

**PARUL UNIVERSITY**  
**FACULTY OF ENGINEERING & TECHNOLOGY**  
**B.Tech. Summer 2023 - 24 Examination**

**Semester: 6<sup>th</sup>**  
**Subject Code: 203105359**  
**Subject Name: Mobile Application Development**

**Date: 01-05-2024**  
**Time: 10:30 am to 01:00 pm**  
**Total Marks: 60**

**Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start a new question on a new page.

<b>Q.1</b>	<b>Objective Type Questions - ( Fill in the blanks, one-word answer, MCQ-not more than Five in case of MCQ) (All are compulsory) (Each of one mark)</b>	<b>(15)</b>	<b>C O</b>	<b>P O</b>	<b>Bloom's Taxonomy</b>
	1. Which of the following is NOT a valid way to create a background thread in Android? A) AsyncTask B) Thread class C) HandlerThread D) BackgroundService		<b>1</b>	<b>2</b>	<b>Apply</b>
	2. Which method is called when an Activity is about to be destroyed? A) onDestroy() B) onStop() C) onPause() D) onExit()		<b>3</b>	<b>10</b>	<b>Understand</b>
	3. Which method is used to set an OnClickListener on a Button in Android? A) setClickListener() B) setOnTouchListener() C) setOnLongClickListener() D) setOnClickListener()		<b>2</b>	<b>3</b>	<b>Understand</b>
	4. . Which method is used to add permissions to an AndroidManifest.xml file? A) <permission> B) <uses-permission> C) <grant-permission> D) <allow-permission>		<b>3</b>	<b>3</b>	<b>Analyze</b>
	5. Which method is used to read data from SharedPreferences in Android? A) read() B) get() C) retrieve() D) getSharedPreferences()		<b>4</b>	<b>5</b>	<b>Evaluate</b>
	6. What type of file is an Android app packaged into for distribution?		<b>3</b>	<b>2</b>	<b>Evaluate</b>
	7. What is used for storing persistent data in Android apps?		<b>2</b>	<b>2</b>	<b>Create</b>
	8. Which class is used for reading and writing files in Android apps?		<b>1</b>	<b>2</b>	<b>Apply</b>
	9. What is used for network operations in Android apps?		<b>4</b>	<b>2</b>	<b>Understand</b>
	10. What design pattern is commonly used in Java-based Android app development?		<b>1</b>	<b>3</b>	<b>Remember</b>

	11. Java _____ is an important concept in mobile app development for efficient memory management		1	3	Understand
	12. . _____ is the process of converting Java source code into byte code.		3	3	Understand
	13. Android apps are packaged into _____ files for distribution.		4	5	Analyze
	14. _____ is used for storing persistent data in Android apps.		3	2	Apply
	15. . _____ layout is commonly used for designing user interfaces in Android apps.		1	3	Create
<b>Q.2</b>	<b>Answer the following questions.</b> (Attempt any three)	<b>(15)</b>			
	A) What is a layout? List its types.		2	3	Understand
	B) What is an intent, and how many types are there? Describe with examples.		4	5	Analyze
	C) What are attributes?		2	2	Remember
	D) Why do we use a bundle?		3	2	Apply
<b>Q.3</b>	A) Describe the Android project folder structure.	<b>(07)</b>	2	1	Analyze
	B) What is the difference between fragments and activities?	<b>(08)</b>	4	5	Evaluate
	<b>OR</b>				
	B) Explain the role of the RecyclerView in Android UI development	<b>(08)</b>	2	3	Understand
<b>Q.4</b>	A) Draw the fragment lifecycle. What is the purpose and role of fragment lifecycle methods?	<b>(07)</b>	4	5	Create
	<b>OR</b>				
	A) Describe Firebase and firestore in Android studio	<b>(07)</b>	4	12	Create
	B) What is an activity? Draw the activity lifecycle diagram	<b>(08)</b>	2	3	Create