**POORNIMA UNIVERSITY, JAIPUR**

**END SEMESTER EXAMINATION, November 2022**

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|  | **4BT7108** | Roll No. | Total Printed Pages: 2 |
| **4BT7108** |  |
| B. Tech IV Year VII-Semester (Back) End Semester Examination, November 2022  **(CC)** | |
| **BCC07102 : Android Security** | | | |

# Time: **3** Hours. Total Marks: **60**

Min. Passing Marks: **21**

Attempt **five** questions selecting one question from each Unit. There is internal choice from Unit I to Unit V. Marks of each question or its parts are indicated against each question / parts. Draw neat sketches wherever necessary to illustrate the answer. Assume missing data suitably (if any) and clearly indicate the same in the answer.

Use of following supporting material is permitted during examination for this subject.

# **1. --------------------------Nil--------------------** **2. ------------------Nil-----------------------**

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|  |  | **UNIT-I (CO1)** | **Marks** |
| **Q.1** | **(a)** | What would you prefer if you have to compile android application, emulator, virtual machine or real physical device? Compare each with advantages and disadvantages? | **(6)** |
|  |  |  |  |
|  | **(b)** | If you are given with simple basic Linux kernel, what enhancements will you make to it in order to be sure it will met the new security parameters for current scenario? | **(6)** |
|  |  | **OR** |  |
| **Q.2** | **(a)** | According to which app will you prefer to build if you are given a choice to choose between native code and platform specific app? Site the reason for the same? | **(6)** |
|  |  |  |  |
|  | **(b)** | Taking security aspect into consideration what module you would like to add to the android architecture to make it more secure, even if you want to drop some of the modules, mention that also? | **(6)** |
|  |  | **UNIT-II (CO2)** |  |
| **Q.3** | **(a)** | If you were early team member of android architectural frame work, would you have gone for new virtual machine or used existing JVM? Support you answer with the proper reason? | **(6)** |
|  |  |  |  |
|  | **(b)** | Why did android’s framework developing team choose to go for DVM instead of JVM? Support you answer with the proper reason? Which among them is fast and why? | **(6)** |
|  |  | **OR** |  |
| **Q.4** | **(a)** | If you have to replicate the android application available on playstore, write down whole process you will follow with the help of appropriate tools? | **(6)** |
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|  | **(b)** | If you have found some were on internet the dalvik byte code how will you convert that code back to source code? Write down the steps for that? | **(6)** |
|  |  | **UNIT-III (CO3)** |  |
| **Q.5** | **(a)** | Being the team head in the android development project you directed your members that we will not use content provider, ignoring that, they still used, what sort of remedy you are going to provide in order to make that secure and also provide the alternative solutions to that? | **(6)** |
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|  | **(b)** | While developing android application for e-commerce purpose, you need to store user data as well as other related data that will be available to the application, where will you store the data categorically being a part of android application development team? | **(6)** |
|  |  | **OR** |  |
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| **Q.6** | **(a)** | Suppose you are an android developer, you wish to use html web pages in your application what security features you will take into consideration while displaying those web pages in your application that you are going to develop? | **(6)** |
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|  | **(b)** | Taking security aspect in consideration, you need to fetch the web services from different web application (website), for your android app, What element you are going to choose and how will you provide security for that particular tool? | **(6)** |
|  |  | **UNIT-IV (CO4)** |  |
| **Q.7** | **(a)** | If you are the security head for android development, will you choose to develop new cryptographic algorithms to secure sensitive information or will go for JCA implemented framework cryptographic algorithms, support your answer with the valid reason? | **(6)** |
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|  | **(b)** | Suppose you are the security administrator in an ABC organization, your organization is working on an android project, they asked your support for helping them in handling GSM-based pivot attacks, what suggestions are you going to provide them? | **(6)** |
|  |  | **OR** |  |
| **Q.8** | **(a)** | Being the part of android development team how you will make sure that the application you are developing will be protected by security implementation in order to avoid mobile botnets, discus your approach that you would follow? | **(6)** |
|  |  |  |  |
|  | **(b)** | While checking your android phone you couldn’t find any viruses or bugs but whenever you install application they are getting infected, what sort of attack it is, how can we prevent it? | **(6)** |
|  |  | **UNIT V (CO5)** |  |
| **Q.9** | **(a)** | Write short note on any latest android specific attack? How we can prevent that attack if remedy is available if not then site the reason for same? | **(6)** |
|  |  |  |  |
|  | **(b)** | Being a programmer, what sort of techniques you will use for null check, and discuss security aspect while checking for nulls? | **(6)** |
|  |  | **OR** |  |
| **Q.10** | **(a)** | You have written some code in java, you want this code to be executed on all major platforms like (Ms Windows, Linux or Mac OS), with the help of example provide the solution? | **(6)** |
|  |  |  |  |
|  | **(b)** | While creating few activities in an android application, you want to pass some information from one activity to other and simultaneously end and start new activity**,** what will be your approach and note that you have to be careful in terms of security? | **(6)** |