SYLLABUS

Subject: Computer Science	Semester: V/VI
Course Title: Mobile Application Development	Course Code: 20CSSEC21MA3
No. of Hours: 45 LTP: 300	Credits: 3

Objectives

- To learn the importance of android platform.
- To describe the layouts and controls of android.
- To analyze the importance and Exploring data in R programming.

Course Outcomes

CO1: Identify basic terms, tools and software related to android systems

CO2: Describe components of IDE, understand features of android development tools.

CO3: Describe the layouts and controls.

CO4: Explain the features of services and able to publish android Application.

CO5: Developing interesting Android applications using MIT App.

UNIT-I   **(9 Hrs.)**

Introduction to Android ,open headset alliance, Android Ecosystem, Need of Android, Features of Android, Tools and software required for developing an Application - Programming Exercises

UNIT-II   **(9 Hrs.)**

Operating system, java JDK, Android SDK, Android development tools , Android virtual devices, steps to install and configure Android studio and sdk, Android activities - Programming Exercises.

UNIT-III   **(9 Hrs.)**

control flow, directory structure, components of a screen, fundamental UI design, linear layout, absolute layout , table layout , text view, edit text, button, image button, radio button, radio group, check box, and progress bar, list view, grid view, image view, scroll view , time and date picker, toast - Programming Exercise.

UNIT-IV   **(9 Hrs.)**

android platform services, Android system Architecture , Android Security model - Programming Exercises.

UNIT-V   **(9 Hrs.)**

Introduction of MIT App Inventor, Application Coding, Programming Basics & Dialog,Audio& Video, File - Programming Exercises.

Co-Curricular Activities
- Assignments on problem solving
- Group discussions
- Student presentations and seminars
- Online quizzes
- Project work

Prescribed Books
1. Erik Hellman, "Android Programming – Pushing the Limits", 1st Edition, Wiley India Pvt Ltd, 2014.
2. App Inventor: create your own Android apps by Wolber, David (David Wayne).

Reference Books
1. Dawn Griffiths and David Griffiths, "Head First Android Development", 1st Edition, O'Reilly SPD Publishers, 2015.
2. J F DiMarzio, "Beginning Android Programming with Android Studio", 4th Edition, Wiley India Pvt Ltd, 2016. ISBN-13: 978-8126565580
3. Anubhav Pradhan, Anil V Deshpande, " Composing Mobile Apps" using Android, Wiley 2014, ISBN: 978-81-265-4660-2
4. Android Online Developers Guide
5. http://developer.android.com/reference/ Udacity: Developing Android
6. Apps- Fundamentals
7. https://www.udacity.com/course/developing-android-appsfundamentals--ud853-nd
8. http://www.appinventor.mit.edu

MARIS STELLA COLLEGE (AUTONOMOUS), VIJAYAWADA – 8
(Affiliated to Krishna University)
Blueprint

Subject: Computer Science   **Semester: V/VI**

Course Title: Mobile Application   **Course Code: 20CSSEC21MA3**
Development

Time: 3 Hrs.   **Max. Marks: 100**

SECTION – A

Answer **ALL** questions   **20 x 1 = 20M**

Q. No.	UNIT	Marks Weightage	RBT LEVEL
1	I	1	
2	I	1	
3	II	1	
4	II	1	
5	III	1	
6	III	1	**No. of questions to be set**
7	IV	1	RBT1 – 8
8	IV	1	RBT2 – 8
9	V	1	RBT3 – 2
10	V	1	RBT4 – 2
11	I	1	
12	I	1	
13	II	1	
14	II	1	
15	III	1	
16	III	1	
17	IV	1	
18	IV	1	
19	V	1	
20	V	1	

SECTION – B

Answer any **FOUR** questions   **4 x 8 = 32M**

Q. No.	UNIT	Marks Weightage	RBT LEVEL
21	I	8	**No. of questions to be set**
22	II	8	
23	III	8	RBT1 – 2
24	IV	8	RBT2 – 2
25	V	8	RBT3 – 1
26	I / II / III / IV / V	8	RBT4 – 1

SECTION – C

Answer any **FOUR** questions   **4 x 12 = 48M**

Q. No.	UNIT	Marks Weightage	RBT LEVEL
27	I	12	**No. of questions to be set**
28	II	12	
29	III	12	RBT1 – 2
30	IV	12	RBT2 – 2
31	V	12	RBT3 – 1
32	I / II / III / IV / V	12	RBT4 – 1

MARIS STELLA COLLEGE (AUTONOMOUS), VIJAYAWADA – 8
(Affiliated to Krishna University)
Model Question Paper

Subject: Computer Science   **Semester: V/VI**
Course Title: Mobile Application   **Course Code: 20CSSEC21MA3**
                    Development
Time: 3 Hrs.   **Max. Marks: 100**

SECTION – A

Answer **ALL** questions   **20 x 1 = 20M**

1. Android is _____
    A. an operating system
    B. a web browser
    C. a web server
    D. a program
2. Which of the following virtual machine is used by the Android operating system?
    A. JVM
    B. Dalvik virtual machine
    C. Simple virtual machine
    D. Simple Virtual Machine
3. What is an activity in android?
    A. Android class
    B. Android package
    C. A single screen in an application with supporting java code
    D. Program class
4. In Android studio, which of the following callback is called when an activity starts interacting with the user?
    A. onDestroy
    B. onCreate
    C. onResume
    D. onStop
5. Android tries to _____ low-level components, such as the software stack, with interfaces so that vendor specific code can be managed easily.
    A. Confound
    B. Abstract
    C. Modularize
    D. Compound
6. Which of the following can you use to display a progress bar in an Android application?
    A. ProgressBar

B. ProgressDialog

C. ProgressView

D. Component status

7. Which of the following is not a layer in Android Architecture?

    A. Android Runtime

    B. Libraries

    C. Linux kernel

    D. Application Framework

8. How can we stop the services in android?

    A. By using the stopSelf() and stopService() method

    B. By using the finish() method

    C. By using system.exit() method

    D. By using system.clear() method

9. Which of the following is the parent class of Activity?

    A. Content

    B. Object

    C. Content Theme Wrapper

    D. Parent Wrapper

10. The sendStickybroadcast(intent) method in android is used to show that the intent is _____.

    A. Optional

    B. Prioritize

    C. Sticky

    D. Intent

11. All layout classes are the subclasses of _____.

12. AAPT stands for _____.

13. All layout classes are the subclasses of _____.

14. In Android studio _____ layout is a default layout in XML.

15. In android, mini activities are also known as_____.

16. The component that manages the user interaction with the phone and controls the UI known as _____.

17. Activity in Android can be killed using _____.

18. Transient data in Android is _____.

19. ANR in android stands for _____.

20. We require an _____ to create an emulator.

SECTION – B

Answer any **FOUR** questions   **4 x 8 = 32M**

21. Explain about Android ecosystem.

22. Describe the features of Android with examples.

23. Discuss about Android development tools.

24. Analyse the directory structure and components of a screen.

25. Describe the Android Security model.
26. Explain the MIT App Inventor

SECTION – C

Answer any **FOUR** questions   **4 x 12 = 48M**

27. Explain about tools and software required for developing an Android application.
28. Discuss steps to install and configure Android studio and sdk.
29. Analyse the different layout in UI design.
30. Elaborate the Android system Architecture.
31. Differentiate between java JDK, Android SDK.
32. Describe the Programming Basics & Dialog,Audio& Video in MIT App