

Term End Examination

Dec 2023

CET4004B - Professional Elective- I - Wireless and Mobile Device Security

Question Paper ID: 026670

Faculty/School	Engineering and Technology	Term	Semester V
Program	TY B.Tech CSF	Duration	2 Hours 30 Minutes
Specialization	CSC	Max. Marks	70

Section - 1 (7 X 10 Marks)

Answer any 7 questions

1	a) Write one restriction of wired and wireless networks. The organization is planning to link its sale counters situated in various parts of the same city. Which type of network out of LAN, WAN, MAN will be formed? Justify. [5 Marks] b) Discuss WiMAX. What are the main differences between IEEE 802.11b (WiFi) and WiMAX? [5 Marks]	10 marks 8 15 min	CO1	Understanding
2	a) What are the advantages and disadvantages of DSDV routing protocols in an ad hoc wireless network? [5 Marks] b) How does the table driven protocol work in ad hoc networks? [5 Marks]	10 marks 4/5 DSDV, DSR	CO2	Remembering
3	What are the two basic kinds of sensor network architecture? Explain any one sensor network architecture with neat diagram. ✓	10 marks 10 20 min	CO2, CO3	Understanding
4	Explain the concept of Localization and Synchronization in sensor networks with challenges.	10 marks	CO3	Understanding
5	Explain the LEACH routing with the help of neat diagram. Give its advantages and disadvantages of LEACH. Low energy Aggregating cluster hierarchy	10 marks 10 15 min	CO3	Understanding
6	Explain the concept of WiFi security and wireless security protocols? What are the various security measures needed to keep WiFi network safe? SAE, SAE-A, RAN, 802.11	10 marks 6	CO4	Applying
7	What are the different Network Layer Attacks? Explain Wormhole attack with its mitigation strategies. Blackhole, greyhole, flooding, jamming.	10 marks 8 20 min	CO4	Applying
8	Explain issues and challenges in security provisioning in wireless networks.	10 marks 8 25 min	CO4	Understanding
9	What is a mobile device management (MDM) solution and why is it important for mobile app security? Explain the benefits of centralized mobile device management?	10 marks 8 20 min	CO5	Understanding

10 ✓	What is mobile application security? Explain the major security concerns for mobile devices. What measures could you take to protect sensitive data on mobile devices?	10 marks 9 10	CO5	Applying
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END OF QUESTION PAPER