA (b) QoS

   (c) Both (a) and (b) (d) None

9. MAC stands for _____

   (a) Mobile Access Control

   (b) Middle Access Control

   (c) Multichannel Access Control

   (d) Medium Access Control

10. _____ is an infrastructure – less wireless that is deployed in a large number of wireless sensors in an ad–hoc manner that is used to monitor the system, physical or environmental conditions.

    (a) Wireless sensor Network

    (b) GUI

    (c) Both (a) and (b)

    (d) None

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Give a brief note on Basics of mobile computing.

    Or

    (b) What do you mean by middleware and Gateways?

12. (a) How to do mobile computing through Internet?

    Or

    (b) What is SMS in Mobile computing?

13. (a) Expand and give a note on J2ME.

Or

(b) Write down any three advantages and disadvantages of mobile payment system.

14. (a) Write short note on Dynamic Linking.

Or

(b) Expand and give a note on QoS.

15. (a) Describe the use of Transport Layer.

Or

(b) What do you mean by DataBase Security?

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Articulate in detail about mobility and location based services.

Or

(b) Explain wireless Internet and Smart clients in detail.

17. (a) Write down Multi Channel and Multimodel user Interfaces.

Or

(b) What is GPRS? How does it work?

18. (a) How to develop Event based programming? Explain.

Or

(b) Write short note on the following:
   (i) Android
   (ii) Wi Fi
   (iii) GPS

19. (a) What is Routing? Explain Routing protocols and its types.

Or

(b) Discuss in detail about Ad–Hoc wireless Network.

20. (a) Illustrate Password Security and Network Security.

Or

(b) Define and describe the usage of Medium Access control.

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