Reg. No. :						

# Question Paper Code: 30146

## M.C.A. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2022.

#### 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. Brief the term Mobile Application Development.
- 2. The barrier to entry for new Android developers is minimal. Justify the statement.
- 3. Why do we want to build generic user interfaces?
- 4. Define MultiModal UI.
- 5. Write the need for Java API.
- 6. Brief is the purpose of Dynamic Link Libraries.
- 7. Write the three ways to protect Android devices?
- 8. Mention the features of iOS Operating System.
- 9. What is mean by Bluetooth Communication?
- 10. Write short notes about Property Animators.

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

11. (a) Define Framework. Explain the different kinds of framework and tools for mobile applications. (13)

Or

- (b) (i) With neat diagram explain about the Mobile Application Architecture. (8)
  - (ii) Mention the types of Mobile Application Technologies. (5)

12.	(a)	$W_{ri}$	ite Short notes about	
		(i)	Design patterns used in UI Development.	(8)
		(ii)	Elements of UI.	
		(-1)	inements of O1.	(5)
			$\operatorname{Or}$	
	(b)	$\operatorname{Exp}$	lain about the design goals and functions of VoiceXML.	(13)
13.	(a)	Exp	lain in detail about the Workflow for Application Development	t. (13)
			Or	
	(b)	(i)	Discuss in detail about the Resource Management cond Application Design.	cept in (8)
		(ii)	Write short notes on plugins and rule of thumb for using DLI	
14.	(a)	With	n neat diagram explain about the Android Application Architec	
			$\operatorname{Or}$	
	(b)	(i)	Explain about the different storage options in Android.	(10)
		(ii)	Discuss about the three biggest threats to Android devices.	(3)
15.	(a)	Expla	ain about the concepts involved in telephony.	(13)
			Or	(-5)
	(b)	Discu Mobi	ass in detail about the Notification and Alarm concepts in Anle.	idroid (13)
			PART C — $(1 \times 15 = 15 \text{ marks})$	
16.	(a)	Write Googl andro	e the types of Google maps, what are the call back methods us le.maps? Explain the methods to display the current location da oid.	ed in ita in (15)
			$\mathbf{Or}$	
	(b)	Discus and se	ss core components of an android app (specifically activities, intervices) and how they are put together to create full featured	ents app. (15)