Roll Number		

SET **A**

INDIAN SCHOOL MUSCAT
SECOND PRE - BOARD EXAMINATION
INFORMATION TECHNOLOGY(802)

CLASS: XII TERM 2 Max.Marks: 30

MARKING SCHEME		
QN.NO	VALUE POINTS **SECTION-A (3+2 = 5 Marks)** **Answer any 03 question out of the given 04 questions**	MARKS SPLIT UP
1	Environmental barriers(Any two) The most common ones include the following. • Lack of adequate resources or raw material • Non-availability of skilled labour • Lack of requisite machinery and other infrastructure	½ + ½ = 1
2	Organisational skills refer to the ability of making optimal use of one's time, energy and resources to achieve one's goals. Becoming better at these organisational skills would help an entrepreneur become successful.	1
3	Green jobs help :(Any two) • increase the efficiency of energy and raw material. • reduce greenhouse gas emissions. • control waste and pollution. • protect and restore ecosystems. • support adaptation to the effects of climate change.	½ + ½ = 1
4	Some green jobs in the agriculture sector are inorganic farming, integrated pest management, farm mechanisation and agriculture tourism.	1
	Answer any 01 question out of the given 02 questions	
5	Any four: DECISIVENESS- Ability to make quick and profitable decisions TAKING INITIATIVE- Ability to take charge and act in a situation before others INTERPERSONAL SKILLS- Ability to work with others ORGANISATIONAL SKILLS- Ability to make the optimum use of time, energy and resources to achieve the desired goals PERSEVERANCE- Ability to continue to do something, even when it is difficult	½ x 4 = 2
6	Any four: We can protect the restore ecosystem by avoiding cutting of forests, planting more trees, investing in soil health, restoration can control the emission of greenhouse gases. Forests and vegetation help stabilise slopes, and therefore, reduce the risk of landslides.	½ x 4 = 2

	SECTION-B (5 + 6 + 6 = 17 marks) **Answer any 05 questions out of the given 07 questions**	
7	A Java compiler instead of translating Java code to machine language code, translates it into Java Bytecode. Java interpreter, called the Java Virtual Machine (JVM), translates the bytecode into machine code and then executes it.	1
8	Any two: Education, banking, railways, telecommunication, hotels, air lines, ecommerce, companies, government sector	½ x 2 = 1
9	A package in java is a group of related classes.	1
10	A Class in Java is a blueprint or prototype that defines the variables and the methods (functions) common to all Java Objects of a certain kind.	1
11	Beginning a comment line with two consecutive forward slashes (//) - This is used for single line comments.	1
12	8 times	1
13	double [ ] weight = {65.4, 70.5, 90, 76.3 ,65.5, 80.8};	1
	Answer any 03 questions out of the given 05 questions	
14	System.out.println() goes to a newline after displaying output. System.out.print() stays in the same line after displaying output.	1 + 1 = 2
15	Corrected code: Corrections are made bold. int num = 5; do { System.out.print("Cube of " + num) ; System.out.println(" = " + num*num*num) ; **num++ ;** } while(num<=10)**;**	1 + 1 = 2
16	A variable is a placeholder for data that can change its value during program execution. Technically, a variable is the *name* for a storage location in the computer's internal memory. Eg. int roll ; String name etc	1 + 1 = 2
17	In a program, when part of a program is executed based on the value of an expression, that type of structure is called selection structure. if…else and switch …case are the selection structures provided in Java	1 + 1 = 2
18	m = 15	2

	Answer any 02 questions out of the given 04 questions	
19	1 false 16	1 + 1+ 1 =3
20	bal = 50 case 5 will be executed and bal will become 30 but because of absence of break statement the control will move down(fall through) and case 6 will be executed which will make bal as 35 again because of absence of break statement the control will move down now case 7 will be executed and bal becomes 50 and break will terminate the switch case statement (2 marks for correct answer and 1 mark for explanation)	2 + 1 = 3
21	for(int count = 10; count <= 20; count = count +2) {System.out.println(count);}	3
22	i) An assertion is a useful mechanism for effectively identifying/detecting and correcting logical errors in a program. Eg: assert age >= 18:"Age not Valid"; When this statement is executed, we assert that the value of the variable age should be>= 18. If it is not, an Assertion Error is thrown and the error message "Age notValid" is returned. ii) A multithreaded program is one that can perform multiple tasks concurrently so that there is optimal utilization of the computer's resources. A multithreaded program consists of two or more parts called threads each of which can execute a different task independently at the same time. iii) Wrapper class for primitive data type int is Integer.	1 + 1 + 1 =3
	SECTION C (2 x 4 = 8 marks) **(COMPETENCY BASED QUESTIONS)** **Answer any 02 question out of the given 03 questions**	

23	A method in Java is a block of statements grouped together to perform a specific task. A method has a name, a return type, an optional list of parameters, and a body.
	
	static double Area (double length, double breadth)
	{
	return (length * breadth) ;
	}
	
	(1 mark for definition . 3 marks for correct syntax of the user define method Area())
		1 + 3

24	Exception handling is required in programming to handle unexpected situation that could arise during run time of a program. We should provide coding to handle those exceptions. The keywords are used for exception handling are **try -** A try block surrounds the part of the code that can generate exception(s). **catch –** The catch blocks follow a try block. A catch block contains the	1 + 1 + 2

exception handler - specific code that is executed when the exception occurs.

Eg:

```
try
{
    int quotient = divide(10,0);
    System.out.println(quotient);
}
 catch (Exception e)
{
   System.out.println(e.getMessage());
}
```

(1 mark for correct explanation,1 mark for keywords and 2 marks for example code using try and catch)

25

For storing information about customers. For example,

i) Personal details such as address, age, PAN card, occupation, contact numbers. Accounts and loans related information. Information regarding daily transactions. For storing employee details such as their personal information, salary, leaves taken, joining date, retirement year.

Name	Type	Remarks
Pid	Varchar(5)	Product unique number
Pname	Varchar(20)	Product name
Price	Decimal(10,2)	Price of the product
Qty	Int(6)	Quantity

Schema- (Pid, Pname, Price,Qty)

(1 mark for applications in banking sector , 2 marks for creating the table with appropriate columns and data type,1mark for creating the schema)

1 + 1 + 2