

Module-3

1. Which modifier in Java can be used to prevent class from being inherited?

A. Final modifier

2. Which of the following is correct way to declare method.

A. public static void display () { }

abstract " " () { }

Final " " () { }

3. Which of the following is not checked exception?

A. Null Pointer exception & Arithmetic exception

4. Predict O/P of code :-

```
interface myinterface
```

```
{
```

```
    int a = 40;
```

```
}
```

```
void predict ( ) {
```

```
    class myclass implements myinterface {
```

```
        public void predict ( )
```

```
        {
```

```
            a++;
```

```
        }
```

```
    }
```

A. a is a constant

compiler error as a is a constant & its value cannot be modified in a class (myclass)

5. O/P of foll code :-

```
map<Integer, String> p = new HashMap<Integer, String>
```

p.put (20, "Neha"), p.put (20, "Austin");

p.put (40, "Pen");

p.put (40, "Pen");

p.put (20, "eraser");

SOP (p.size());

Ans:- 2 (duplicate values are not allowed)

6. Which of the following → correct way to ^{declare} abstract method in abstract Java class?

A. public abstract void display() { }

7. not true for abstract class?

A. i, cannot have concrete methods

ii, can't have subclasses

8. Student management, the length of lastname → length()

↓
null - exception.

True about scenario?

A

9. class Neha

```
{  
    public static void main (    )
```

```
{  
    try
```

```
{  
        int x = 8/0
```

```
}
```

```
catch
```

```
{  
        nullpointer exception null x
```

```
SOP("Null pointer exception");
```

```
Finally
```

```
SOP("Finally block");
```

```
}
```

O/P of the code?

A. Finally block, arithmetic exception is thrown at run-time

10. Java code → try with 2 catch blocks; one for sql exc, other for io exception. Finally block follows catch block but at the time of exc in try block throws sql excp acc to given scenario are collection?

A. When exception is thrown, sql exception block will be executed followed by finally block

11. scenario → Java → allow → comm. with obj via ~~remote~~^{socket} in remote method invocation. For this purpose what has to be done?

A. Use object serialization by creating a class which implements the serializable interface

12. how do you test exception thrown by the fol. method in JUnit?

```
public void resultmethod()  
{  
    int result = 5/0;  
}
```

Ans. - @Test (Exception^{ed} = ArithmeticException.class)

13. public class Neha

{

@Test

public void getdetail()

{

}

@Ignore

@Test

(expected = classCastException.class)

public void enterdetails()

@Ignore("This method is not modified");

@Test

public void displaydetails(){};

}

A. only one test case is executed

14. how many times following method is executed in JUnit?

@Before

public

SOP("method 1");

A. once before every test in the class

15. ArrayList

Predict %p of code ArrayList<String> a = new ArrayList<String>

A. -30

30

40

Meha

neha

a.add("30");

a.add("-30");

a.add("Meha");

a.add("40");

a.add("Neha");

collection.sort(a); SOP("contents of a:");

16. o/p of code → TreeSet

TreeSet tree = new TreeSet;

tree.add(apple)

tree.add(Ball)

tree.add(ball).

tree.add(Apple)

tree.add(apple.)

SOP(tree);

A. Apple

Ball

ape

apple

ball

17. Pick up true statement about Java collection.

A. a) Map stores obj in form of (key, value) pair

b) Set doesn't permit duplicate entries

18. Consider scenario ^{java doesn't want a} → coll of object → no dup entries → no order
which collection is used?

A. Hashset

19. ^{change} What is the default value assigned to foll array element,

A. boolean status = new boolean[2];

A:- False

20. Class Neha

```
{  
    public static void main()
```

```
{  
    int num1 = 0, num2 = 10;
```

```

do
{
    num2 --;
    ++num1;
}
while (num1 < 5)
{
    SOP (num1 + " ; " + num2);
}

```



O/p :- 5 5

21. Huma wants only subclasses in package to have access mem of superclass. What access modifier is used?

A. protected

22. The import keyword is used for which of following function?

A. import both built-in packages & user-def packages

23. Which is the correct way of writing the getter method of java bean property "city" of string data type?

A. String getcity ();

24. Which of the following → not a wrapper class?

A. Vector

25. Consider foll scenario

A. This will throw unchecked exception

26. customer ^{defined check} excep → new class → PurchaseOrderException.
Which predefined class need to be inherited by purchase
order exception by making

A. Runtime exception.

27. public class Neha

```
{  
    public static void main( )  
    {  
        try  
        {  
            SOP ("Integer.parseInt ("A 90"));  
        }  
        catch  
        {  
            (Arithmetic exception array index out of bound  
            exception e);  
        }  
        SOP (catch block 1);  
    }  
    catch  
    {  
        (Number Format exception ne);  
        SOP (catch block 2);  
    }  
    catch  
    {  
        (Exception e)  
        SOP (catch block 3);  
    }  
}
```

A :- catch block 2 ← 0/p

28. Can data flow in a given I/O stream in both dir? → No
stream has one dir either %p or %p

29. Consider testcases, which one is true?

1. @Test (Expected = ArithmeticException.class)

```
public void division()
```

```
{ int i = 1/0;
```

```
}
```

30. Which of the below method will fail?

```
public class Neha
```

```
{
```

```
@Test
```

```
public void test1()
```

```
{
```

```
assertEquals(23, int.parseInt("23"));
```

```
}
```

```
@Test
```

```
public void test2()
```

```
{
```

```
assertEquals("two", "two"); Fail("test fails");
```

```
}
```

Ans:- Test 2

31. Which is correct code for failing the test if the test takes longer than 1 sec for exec.?

1. @Timeout(1)

@Ignore

✓ @Test(timeout = 1000)


```

32. HashMap map = new HashMap(),
    map.put ("J", "Gulam");
    map.put ("null", "Rani");
    map.put ("null", null);
    map.put ("K", "null");
    map.put ("K", "Raja");
    SOP (map.size()),

```

Ans:- 3 (J, K, null)

33. Which statement should be inserted at line 6 to sort the array?

```

1 ArrayList subjects[] = new ArrayList[],
2 subjects.add ("Eng", "Mat", "Phy", "Chem");
3
4
5
6
7
8

```

Ans. collections.sort (subjects)

↓
name of array list

34. Pick up true stat related to array & arraylist

A:- i) array is static, arraylist is dynamic

ii) array & arraylist both of them allow duplicate values

35. Predict O/P → set < string ts > = new TreeSet < string >
 string [] v = {"1", "3", "1", "2"};
 for (i=0; i<v.length; i++)
 { ts.add (v[i]).

```

    iterator it = ls.iterator(),
    while (it.hasNext())
    {
        SOP (it.next()),
    }
}

```

Ans: 123

36. The hashtable doesn't allow ^{"null" value in} keys as well as in values.
A: True

DOPS-UML (MODULE 1)

1. Which of the following feature of a class diagram shows relationship b/w father & son?

A. Generalization (inheritance)

2. Which of the following options are not true w.r.t instance variables?

A. i, They comprise of all static variables in the class

ii, They cannot be initialised in the constructor

Module-1 - Pseudocode

3. Which of the below are true about exception handling?

A. i. Exception handling provides meaningful error messages

2. Use of exception mechanism helps in separating regular & error code

4. True in case of exhaustive testing

A. It is impractical & not economically weighable.

5. correct example of good pract using sub-module:

A. SUB Multiplication(

(one AS INTEGER

two AS INTEGER)

returns INTEGER

RETURN num1 x num2

END SUB

BEGIN

END → Multiplication();

★★

RVFD. - (★★)

1. According to the Chooes report, undocumented ^{assumptions} is the main reason ^{30% of} that contributes to requirement errors during the initial phases of SDLC (Pg-25) (M-2)

2. Identify which term below is used to identify the scenario?

banking system

- allows rec funds
- Trans alerts on mobile
- view ac bal
- Trans

A. features of the system

3. Non-func. requirement type of req. check includes checking that the system should be able to serve at the most 100 concurrent users

4. Scenario → Identify req

Sys should be func. on both old & new servers & space should be managed by both

A. Physical constraint

5 Identify methods to control req. creep

A. i, use prototyping

ii, JAD use

(Joint Application Development)

6 Identify severity & Priority for foll. defect

Neha → HR exec → recr. website → hire final yr st → April
website → downtime → during 1st month of Year

A. high sev, low priority

7. Identify defect status when defect is logged & yet to be assigned to developer?

A. NEW

8 Scenario → type of testing should be done → avoid this
hacker → US govt comp → 2 agen → defence dept

A. Security testing

9 Identify defect management tool from below description

A. Bugzilla

i, sporting no. of adv tools from notification to
ii, detection to shared searches ^{duplicate bug detection}

10. Use case describe logical interaction b/w actor & system

ii. In a ATM machine, ^{checks} bal → ^{then} savings → withdraw cash. Which
type of flow?

A. Alternate flow

Use Case

1 Which of foll → example of actor?

A customer, webclient

2 Identify use cases for online shop 40

A Login, User Regs, Buy Item, Make Payment

3 2 movie tickets ^{user has booked} by submit req details Which type of validation the above scenario comes?

A Use case level testing

4 Identify actor from the given scenario

College lib, lib clerk, stu $\xrightarrow{\text{update}}$ admin rights → librarian

Answer

Pseudocode

1 write way of writing pseudocode → naming convention

A BEGIN

ACCEPT ^{value} firstname, lastname;

result = firstname + lastname,

PRINT result

2 Black box testing ^{an} Equivalence partition
error guessing

3 Which of foll shows purpose of defensive programming?

A i. ensure that the program never returns inactive run
ii. abnormal termination of program will be avoided

OOPS - UML

1. true UML diagram - (^{wrong answer}ERD) deployment diagram
Entity Relationship

2. online shop app, objects from different classes communicate with each other. This communication is known as messaging.

Which type of

variant

g convention

programming?
inactive result
be avoided