

MOBILE APPLICATION DEVELOPMENT [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2016 -2017) SEMESTER – VI			
Subject Code	15CS661	IA Marks	20
Number of Lecture Hours/Week	3	Exam Marks	80
Total Number of Lecture Hours	40	Exam Hours	03
CREDITS – 03			
Course objectives: This course will enable students to <ul style="list-style-type: none"> • 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			8 Hours
Module – 2			
User Interaction, Delightful user experience, Testing your UI			8 Hours
Module – 3			
Background Tasks, Triggering, scheduling and optimizing background tasks			8 Hours
Module – 4			
All about data, Preferences and Settings, Storing data using SQLite, Sharing data with content providers, Loading data using Loaders			8 Hours
Module – 5			
Permissions, Performance and Security, Firebase and AdMob, Publish			8 Hours
Course outcomes: The students should be able to: <ul style="list-style-type: none"> • 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. There will be TWO questions from each module. Each question will have questions covering all the topics under a module. The students will have to answer FIVE full questions, selecting ONE full question from each module.			
Text Books:			
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



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