

<b>Name:</b>	 <b>UPES</b> <small>UNIVERSITY WITH A PURPOSE</small>
<b>Enrolment No:</b>	

**UNIVERSITY OF PETROLEUM AND ENERGY STUDIES**  
**End Semester Examination, December 2019**

<b>Course: Open Source Mobile Platform</b>	<b>Semester : V</b>
<b>Program: B. Tech. CSE+OSOS</b>	<b>Time : 03 hrs.</b>
<b>Course Code: CSOS 3001</b>	<b>Max. Marks: 100</b>

**Instructions:**

**All Questions are compulsory**  
**Write appropriate XML and JAVA files wherever required**  
**Write all assumptions in the form of comments.**


**SECTION A**

S. No.	Question	Marks	CO
Q 1	Justify significance of Android Manifest file.	4	CO1
Q 2	Differentiate between internal and external memory storage in android application. Discuss about necessary functions required for external storage.	4	CO4
Q 3	What is SQLite database? How to create database connection using SQLite database?	4	CO3
Q 4	Create an android application with required components that shows current location of the User.	4	CO4
Q 5	Demonstrate use of Spinner view in android app with suitable example.	4	CO3

**SECTION B**

Q 6	Explain the following Layouts used in Android application: <ul style="list-style-type: none"> <li>• LinearLayout</li> <li>• RelativeLayout</li> </ul>	10	CO2
Q 7	Develop an android application to store the details of a student permanently and display the details in another activity using shared preference.	10	CO3
Q 8	Describe use of Intent. Differentiate Explicit and Implicit Intents.	10	CO1
Q 9	Illustrate use Notification in Android app with suitable example.  <p style="text-align: center;"><b>OR</b></p> Create an android application that contains a TextView, displays a message and two Buttons, 'CHANGE FONT' and 'CHANGE COLOR', which change font size and color of given message respectively. Separate data from code and write required resource files.	10	CO2

**SECTION-C**

Q 10	Develop layout for an Activity used to insert student details (Roll no, Name, marks, DOB). Save entered data into SQLite database. Display a toast message after each successful insertion. Add another activity used to search and display details of specific student.	<b>20</b>	<b>CO4</b>
Q 11	<p>Explore use of different options available to make our data persistence in android application. Demonstrate use of internal memory with the help of traditional file I/O by storing username and password in a text file.</p> <p style="text-align: center;"><b>OR</b></p> <p>Develop an android activity that generates a custom List View. Each row of the list contains images and texts. List out Country Flag image, Country name, and captain of cricket team as shown in figure 1.</p> <div data-bbox="493 730 891 814" style="text-align: center;"></div> <p style="text-align: center;"><i>Figure 1: Sample View of each row</i></p>	<b>20</b>	<b>CO3</b>