ANNEXURE: 1 MODULE WISE COURSE CONTENT AND OUTCOME

SL. NO	MODULE NAME	MODULE CONTENT	MODULE LEARNING OUTCOME	DURATIO N (HRS)
1	Introduction to Mobile App Developmen t	Overview of mobile development platforms (Android, iOS), app lifecycle, and tools (e.g., Android Studio, Xcode)	Explore the fundamentals of mobile app development, platforms, and tools	9
2	Mobile App Programmin g Basics	Introduction to programming languages for mobile apps (Java, Kotlin, Swift), key libraries, and frameworks	Apply basic programming concepts and languages used in mobile app development	9
3	UI/UX Design for Mobile Apps	Principles of UI/UX design, creating user- friendly mobile interfaces, responsive design for apps	Acquire skills to design user-friendly and visually appealing mobile apps	9
4	Mobile App Debugging & Testing	Debugging techniques, using development tools for testing (e.g., Android Studio Debugger, Xcode), common errors and solutions	Debugging mobile app, identify, and resolve common issues, and conduct testing	9
5	Mobile App Deployment & Support	Deploying apps to app stores (Google Play, Apple App Store), app maintenance, providing app support and troubleshooting	Deployment of application and learn support/troubleshootin g for mobile apps	9

ANNEXURE : 2 Industry Use Cases/Final Projects

LEARNING OUTCOME	ASSESSMEN T CRITERIA	PERFORMA NCE CRITERIA	USECASES
Understand the basics of mobile app development platforms	Completion of introductory tasks in Android/iOS platform setup	Ability to set up Android Studio or Xcode, create basic app projects	Setting up Android/iOS development environments and creating a simple "Hello World" app
Apply mobile programming skills for Android and iOS apps	Write and implement basic code in Java, Kotlin, or Swift	Successfully build a functional mobile app with simple features like buttons and text fields	Building a calculator app for Android or an expense tracker for iOS
Design intuitive and responsive mobile app interfaces	Develop UI/UX for mobile apps considering usability and aesthetics	Ensure interfaces are responsive and user- friendly across different devices and screen sizes	Designing a login screen with interactive elements such as buttons and text input fields
Debug and test mobile applications effectively	Use Android Studio or Xcode debugger to identify and fix bugs	Demonstrate the ability to find and fix bugs, and successfully run test cases	Debugging a mobile app where buttons are unresponsive or screen crashes
Deploy mobile applications and provide post-deployment support	Deploy apps to Google Play Store or Apple App Store and troubleshoot issues	Ensure that apps are deployed correctly and that post-launch support is provided for troubleshooting	Deploying a task manager app to the Play Store and handling user feedback regarding bugs or performance issues

LIST OF FINAL PROJECTS			
SL.NO	FINAL PROJECT		
1	Build a basic "Hello World" app for Android or iOS using Android Studio or Xcode		
2	Develop a simple mobile calculator app with basic arithmetic functions and UI interaction		
3	Design and implement a login screen with user authentication and password validation		
4	Create a To-Do List app with features like adding, editing, and deleting tasks		
5	Develop a basic weather app that fetches weather data from an API and displays it on the user interface		
6	Build a simple expense tracker app where users can input, track, and categorize their expenses		
7	Design a mobile quiz app with multiple choice questions, timer, and score tracking		
8	Develop a mobile app for managing contacts, with options for adding, editing, and deleting entries		
9	Create a simple note-taking app with options to add, edit, and organize notes		
10	Build a basic music player app with play, pause, and skip functionality for audio files		
11	Design a task management app with reminder notifications and priority levels		
12	Develop a mobile fitness tracking app that records steps, distance, and calories burned		
13	Implement a basic shopping list app with the ability to add, remove, and mark items as purchased		
14	Build a currency converter app that uses real-time exchange rate data from an API		
15	Design and develop a mobile app for a simple social media platform with text and image posts		
16	Create a movie listing app that displays movie details fetched from a public API		
17	Develop a food delivery app prototype with features for browsing restaurants, selecting food items, and checking out		
18	Design a basic digital diary app with daily entries, categorized by mood or theme		
19	Create a photo gallery app that allows users to view, add, and organize photos		
20	Develop an e-commerce app prototype with user login, product catalog, and shopping cart functionality		

ANNEXURE 3 – COURSE ASSESSMENT RUBRICS

TABLE 5: COURSE ASSESSMENT RUBRICS (TOTAL MARKS: 70)					
ASSESSM ENT	DESCRIB CA	TOTAL MARKS			
CRITERIA	FAIR	GOOD	EXCELLENT		
1. Mobile App Developme nt (Project- based)	FAIR: App functionality works but with minor issues or incomplete features.	GOOD: App is functional with all key features, but may have some small usability or design flaws.	EXCELLENT : App is fully functional, user-friendly, and well-designed with no major issues.	25	
2. UI/UX Design & User Interaction	FAIR: Basic UI/UX design with minimal attention to user experience or responsive design.	GOOD: UI is clean, functional, and somewhat intuitive, but may need improvements in responsivenes s or user flow.	EXCELLENT : UI/UX is highly intuitive, aesthetically pleasing, and responsive across different devices.	15	
3. Debugging & Testing Skills	FAIR: Application shows basic debugging but leaves some critical bugs unresolved.	GOOD: Most common bugs have been resolved, and the app runs smoothly with minimal issues.	EXCELLENT : App is thoroughly tested with no significant bugs, smooth performance across scenarios.	10	
4. App Deploymen t & Support Knowledge	FAIR: Limited understandin g of deployment process and minimal troubleshooti ng skills.	GOOD: Deploys app with some minor issues and is able to troubleshoot some common problems.	EXCELLENT: Successfully deploys app with no issues, and effectively handles troubleshooting and post-deployment support.	10	
5. Project Documenta tion & Presentatio n	FAIR: Basic documentation n and presentation, missing some important details or explanations.	GOOD: Clear documentatio n and well-explained project presentation with minor gaps.	EXCELLENT: Detailed, well- organized documentation and clear, professional project presentation.	10	

Category	Assessment Criteria	Performance Levels	Weightag e (Marks)
Practical Skills Proficiency	Demonstrates ability to perform job-specific tasks effectively, using relevant tools, techniques, or methodologies (e.g., Tally for accounting, consignment tracking).	Fair, Good, Excellent	20
Technical Knowledge Application	Applies theoretical concepts to practical scenarios with accuracy and relevance (e.g., compliance with GST laws, financial planning, or logistics protocols).	Fair, Good, Excellent	15
Project Execution	Completes assigned projects or use cases demonstrating innovation, thoroughness, and skill application relevant to industry standards.	Fair, Good, Excellent	25
Communication and Reporting	Clearly presents findings, solutions, or project outcomes using professional communication and documentation standards (e.g., reports, presentations).	Fair, Good, Excellent	10