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Roll No. ....14020283

PAPER ID—11137

Bachelor of Technology (Computer  
Sciences), Specialization Artificial  
Intelligence EXAMINATION, 2024

(Fifth Semester)

MOBILE APPLICATION DEVELOPMENT

for AI (Professional Elective Course-I)

*Time : 3 Hours*

*Maximum Marks : 70*

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Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

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**Note :** Attempt *Five* questions in all, selecting *one* question from each Unit. Q. No. 1 is compulsory. All questions carry equal marks.

1. Write the following : 2×7=14
- (a) What do you mean by app sandboxing ?
  - (b) What is the main functionality of kernel ?
  - (c) Name any *five* mobile operating systems.
  - (d) Distinguish between fragments and activities.
  - (e) What are the attributes of checkbox control ?
  - (f) What is implicit intent ?
  - (g) How to create a Togglebutton ?

### Unit I

2. (a) Discuss, how protection and security is managed in mobile operating system. 7
- (b) What are the components of mobile operating systems with their functionality? 7
3. Discuss layered architecture of Android Operating systems. 14

## Unit II

4. (a) What is the usage of IDE in mobile application development ? 7
- (b) Highlight the working of IBM Worklight with their components. 7
5. (a) What is the role of adapters in IBM Worklight studio ? 7
- (b) Discuss Xcode, Android Studio, VisualStudio Code, IntelliJIDEA for mobile application development. 7

## Unit III

6. Analyse the configuration of J2ME. List J2ME profiles and describe its limitations. 14
7. (a) How to create and display notifications ? 7
- (b) Explain about changes of various UI components. 7

## Unit IV

8. What is Android ? Explain its architecture by describing its main components and their roles in the operating system ? 14
9. What are the key communication protocols in iOS and how do they influence application development methods and practices ? 14