

[This question paper contains 2 printed pages.]

Your Roll No.....

Sr. No. of Question Paper : 3620

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Unique Paper Code : 6332493603

Name of the Paper : Android Programming

Name of the Course : **B.Voc (Web Designing) (NEP-UGCF)**

Semester : VI

(For Admissions of 2019 onwards)

Duration : 3 Hours

Maximum Marks : 90

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Question No. 1 is compulsory in **Section-A**.
3. Attempt any **four** questions from **Section-B**.
4. Parts of a question should be attempted together.

Section A

- Q1. (a) Explain the concept of Inheritance in Object-Oriented Programming with reference to function overriding. 3
- (b) Explain the different types of layouts used in Android application development. 3
- (c) Differentiate between CheckBox and RadioButton in Android. Also explain how CheckBox can be implemented using Kotlin. 3
- (d) What is a Spinner in Android? Explain its working with a suitable example. 3
- (e) Which of the following languages can be used in the Android development: 3
- (1) Java
- (2) CSS
- (f) Explain TextView in android? 3
- (g) Write a small program to display the Notification from the Top middle using Toast class? 3
- (h) Discuss working of Content Provider? 3
- (i) Discuss SQLite databases for developing android applications. 3
- (j) How can we insert toggle buttons in an activity in android using kotlin? 3

P.T.O.

Section B

- Q2. (a) Design a Simple Calculator with operations addition, and division. Use only a single activity without any intents. 12
- (b) What is Broadcast Receivers. Discuss with suitable example? 3
- Q3. (a) Explain the working of an Android application that displays the population of a country by taking the country name as input and fetching the population data using the given API. 12
- API: <https://knowyourworld/getpopulation/from/country>
- Request Body: Country Name
- Response: Population (in crores)
- (b) How can we test our android application in Desktop view? 3
- Q4. (a) Create a function in kotlin as an android application with following details: 8
- Function will take an integer as input and find its square and return the result
- (b) Discuss Activity Lifecycle. 7
- Q5. (a) Discuss following callback methods with respect to activity: 9
- (1) onCreate()
- (2) onStart()
- (3) onResume()
- (b) What is the usage of android Manifest.xml file? 6
- Q6. (a) Explain Android Architecture with a suitable diagram. 8
- (b) What is SQLite database? How to provide that database connection using SQLite database. 7
- Q7. (a) Discuss steps to create notifications in Android? 8
- (b) Differentiate between Implicit intent and explicit intent? 7