

End Semester Examination 2024

Name of the Course: _

B.Tech.(CSE)

Name of the Paper: **Mobile
Applications Development**

Semester: VIII

Paper Code: TCS 822

Time: 3 Hour's

Maximum Marks: 100

Note:

- (i) All Questions are compulsory.
- (ii) Answer any two sub questions among a,b and c in each main question.
- (iii) Total marks in each main question are twenty.
- (iv) Each question carries 10 marks.

Q1	(10 X2 = 20 Marks)	
(a)	What are the advantages and disadvantages of native app development compared to cross-platform development, and how should businesses decide which approach to take?	CO1
(b)	How can developers ensure that their mobile applications meet the performance and usability standards expected by modern users?	
(c)	Provide a detailed case study of a successful mobile app development project, including the initial concept, development process, challenges faced, and outcomes?	
Q2	(10 X2 = 20 Marks)	
(a)	What are the best practices for managing and organizing UI resources in a large-scale mobile application project?	CO2
(b)	What are the different states in the Android activity life cycle, and how should developers handle state transitions to ensure smooth user experiences and efficient resource management?	
(c)	How can developers implement and manage notifications to provide timely and relevant updates to users?	
Q3	(10 X2 = 20 Marks)	
(a)	What are the different APIs available in Android and iOS for audio and video playback, and how do they compare in terms of functionality and ease of use?	CO3
(b)	What are the key differences between GPS, Wi-Fi, and cellular-based location services in mobile applications, and how can developers choose the best method for their needs?	
(c)	What are the key differences between accelerometer and gyroscope sensors, and how can developers decide which sensor to use for specific functionalities?	
Q4	(10 X2 = 20 Marks)	
(a)	How can developers utilize debugging tools and features provided by Android Studio and Xcode to troubleshoot and resolve issues in their mobile applications?	CO4
(b)	What is white box testing, and how does it differ from other testing methodologies in the context of mobile app development?	
(c)	How can testers design effective test cases for black box testing to cover all possible user scenarios and edge cases in mobile applications?	

Q5	(10 X2 = 20 Marks)	CO5
(a)	What are the best practices for versioning mobile applications to ensure consistency and clarity for both developers and users?	
(b)	Why is signing mobile applications critical, and what are the consequences of improperly signed apps?	
(c)	What strategies can developers use to handle app updates and manage user feedback effectively on mobile marketplaces?	