MOBILE APPLICATION DEVELOPMENT
(OPEN ELECTIVE)
(Effective from the academic year 2018 -2019)
SEMESTER – VI

Course Code	18CS651	CIE Marks	40
Number of Contact Hours/Week	3:0:0	SEE Marks	60
Total Number of Contact Hours	40	Exam Hours	03

CREDITS –3

Course Learning Objectives: This course (18CS651) will enable students to:

- Learn to setup Android application development environment
- Illustrate user interfaces for interacting with apps and triggering actions
- Interpret tasks used in handling multiple activities
- Identify options to save persistent application data
- Appraise the role of security and performance in Android applications

Module – 1	Teaching Hours
Get started, Build your first app, Activities, Testing, debugging and using support libraries **Textbook 1: Lesson 1,2,3** **RBT: L1, L2**	08
Module – 2	
User Interaction, Delightful user experience, Testing your UI **Textbook 1: Lesson 4,5,6** **RBT: L1, L2**	08
Module – 3	
Background Tasks, Triggering, scheduling and optimizing background tasks **Textbook 1: Lesson 7,8** **RBT: L1, L2**	08
Module – 4	
All about data, Preferences and Settings, Storing data using SQLite, Sharing data with content providers, Loading data using Loaders **Textbook 1: Lesson 9,10,11,12** **RBT: L1, L2**	08
Module – 5	
Permissions, Performance and Security, Firebase and AdMob, Publish// **Textbook 1: Lesson 13,14,15** **RBT: L1, L2**	08

Course outcomes: The students should be able to:

- Create, test and debug Android application by setting up Android development environment
- Implement adaptive, responsive user interfaces that work across a wide range of devices.
- Infer long running tasks and background work in Android applications
- Demonstrate methods in storing, sharing and retrieving data in Android applications
- Analyze performance of android applications and understand the role of permissions and security
- Describe the steps involved in publishing Android application to share with the world

Question Paper Pattern:

- The question paper will have ten questions.
- Each full Question consisting of 20 marks

- There will be 2 full questions (with a maximum of four sub questions) from each module.
- Each full question will have sub questions covering all the topics under a module.

The students will have to answer 5 full questions, selecting one full question from each module.

Textbooks:
1. Google Developer Training, "Android Developer Fundamentals Course – Concept Reference", Google Developer Training Team, 2017. https://www.gitbook.com/book/google-developer-training/android-developer-fundamentals-course-concepts/details (Download pdf file from the above link)

Reference Books:
1. Erik Hellman, "Android Programming – Pushing the Limits", 1st Edition, Wiley India Pvt Ltd, 2014.
2. Dawn Griffiths and David Griffiths, "Head First Android Development", 1st Edition, O'Reilly SPD Publishers, 2015.
3. J F DiMarzio, "Beginning Android Programming with Android Studio", 4th Edition, Wiley India Pvt Ltd, 2016. ISBN-13: 978-8126565580
4. Anubhav Pradhan, Anil V Deshpande, " Composing Mobile Apps" using Android, Wiley 2014, ISBN: 978-81-265-4660-2

H. O. D.
Dept. Of Information Science & Engineering
Alva's Institute of Engg. & Technology
Mijar, MOODBIDRI - 574 225