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Roll No.

TBC-502/TBI-501

B. C. A./B. SC. (IT)

(FIFTH SEMESTER)

END SEMESTER

EXAMINATION, Jan., 2023

MOBILE APPLICATION DEVELOPMENT

Time : Three Hours

Maximum Marks : 100

Note : (i) All questions are compulsory.

(ii) Answer any *two* sub-questions among (a), (b) and (c) in each main question.

(iii) Total marks in each main question are **twenty**.

(iv) Each sub-question carries 10 marks.

1. (a) Define Android operating system. Also discuss its architecture with a suitable diagram. (CO1)
- (b) Discuss the file/folder hierarchy under android studio project. (CO1)

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- (c) Define the purpose of native and hybrid application. Also discuss its advantages as well as its limitations. (CO1)
2. (a) What do you mean by the term fragment ? What is the need of fragment ? Also discuss the life cycle of fragments. (CO2)
- (b) Discuss android activity life cycle with example. (CO2)
- (c) What are Intents ? Discuss its types with suitable code. (CO2)
3. (a) What are Event Handlers and Event Listeners ? List out various Event Handlers and Listeners with example. (CO3)
- (b) Define the term sensors. How do they work ? Develop an application to display various in-built sensors in your device. (CO3)
- (c) Discuss MediaController class under multimedia. Develop an application to show the use of MediaController class. (CO3)

(3)

4. (a) What do you mean by the term content provider ? How URI is linked with content provider. Discuss it with a suitable code. (CO4)
- (b) Discuss the scope of Shared Preferences with an example. (CO4)
- (c) Define SQLite Databases. Explain with example CRUD operations performed on data inserted by user. (CO4)
5. (a) What are the various types of google maps ? List out some inbuilt methods of google maps. (CO5)
- (b) Define BluetoothAdapter class in android with an example. (CO5)
- (c) Discuss the importance of Geocoder class with a suitable code. (CO5)