JAHANGIRNAGAR UNIVERSITY
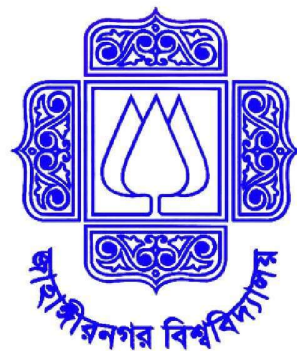
Institute of Information Technology (IIT)

CLASS TEST 1
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Date of Examination: JULY 14, 2023

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1ST Trimester Regular Batch
Section A
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Ans:

<u>@</u> Basically Andriod studio application implementation required 7 basic folders & 1 stricpts directory.

These are:

   ⓘ Java folder:- contains sourcecode of java.

         default classfile : Mainactivity.java

   ⓘⓘ Resource folder:- or known as <u>res folder</u>.
contains all non-code resource, image, xml layouts

   ⓘⓘⓘ Drawable folder: (res/drawable):- basically contains different type of images. & or icons of app.

   ⓘⓥ Layout Folder (res/layout):- contains all XML layout used for user interface.

   ⓥ Mipmap folder: (res/mipmap): contains app/launcher icons used to show on home screen. based on different device size.

   ⓥⓘ values folder (res/values): contains a various xml files like string, colors. arrays.

(m) Maintests folder :- contains maintest file (AndroidManifest.xml) which contain information about application information. access. permission. metadodata

(viii) ~~type~~ Gradle Scripts :- ~~meas~~ automated build system by ~~coricpore~~ defineing a conibigration modules for application.

In gradle build.gradle (project), build.gradle (Module) used to build conbigarations that apply bor app modules or specific to one app module.

Main files :-

① Android layout file : activity_main.xml
② Android Main activity File : MainActivity.java
③ Android Mainfest file : AndroidManifest.xml

1(B) Android is an open-source operating system. based of linux ~~operating system~~ with a java programming user interface for mobile, TV or touch devices.

• Android is an OS or operating system because it is modified version of the linux operating system's kernal & usually build for devices like mobile, TV or touchscreen.

It is open source Because it's source code is open & public for developer through Android open Source project (AOSP). So anyone can customize this based on requirements.

And finally any hardware/software environment in which the program runs is known as platform Since Android has its own runtime environment (JRE) and API. so, Android is a platform.

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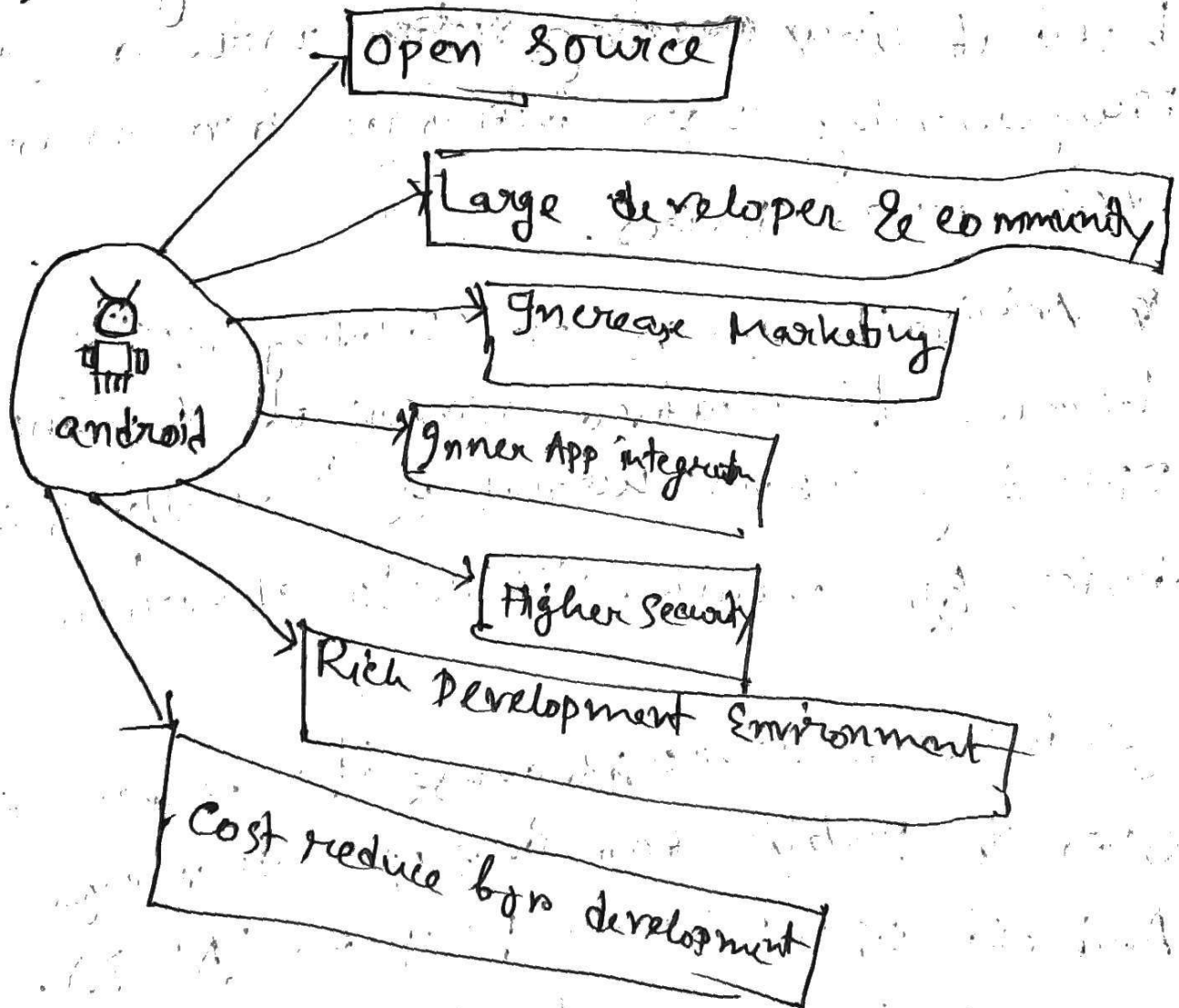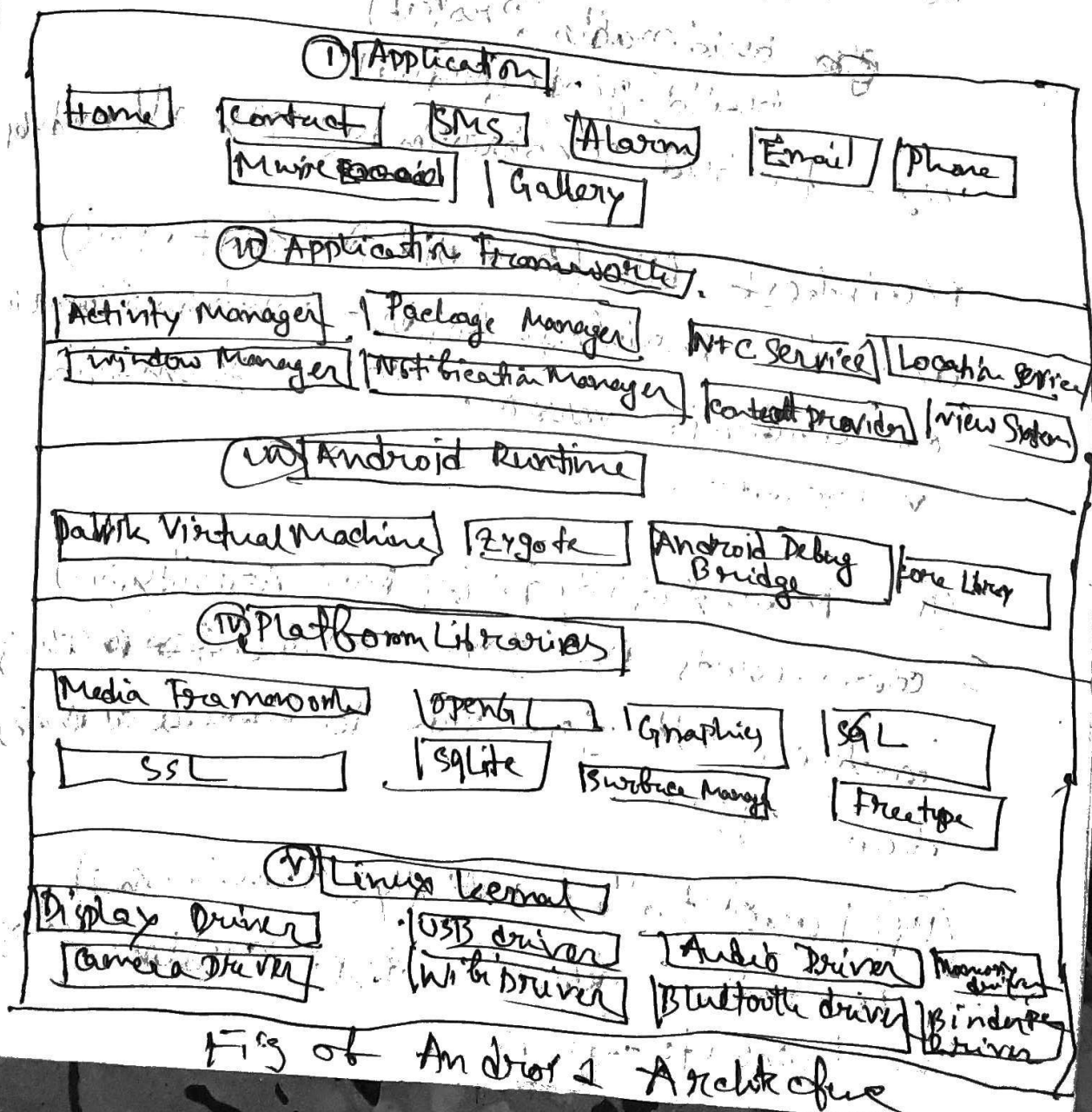
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- Open Source
- Large developer & community
- Increase Marketing
- Inner App integration
- Higher Security
- Rich Development Environment
- Cost reduce for development

Figure of : Android ~~Feautur~~ Features.

Ans. 2

2(a) Android architecture is based on 5 component
that are given in figures.
- Linux kernal is the main component of Android.
- 2e DVM (Dalvik Virtual Machine) is responsible
for mobile application.

```
┌──────────────────────────────────────────────────────┐
│              ① Application                              │
│  [Home]  [Contact]  [SMS]  [Alarm]   [Email] [Phone]  │
│       [Music Record] | [Gallery]                       │
│                                                        │
│            ② Application Framework                      │
│  [Activity Manager]  [Package Manager]  [NFC Service][Location service]│
│  [Window Manager][Notification Manager][Content Provider][View System]│
│                                                        │
│            ③ Android Runtime                            │
│  [Dalvik Virtual Machine] [Zygote]  [Android Debug    │
│                                      Bridge] [Core Library]│
│                                                        │
│            ④ Platform Libraries                         │
│  [Media Framework]   [OpenGL]   [Graphics]  [SGL]     │
│  [SSL]        [SqLite] [Surface Manager] [Freetype]    │
│                                                        │
│            ⑤ Linux kernal                               │
│  [Display Driver]   [USB driver]  [Audio Driver][Memory driver]│
│  [Camera Driver]    [Wifi Driver][Bluetooth driver][Binder driver]│
└──────────────────────────────────────────────────────┘
```

Fig of Android Architecture

2(b)

(i) Gradle scripts & Manifest files
Gradle means automated build system
use for build configuration to apply
all modules in application. In gradle.
      build.gradle (Project)
      build.gradle (Module)
used to build configuration to apply all modules.

Manifest file (Android manifest.xml).
are in manifest folder. contains information
of android version. access permission
metadata.

(ii) → Main Activity file (Main Activity.java)
exists in java folder. This
contains all java code to handle activities
for app.

(iii) Layout file (activity_main.xml)
containing design & text modules exist
in layouts-folder.

23,24,32-

2 ⊙
=

Android NO	codename	AP
1	. alpha	1
1.1	Banana Bread	2
1.5	cupcake	3
1.6	Donut	4
2 - 2.1	Eclair	5-7
2.2	Froyo	8
2.3	Gingerbread	9 - 10
3 - 3.2	Honeycomb	11 - 13
4	gee obune scream	14 - 15
4.1 - 4.3	Jelly Bean	16 - 18
4.4	kitkat	19 - 20
5 - 5.1	Lollipop	21 - 22
6	Marshmallow	23
7	. Nogut	24
8	Oreo	26

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9	Pie	25
10	Quince tart	
11	Red velvet	
12	Snow cone	
13	Tiramisu	