

Reg. No.

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B.E. / B.TECH. DEGREE EXAMINATIONS, MAY 2023

Fifth Semester

IT18502 – MOBILE COMPUTING*(Common to CS & IT)***(Regulation 2018)****TIME: 3 HOURS****MAX. MARKS: 100**

COURSE OUTCOMES	STATEMENT	RBT LEVEL
CO 1	Interpret the working characteristics and limitations of mobile hardware devices including their user-interface modalities.	3
CO 2	Choose the suitable technologies for appropriate mobile communication	3
CO 3	Summarize the various wireless LAN technologies.	5
CO 4	Assess the development environment used in mobile devices	5
CO 5	Develop applications that are mobile-device specific	3

PART- A(10x2=20Marks)

(Answer all Questions)

	CO	RBT LEVEL
1. State few applications of ubiquitous computing.	1	1
2. Interpret the need of dialogue control with the suitable examples.	1	3
3. Differentiate active RFID and passive RFID.	2	3
4. Compare between the term 4G and 5G.	2	3
5. Outline the role of MSRN in call routing in GSM.	3	4
6. List the different types of Wireless LAN.	3	1
7. List the important features of Windows CE OS?	4	1
8. Why kernel mode is said as memory resident part? Explain it.	4	4
9. How attacks on static assets are categorized?	5	3
10. Describe about SIP.	5	1

PART- B (5x 14=70Marks)

	Marks	CO	RBT LEVEL
11. (a) (i) Explain ICAP functionality with a neat diagram. List its future services.	(8)	1	3
(ii) Explain the various contexts in mobile computing.	(6)		

(OR)

(b) Under what circumstances, computation is required in mobile application? Draw and explain the architecture of mobile computing. (14) 1 3

12. (a) Construct the Architecture of GSM and explain its working principle with a neat diagram. (14) 2 3

(OR)

(b) Construct the Architecture of GPRS and explain its working principle with a neat diagram. (14) 2 3

13. (a) (i) Explain the call establishment procedure in Intelligent Network. (7) 3 2
(ii) Illustrate the Network Architecture of SS7 with a neat diagram. (7)

(OR)

(b) Illustrate the components and working principle of WAP architecture with a neat sketch. (14) 3 2

14. (a) Deduce the steps to develop a small mobile application to read student information and display the same using Android OS. (14) 4 3

(OR)

(b) Explain the architecture of Symbian OS. (14) 4 3

15. (a) (i) Evaluate the techniques to overcome security issues in mobile computing (8) 5 3

(ii) Point out the differences between H.323 and SIP. (6)

(OR)

(b) (i) Evaluate the need for CODECs for mobile application. (7) 5 3

(ii) Point out the need of short message service and explain its type. (7)

PART- C (1x 10=10Marks)

(Q.No.16 is compulsory)

		Marks	CO	RBT LEVEL
16.	Justify CSMA/CD leads to hidden terminal and exposed to terminal problem? Provide the suitable solution for the same.	(10)	3	5