

1. Suppose I have an enum defined say Subjects with Values: DBMS, DSA, NETWORKING, OPERATING SYSTEMS. a) How do I access the index of the values present in the enums. b) If while accessing the enums I pass an argument or say value which is not present in the enum then what kind of exception will be thrown? c) Can you demonstrate the same using a Java program?
2. Will the following method compile? If not, why?

```
public static void print(List<? extends Number> list) {  
  
    for (Number n : list)  
        System.out.print(n + " ");  
  
    System.out.println();  
  
}
```

3. If the compiler erases all type parameters at compile time, why should you use generics?
4. What is the following class converted to after type erasure?

```
public class Pair<K, V> {  
  
    public Pair(K key, V value) {  
        this.key = key;  
        this.value = value;  
    }  
  
    public K getKey(); { return key; }  
    public V getValue(); { return value; }  
  
    public void setKey(K key)    { this.key = key; }  
    public void setValue(V value) { this.value = value; }  
  
    private K key;  
    private V value;  
}
```

5. Look at the following code snippet and select the correct option:

```
class Test extends Exception { }

class Main {
    public static void main(String args[]) {
        try {
            throw new Test();
        }
        catch(Test t) {
            System.out.println("Got the Test Exception");
        }
        finally {
            System.out.println("Inside finally block ");
        }
    }
}
```

Options:

a) Got the Test Exception

Inside finally block

b) Got the Test Exception

c) Inside finally block

d) Compiler Error

6. What will be the output of the following code:

```
class Test
{
    public static void main(String[] args)
    {
        try
        {
            int a[]={1, 2, 3, 4};
            for (int i = 1; i <= 4; i++)
            {
                System.out.println ("a[" + i + "]= " + a[i] + "\n");
            }
        }

        catch (Exception e)
        {
            System.out.println ("error = " + e);
        }
    }
}
```

```
        catch (ArrayIndexOutOfBoundsException e)
        {
            System.out.println ("ArrayIndexOutOfBoundsException");
        }
    }
```

- a) Compiler error
- b) Run time error
- c) ArrayIndexOutOfBoundsException
- d) Error Code is printed
- e) Array is printed