ABV-Indian Institute of Information Technology & Management Gwalior
Mobile Application Technology (Minor Exam)
Semester – II (IMT, IMG)
Faculty: Dr. P. K. Singya

Date: 02/03/2024
Time: 10 AM-12 PM

Total Marks: 30

Instructions:
1. All questions are compulsory.
2. In case of multiple seemingly correct options (in MCQs), choose the most appropriate one.
3. Write the MCQs answers on the first page of your answer sheet.

Q1. What is the primary purpose of the 'findViewById' method in Android development? [1]

a. Find a view by its identifier
b. Find a view by its class
c. Find a view by its name
d. Find a view by its tag

Q2. What is the function of an Intent in Android? [1]

a. To display a message
b. To perform background tasks
c. To navigate between activities or apps
d. To store data in a database

Q3. In JAVA, which keyword is used to declare a variable that does not change its value? [1]

a. Final
b. static
c. const
d. var

Q4. What is the purpose of 'main' method in a Java program? [1]

a. It is the starting point of the program
b. It handles exceptions.
c. It defines the main variables.
d. It is used for memory allocation.

Q5. How is method overloading different from method overriding in Java? [1]

a. Overloaded methods have the same method signature; overridden methods have different signatures.
b. Overloaded methods have different method names; overridden methods have the same name
c. Method overloading is static, and method overriding is dynamic.
d. Method overloading involves changing the return type, method overriding does not

Q6. What will be the output of the following Java program? [1]

```java
class variable_scope
{
    public static void main(String args[])
    {
        int x;
        x = 5;
        {
            int y = 6;
            System.out.print(x " " + y);
        }
        System.out.println(x + " " + y);
    }
}
```

a. Compilation error
b. Runtime error
c. 5 6 5 6
d. 5 6 5

Q7. What will be the output of the following Java program? [1]

```
class HelloWorld {
    public static void main(string[] args) {

        int[] arr = {1,2,3,4,5,6,7,8,9};
        int even =0;
        int odd =0;
        for(int i=0;i<arr.length;i++){
            if(arr[i]%2==0) even+=arr[i];
            else odd+=arr[i];
        }
        System.out.println(even+","+odd);
    }
}
```

a. 20,25

b. Array Index out of bound error.

c. 25,20

d. Run time error

Q8. When is method overloading determined? [1]

a. At run time

b. At compile time

c. At coding time

d. At execution time

Q9. Which folder in android studio project contains the java source code? [1]

a. res

b. libs

c. src

d. assets

Q10. Which component is responsible for managing the lifecycle of an Android activity? [1]

a. Fragment

b. Intent

c. Service

d. Activity

Q11. Define different types of layouts in Android Studio in detail. [2]

Q12. Explain private, public, and protected keywords in Java. [2]

Q13. What is exception handling, and why do we need it? Explain the try-catch block with an example. [2]

Q14. What is the difference between .java file and .xml files and what are their uses? How to create a new activity/screen in Android Studio? [2]

Q15. Explain how you will create a new project for Android using Android Studio. Also, explain the folder structure of the project created. [2]

Q16. What is inheritance? Explain it with an example. [2]

Q17. Write a program to find the GCD of two numbers using for loop. [2]

Q18. Compare and contrast while loop and do while loop in Java. Give an example to explain the working. [3]

Q19. Explain the activity life cycle of an Android application. [3]