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Question Paper Code: 10847

M.C.A. DEGREE EXAMINATIONS, APRIL/MAY 2023.

Second Semester

MC 4204 – MOBILE APPLICATION DEVELOPMENT

(Regulations 2021)

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

PART A — $(10 \times 2 = 20 \text{ marks})$

- 1. List features of the Android Operating System.
- 2. Define Android Virtual Devices.
- 3. Write the directory path where images are stored while developing Android applications.
- 4. How you manage changes to screen orientation?
- 5. What is DLL?
- 6. What is multithreading?
- 7. What is Intent?
- 8. How will you deploy APK Files?
- 9. Differentiate Activity and Services.
- 10. How is the communication established between a service and activity?

PART B — $(5 \times 13 = 65 \text{ marks})$

- 11. (a) (i) What is android? Explain their versions and applications? (7)
 - (ii) What are the various steps of installing Android SDK Tools? Explain.

Or

- (b) (i) Discuss the anatomy of android application. (7)
 - (ii) Discuss different frameworks and tools for mobile applications development. (6)

12.	. (a)	(i)	Describe the Android layouts in detail.	(6)
		(ii)	Write a program to display a circular progress bar.	(7)
			Or	
	(b)	(i)	Explain various services in Android operating system.	(7)
		(ii)	Write a note on UI toolkits.	(6)
13.	. (a)	(i)	List the sensors in Android and explain anyone in detail.	(6)
		(ii)	Explain the design patterns for limited memory.	(7)
			Or	
	(b)	(i)	Illustrate dynamic linking with suitable example.	(7)
		(ii)	Illustrate the syntax for Intent - Filter tag with an example.	(6)
14.	(a)	(i)	What are the steps in calling Built-In Applications using Int Explain.	. ,
		(ii)	Enlist the steps to publish the Android application.	(7)
			Or	, ,
	(b)	(i)	Describe the different types of mobile OS in detail.	(6)
		(ii)	Discuss the need of permissions in Android. Describe permissions to set system functionalities like Bluetooth camera.	the and (7)
15.	(a)	(i)	Describe the steps involved in designing multimedia application	
		(ii)	How to develop location aware applications using iOS? Explain an example.	
			Or	
	(b)	Desc	cribe how to perform Alarm and Notification in Mobile application	1.
			PART C — $(1 \times 15 = 15 \text{ marks})$	
16.	(a)	(i)	Develop an application to send and receive SMS.	(7)
		(ii)	Develop a simple calculator using table layout.	(8)
			Or	
	(b)	(i)	Write a program to capture an image using camera and display i	t.(7)
		(ii)	Develop a program to send an email.	(8)