

2019

3rd Semester Examination

COMPUTER SCIENCE (Honours)

Paper - SEC 1-P

**Software Lab Based on
Android Programming**

[Practical]

SET-I

Full Marks : 20

Time : 3 Hours

*The figures in the margin indicate full marks.
Candidates are required to give their answers
in their own words as far as practicable.*

Answer *any one* question (Lottery basis). $15 \times 1 = 15$

1. Write a program in Android that make use of databas to Add, Update and Delete the Name, Roll no. and Marks obtained of a student.
2. Write an Android application where after clicking on 'OK' button a message with entered name will display.
e.g. "Hi. Sreemat, Welcome to my Application"

[Turn Over]

3. Develop an Android application for performing simple calculations (Addition, subtraction, Multiplication, Division etc.)
4. Write an Android program to convert temperature from Celsius to Fahrenheit and vice versa.
5. Develop an Android application to design a Login Screen using Relative Layout.
6. Write an Android program to implement Date and Time Picker.
7. Develop an Android application to implement an order list to order more than one item using checkbox widget.

PNB : 02, Viva-voce : 3

SOFTWARE LAB BASED ON METALAB

SET-I

Full Marks : 20

Time : 3 Hours

Answer *any one* question (Lottery basis). 1×15

1. Consider the following functions,

$$f(x) = \begin{cases} (x-5)^2 & , \text{if } x > 0 \\ -(x-3)^2 + 34 & , \text{if } x \leq 0 \end{cases}$$

Write a Matlab program for x values varying between -6 to 6 with the increment of 0.5 to evaluate the function f(x). Next find and display the value of x which gives the largest value of f(x).

2. Write a Matlab program to find the Transpose and Inverse of a Matrix.
3. Write a Matlab program to find the roots of the following equation.

$$3x^2 + 5x + 25 = 0$$

4. Write a Program to input two strings from user and do the following :
 - (i) Concatenate two strings.
 - (ii) Line of asterisks (*) of same length of concatenated strings.
 - (iii) Reversed the concatenated string.
5. Calculate 10 approximate points from the function $y = 2x$ by using the formulae :
 - (i) $x_n = n$
 - (ii) $y_n = 2n + \text{rand} - 0.5$

6. Write a program to sort the following Array in descending order.

$A = [25, 10, 3, 100, 75, 155]$

7. Calculate and replay 1 second of a sinewave at 600Hz with a sampling rate of 10225 Hz and plot the first 100 samples.

LNB 2

Viva-voce 3

2019

3rd Semester Examination

COMPUTER SCIENCE (Honours)

Paper - SEC 1-P

**Software Lab Based on
Android Programming**

[Practical]

SET-II

Full Marks : 20

Time : 3 Hours

*The figures in the margin indicate full marks.
Candidates are required to give their answers
in their own words as far as practicable.*

Answer *any one* question (Lottery basis). $15 \times 1 = 15$

1. Develop an Android application to design a Login screen using Relative Layout.
2. Develop an Android application to implement an order list to order more than one item using checkbox widget.

[Turn Over]

3. Develop an Android application for performing simple calculations (Addition, subtraction, Multiplication, Division etc.)
4. Write an Android program to implement Date and Time picker.
5. Write an Android Program to convert temperature from celsius to Fahrenheit and vice versa.
6. Write a program in Android that make use of data base to Add, update and delete the Name, Roll no, and Marks obtained of a student.
7. Write an Android application where after clicking an 'OK' button a message with entered name will display.
e.g. 'Hi Sreemat, welcome to my Application'

PNB : 02

Viva-voce : 03

SOFTWARE LAB BASED ON METALAB

SET-II

Full Marks : 20

Time : 3 Hours

Answer *any one* question on lottery basis. 1×15

1. Write a matlab program to find the transpose, inverse and determinant of a square matrix.
2. Write a matlab program to find the roots of the following equation.
$$3x^2 + 15x + 18 = 0$$
3. Write a matlab program to sort each row of a matrix.
4. Write a program to find the mean, mode and standard deviation of a matrix.
5. Plot the output of question no. 4
6. Write a matlab program to find the index of a vector for each occurrence of 1.
7. Write a matlab program to remove all negative numbers from a vector.