Hall Ticket No | | | | | | | | | | | Question Paper Code: BCSB22

INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad - 500 043

MODEL QUESTION PAPER

M.Tech III Semester End Examinations, November-2019

Regulations: R18

MOBILE APPLICATIONS AND SERVICES

(CSE)

Time: 3 hours **Max. Marks: 70**

Answer ONE Question from each module

All Questions Carry Equal Marks

All parts of the question must be answered in one place only

MODULE – I

1.	a)	Describe about the development of Android environment with a suitable examples.	**[7M]**
	b)	Explain briefly about the mobile software engineering with functions and tools.	**[7M]**
2.	a)	Explain about tools of mobile application development.	**[7M]**
	b)	Define Android user and Explain about the Generic UI Development of android application.	**[7M]**

MODULE – II

3.	(a)	Explain Text-to-Speech Techniques with examples?	**[7M]**
	(b)	What are the difference between Multichannel and Multimodal UIs?	**[7M]**
4.	(a)	Describe Synchronization and Replication of mobile data. Justify the relationship between two of them.	**[7M]**
	(b)	How data is accessing and building a content provider. What would be the result if not have network connectivity.	**[7M]**

MODULE – III

5.	(a)	Explain how data communicates via Network and the Web.	**[7M]**
	(b)	Describe in detail about how Android telephony notifications and alarms works.	**[7M]**
6.	(a)	How memory is managed in android application notifications. Specify each application with an example.	**[7M]**
	(b)	Explain performance of multithreading in different platforms.	**[7M]**

MODULE – IV

7.	(a)	Define the following terms a. Multi Media b. Peer-To-Peer Architecture c. Mobile Agents	**[7M]**
	(b)	Explain location based services android. Explain how its connects with GPS	**[7M]**
8.	(a)	Explain the packaging and deploying process in putting it all together process. Justify the difference between them	**[7M]**
	(b)	Explain performance best practices in android location mobility. What are the issues will face in location mobility.	**[7M]**

MODULE – V

9.	(a)	Discuss architectural styles and design styles in platform level with an structures.	**[7M]**
	(b)	Explain the following terms a. Hurdles b. Testing c. Security d. Hacking	**[7M]**
10..	(a)	Explain myths of security and hacking of Android application with a suitable example.	**[7M]**
	(b)	Explain about active transactions in Android series. How data will be secured while transacting data.	**[7M]**

COURSE OBJECTIVES:

The course should enable the students to:	
I	Understand the three main mobile platforms and their ecosystems, namely Android, iOS, and Phone Gap / Web OS and designing and develop mobile applications using a chosen application development framework
II	Explores emerging technologies and tools used to design and implement. The capabilities and limitations of mobile platforms that affect application development and deployment
III	Explore the techniques for deploying and testing mobile applications, and for enhancing their performance and scalability account of communications via network by wireless connectivity.
IV	Prepare mobile application for multimedia and learn about additional issue like security, hacking etc.,

COURSE OUTCOMES (COs):

CO1	Understand the mobile platforms and their ecosystems with frameworks, tools.
CO2	Understand more on mobile computing UIS and synchronization and replication of mobile data
CO3	Prepare a well -structured network connectivity and notifications with wireless connectivity.
CO4	Explore on various multimedia agents of architecture, models and design
CO5	Understand the security and hacking issues while active transactions in processed

COURSE LEARNING OUTCOMES (CLOs):

CLO Code	At the end of the course, the student will have the ability to
BCSB22.01	Understand the concept of mobile computing in terms of knowledge.
BCSB22.02	Analyze the frameworks and tools for Android development.
BCSB22.03	Identify generic UI development android user.
BCSB22.04	Estimate the VUIs and mobile apps of development.
BCSB22.05	Identify the state machine, correct communications model, android networking and web.
BCSB22.06	Explain about the synchronization and replication of mobile data.
BCSB22.07	Understand the database issues of android applications.
BCSB22.08	Classify the Android telephony notifications and alarms.
BCSB22.09	Develop the Android field service app for runtime environment.
BCSB22.10	Understand and develop packaging and deploying of android application.
BCSB22.11	Examine the performance best practices of applications.
BCSB22.12	Apply the Android multimedia on additional issues like security.
BCSB22.13	Differentiate the mobile agents and peer-to-peer architecture, Android multimedia.
BCSB22.14	List out the platforms and additional issues like security, hacking.
BCSB22.15	Understand active transactions and provide security from development hurdles.

MAPPING OF SEMESTER END EXAM TO COURSE LEARNINIG OUTCOMES

SEE Question No		Course Learning Outcomes		Course Outcomes	Blooms Taxonomy Level
1	a	BCSB22.02	Analyze the frameworks and tools for Android development	CO 1	Understand
	b	BCSB22.01	Understand the concept of mobile computing in terms of knowledge.	CO 1	Remember
2	a	BCSB22.02	Analyze the frameworks and tools for Android development	CO 1	Understand
	b	BCSB22.03	Identify generic UI development android user	CO 1	Understand
3	a	BCSB22.05	Identify the state machine, correct communications model, android networking and web	CO 2	Understand
	b	BCSB22.06	Explain about the synchronization and replication of mobile data	CO 2	Remember
4	a	BCSB22.06	Explain about the synchronization and replication of mobile data	CO 2	Understand
	b	BCSB22.04	Estimate the VUIs and mobile apps of development	CO 2	Understand
5	a	BCSB22.07	Understand the database issues of android applications	CO 3	Understand
	b	BCSB22.08	Classify the Android telephony notifications and alarms	CO 3	Understand
6	a	BCSB22.08	Classify the Android telephony notifications and alarms	CO 3	Understand
	b	BCSB22.09	Develop the Android field service app for runtime environment	CO 3	Understand
7	a	BCSB22.10	Understand and develop packaging and deploying	CO 4	Remember
	b	BCSB22.11	Examine the performance best practices of applications	CO 4	Remember
8	a	BCSB22.12	Apply the Android multimedia on additional issues	CO 4	Remember
	b	BCSB22.10	Understand and develop packaging and deploying	CO 4	Remember
9	a	BCSB22.14	List out the platforms and additional issues like security, hacking	CO 5	Remember
	b	BCSB22.13	Differentiate the mobile agents and peer-to-peer architecture, Android multimedia	CO 5	Understand
10	a	BCSB22.14	List out the platforms and additional issues like security, hacking	CO 5	Remember
	b	BCSB22.15	Understand active transactions and provide security from development hurdles	CO 5	Understand

Signature of Course Coordinator **HOD, CSE**