22/12/23
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December 2023

B.Tech (EE IoT) B.Tech. VII SEMESTER

Mobile app Development for IoT (EE-IOT-701)

Time: 3 Hours   Max. Marks:75

Instructions:
1. It is compulsory to answer all the questions (1.5 marks each) of Part -A in short.
2. Answer any four questions from Part -B in detail.
3. Different sub-parts of a question are to be attempted adjacent to each other.

PART -A

Q1 (a) What is mobile UI?   (1.5)

(b) What is a service in android?   (1.5)

(c) How we add permissions to android application?   (1.5)

(d) What is mobile embedded system?   (1.5)

(e) What are the advantages of content provider?   (1.5)

(f) What is Nondeterministic Polynomial Time?   (1.5)

(g) How power optimization is done using loop scheduling?   (1.5)

(h) What are the techniques for mobile app data synchronization? (1.5)

(i) Draw mobile cloud computing architecture.   (1.5)

(j) What are the security features to prevent data stored on cloud? (1.5)

PART -B

Q2 (a) What are the various steps for executing video in Android.   (10)

(b) How Big Data can be stored on mobile devices?   (5)

Q3 (a) What is cloud based application? What are different cloud based applications? (5)

(b) Create a sample 2-D animation activity for continuous rotation of a traingle. (10)

Q4   Create a sample SQLITE database for student information record and an interface to add new information to database. (15)

Q5 (a) How different resources can be added to android application?   (7)

(b) What are different factors to consider in mobile embedded scheduling algorithms? (8)

Q6 (a) What is mobile cloud computing? Explain techniques of mobile cloud computing. (10)

(b) How mobile optimization can be achieved using dynamic programming? (5)

Q7 (a) What is loop scheduling? Explain types of loop scheduling.   (10)

(b) Write short note on Nondeterministic Polynomial Time Problems. (5)

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