

**MCA**  
**(SEM IV) THEORY EXAMINATION 2017-18**  
**Design & Development of Applications**

**Time: 3 Hours****Total Marks: 70****Note: 1.** Attempt all Sections. If require any missing data; then choose suitably.**SECTION A****1. Attempt *all* questions in brief. 2 x 7 = 14**

- a. What is Android ? List its features.
- b. Explain various Triggers.
- c. What do you understand by Widgets.
- d. What is parsing ?
- e. Differentiate between Grid View & Web View.
- f. What is Google Cloud Messaging (GCM) ?
- g. Differentiate between Explicit Intent & Implicit Intent.

**SECTION B****2. Attempt any *three* of the following: 7 x 3 = 21**

- a. Draw and explain Activity life cycle of Android Application .
- b. List and explain various UI controls provided by Android.
- c. Write a note on scheduling and optimizing background Tasks.
- d. Discuss the steps in storing data in your application using SQLilte.
- e. Discuss the procedure of publishing Android Application.

**SECTION C****3. Attempt any *one* part of the following: 7 x 1 = 7**

- (a) Describe the Android Architecture.
- (b) What is the use of an activityCreator? Differentiate Activities from Services.

**4. Attempt any *one* part of the following: 7 x 1 = 7**

- (a) Explain various Layouts provided by Android.
- (b) Explain following tools to test android applications.

- 1) JUnit
- 2) Monkey

**5. Attempt any *one* part of the following: 7 x 1 = 7**

- (a) What is Notification. Write the steps to create the Notification in Android application.
- (b) Define and differentiate between the two types of services. How to run the service even after killing the application in android?

**6. Attempt any *one* part of the following:** **7 x 1 = 7**

- (a) What is SQLite database? How to provide database connection using SQLite database.
- (b) How to adding, updating and deleting content in android application.

**7. Attempt any *one* part of the following:** **7 x 1 = 7**

- (a) Explain types of application and create any small application in android.
- (b) What is Android Support Library. Describe its Features.