Strictly Confidential: (For Internal and Restricted use only)
Senior School Certificate Examination
March 2019
Marking Scheme – Informatics Practices (SUBJECT CODE 065)
(SERIES: BVM -1 PAPER CODE – 90)

General Instructions:

1. You are aware that evaluation is the most important process in the actual and correct assessment of the candidates. A small mistake in evaluation may lead to serious problems which may affect the future of the candidates, education system and the teaching profession. To avoid mistakes, it is requested that before starting evaluation, you must read and understand the spot evaluation guidelines carefully. **Evaluation is a 10 -12 days mission for all of us. Hence, it is necessary that you put in your best efforts in this process.**
2. Evaluation is to be done as per instructions provided in the Marking Scheme. It should not be done according to one's own interpretation or any other consideration. Marking Scheme should be strictly adhered to and religiously followed. **However, while evaluating, answers which are based on the latest information or knowledge and/or are innovative, they may be assessed for their correctness otherwise and marks be awarded to them.**
3. The Head-Examiner must go through the first five answer books evaluated by each evaluator on the first day, to ensure that evaluation has been carried out as per the instructions given in the Marking Scheme. The remaining answer books meant for evaluation shall be given only after ensuring that there is no significant variation in the marking of individual evaluators.
4. If a question has parts, please award marks on the right-hand side for each part. Marks awarded for different parts of the question should then be totaled up and written in the left-hand margin and encircled.
5. If a question does not have any parts, marks must be awarded in the left hand margin and encircled.
6. If a student has attempted an extra question, answer of the question deserving more marks should be retained and the other answer scored out.
7. No marks to be deducted for the cumulative effect of an error. It should be penalized only once.
8. A full scale of marks 0-70 has to be used. Please do not hesitate to award full marks if the answer deserves it.
9. Every examiner has to necessarily do evaluation work for full working hours i.e. 8 hours every day and evaluate 25 answer books per day.
10. Ensure that you do not make the following common types of errors committed by the Examiner in the past:-
    a. Leaving the answer or part thereof unassessed in an answer book.
    b. Giving more marks for an answer than assigned to it.
    c. Wrong transfer of marks from the inside pages of the answer book to the title page.
    d. Wrong question wise totaling on the title page.
    e. Wrong totaling of marks of the two columns on the title page.
    f. Wrong grand total.
    g. Marks in words and figures not tallying.
    h. Wrong transfer of marks from the answer book to online award list.
    i. Answers marked as correct, but marks not awarded. (Ensure that the right tick mark is correctly and clearly indicated. It should merely be a line. Same is with the X for incorrect answer.)
    j. Half or a part of answer marked correct and the rest as wrong, but no marks awarded.
11. While evaluating the answer books if the answer is found to be totally incorrect, it should be marked as (X) and awarded zero (0) Marks.
12. Any unassessed portion, non-carrying over of marks to the title page, or totaling error detected by the candidate shall damage the prestige of all the personnel engaged in the evaluation work as also of the Board. Hence, in order to uphold the prestige of all concerned, it is again reiterated that the instructions be followed meticulously and judiciously.
13. The Examiners should acquaint themselves with the guidelines given in the Guidelines for spot Evaluation before starting the actual evaluation.
14. Every Examiner shall also ensure that all the answers are evaluated, marks carried over to the title page, correctly totaled and written in figures and words.

15. The Board permits candidates to obtain a photocopy of the Answer Book on request in an RTI application and also separately as a part of the re-evaluation process on payment of the processing charges.

Specific Instructions:

- All programming questions have to be answered with respect to Java Language only.

In Java,

- Ignore case sensitivity for Variable identifiers in programming codes.

In SQL related questions :

- Single quote ' ' as well as double quote " "should be accepted for text/character/date entries. For example: "AMAR" and 'amar' both are acceptable.
- Date entries should be accepted in all formats. For example: 'YYYY-MM-DD', 'YY-MM-DD', 'DD-Mon-YY', "DD/MM/YY", 'DD/MM/YY', "MM/DD/YY", 'MM/DD/YY' and {MM/DD/YY} are correct.
- Semicolon should be ignored for terminating the SQL statements.
- Ignore case sensitivity for commands.
- Ignore headers in output questions.

<table>
<tr><td>1</td><td>(a)</td><td>ABC bank has many computers connected in a building. What type of network is formed? Name two hardware resources that can be shared by the computers connected in the bank network.</td><td>2</td></tr>
<tr><td></td><td>Ans</td><td>Type of network that is formed : LAN / Local Area Network
Hardware Resources that can be shared:
● Modem
● Printer
● Scanner
● Hard disk</td><td></td></tr>
<tr><td></td><td></td><td>(1 mark for part 1)
(½ mark each for any two hardware resources)</td><td></td></tr>
<tr><td></td><td>(b)</td><td>Write one example of situation when you would use a Remote access software such as Team Viewer.</td><td>2</td></tr>
<tr><td></td><td>Ans</td><td>Example : Computer engineer installs a software on a client's remote desktop computer .</td><td></td></tr>
<tr><td></td><td></td><td>(2 marks for any valid example)</td><td></td></tr>
<tr><td></td><td>(c)</td><td>Distinguish between ASCII and Unicode. Write 2 points</td><td>2</td></tr>
<tr><td></td><td>Ans</td><td><table><tr><th>ASCII</th><th>Unicode</th></tr><tr><td>Stands for American Standard Code for Information Interchange</td><td>Stands for Universal Character Set Coding</td></tr><tr><td>Uses 7 bits to represent a character</td><td>Uses 8 bit, 16 bits,32 bits depending on encoding type.</td></tr><tr><td>Platform Dependent</td><td>Platform Independent</td></tr></table></td><td></td></tr>
<tr><td></td><td></td><td>(1 mark each for any two valid points)</td><td></td></tr>
<tr><td></td><td>(d)</td><td>What are Cookies on a computer?</td><td>2</td></tr>
<tr><td></td><td>Ans</td><td>Cookies are small text files placed on a computer by a web server when some sites are viewed online. It provides a way to keep track of user preferences .</td><td></td></tr>
<tr><td></td><td></td><td>(1 mark for stating "Cookies as text file")
(1 mark for stating purpose)</td><td></td></tr>
</table>

	(e)	Explain in brief any two freedoms offered by open source software.	2
	Ans	▪ Freedom to use software for any purpose ▪ Freedom to modify software ▪ Freedom to distribute copies of the software	
		(1 mark each for mentioning any two freedoms)	
2	(a)	Distinguish between Java and Netbeans.	1
	Ans	Java is a high level programming language while NetBeans is an IDE that enables programmers to easily develop software.	
		(1 mark for correct difference) ***Note: Java is a programming language and NetBeans is an IDE also to be accepted as a difference .***	
	(b)	Name two data types of Java used to store fractional numbers (numbers with decimals).	1
	Ans	**`float`** **`double`**	
		(½ mark for each correct datatype)	
	(c)	(i) Which property of jList component lets us add items in a ListBox?	1
	Ans	**(i) Model property**	
		(1 mark for correct answer)	
		(ii) Esha has created a List box on her form and has set the selectionMode property to MULTIPLE_INTERVAL . What is the purpose?	1
	Ans	(ii) MULTIPLE-INTERVAL selection property lets the user select multiple ranges of items within a list.	
		(1 mark for correct answer)	
		OR	
		(ii) Write one difference between Listbox and Combobox.	1
	Ans	<table><tr><th>Listbox</th><th>Combobox</th></tr><tr><td>Supports multiple Selection</td><td>Supports single Selection</td></tr><tr><td>Occupies more space</td><td>Occupies less space</td></tr><tr><td>Contains only list , it does not contain text box</td><td>Contains list and text box</td></tr><tr><td>Scroll style</td><td>Drop down style</td></tr></table>	
		(1 mark for ANY one correct difference) ***Note:Diagram / suitable example depicting the difference to be accepted.***	
	(d)	What is the meaning of "Markup" in Hypertext Markup language? Which software is used to create HTML code?	2
	Ans	In Hypertext Markup language , Markup means tag which tells the web browser how to display the contents on webpage. Text editor is used to create HTML code.	
		(1 mark each for both parts) ***Note: Any one example of a text editor like Notepad,Wordpad,Notepad++ to be accepted in place of text editor.***	

		OR	
		Distinguish between the purpose of HTML and XML.	
	Ans	HTML is used to create webpage(s) while XML is used to describe data.	
		(2 marks for correct difference/purpose) ***Note : 1 mark to be awarded for expansion of both terms*** ***1 mark to be awarded for mentioning any one difference between HTML and XML***	

	(e)	What will be displayed in jTextField1 and jTextField2?
		`int x,y,z,t;`
		`x = 7;`
		`y= 10;`
		`z = x+y*3;`
		`t= x + y;`
		`jTextField1.setText(""+z);`
		`jTextField2.setText(""+t);`
			2

	Ans	The content of jTextField1 is 37 The content of jTextField2 is 17	
		(1 mark for each correct output)	

	(f)	Consider the following code:
		`salary = 20000;`
		`grade= 'g';`
		`switch(grade)`
		`{`
		`case 'x' : salary = 25000;`
		`break ;`
		`case 'y' : salary = 30000;`
		`break ;`
		`}`
		What will be the value of salary variable after execution of the above code ?
		What will happen if 'break' statements are omitted from the above code.
			2

	Ans	Value of salary variable = 20000 Omission of the first break statement will make the control move to the next case / statement. Omission of second break statement will not make any difference.	
		(1 mark for correct value of salary variable) ***(½ mark each for mentioning the effects of both omissions)*** ***Note: if purpose of 'break' used in switch is mentioned ,it should be accepted***	
		OR	
		Write equivalent code of the above mentioned code using if elseif statement instead of switch statement.	

	Ans	`salary = 20000;`
		`grade= 'g';`
		`if( grade == 'x')`
		`salary = 25000;`
		`else if ( grade == 'y')`
		`salary = 30000;`	

OR

```
grade= 'g';
if( grade == 'x')
   salary = 25000;
else if ( grade == 'y')
       salary  = 30000;
     else
       salary = 20000;
```

(1 mark for if)
(1 mark for else if)

3 (a) Ajay has applied a Constraint on a column(field) such that Ajay will certainly have to insert a value in this field, when he inserts a new row in the table. Which constraint has Ajay used? 1

Ans NOT NULL constraint

(1 mark for correct answer)
Note: PRIMARY KEY constraint also to be accepted.

(b) 'STUDENT' table has a column named 'REMARK' that stores Remarks. The values stored in REMARK are "PASS" or "NOT PASS" or "COMPTT" etc.
Write SQL query to display details of all rows except those that have REMARK as "PASS" . 1

Ans

```
SELECT * FROM student WHERE Remark NOT IN ('PASS');
OR
SELECT * FROM student WHERE NOT Remark IN ('PASS');
OR
SELECT * FROM student WHERE Remark <> 'PASS';
OR
SELECT * FROM student WHERE Remark !='PASS';
OR
SELECT * FROM student WHERE Remark IN ('NOT PASS','COMPTT');
```

(½ mark for SELECT)
(½ mark for WHERE)

(c) Consider the following table: 2

Table: Results

STUDENTID	NAME	EXAMID	SCORE
10	Leena	1	20
10	Leena	2	25
11	Samarth	1	30
11	Samarth	2	35
12	Jai	1	14
12	Jai	2	15
14	Shoaib	1	32
14	Shoaib	2	13

Write the Outputs that the following SQL statements will generate:

(i) `SELECT AVG(SCORE) FROM RESULTS WHERE EXAMID = 1;`

(ii) `SELECT EXAMID,AVG(SCORE) FROM RESULTS GROUP BY EXAMID;`

Ans i) 24

ii)

EXAMID	AVG(SCORE)
1	24
2	22

(1 mark for part (i))
(½ mark each for each row of part (ii))

(d) Consider the table: ITEM. Write SQL statement to delete the last row.

PRODUCTID	PRODUCTCODE	QTY	PRICE
101	PEN	500	20.00
102	PEN	800	10.00
103	PEN	1000	20.00
104	PENCIL	700	10.00
105	PENCIL	800	20.00

Ans
```
DELETE FROM ITEM WHERE PRODUCTID=105;
```

(1 mark for DELETE)
(1 mark for WHERE clause)

(e) (i) Write the purpose of setting **AUTOCOMMIT=0;** 2

(ii) Table 'employees' has the following data

empid	lastname	salary
101	Sharma	50000
102	Arora	25000

Write the output of the following SQL statements:

```
SET AUTOCOMMIT = 0;
UPDATE employees
    SET salary = 70000
    WHERE lastname = 'Sharma';
SAVEPOINT Sh;

UPDATE employees
    SET salary = 30000
    WHERE lastname = 'Arora';
SAVEPOINT Ar;

SELECT SUM(salary) FROM employees;

ROLLBACK TO SAVEPOINT Sh;

SELECT SUM(salary) FROM employees;
```

Ans i) **Autocommit = 0** disables the automatic COMMIT mode of the current session, ie. SQL statement is not committed when it successfully completes.

ii)

SUM(SALARY)
100000
95000

(1 mark for part (i))
(½ mark each for each row of part (ii))

	(f)	While creating a table,when a column is declared with data type and size as : DECIMAL(20,6) , how many maximum number of digits may be present to the right of the decimal point? Which command in SQL is used to see the structure of the table?	2
	Ans	**6** **DESC / DESCRIBE / SHOW FIELDS FROM <TABLE NAME>;**	
		(1 mark each for both parts)	

4	(a)	Identify error(s) in the following code.
		`switch (7)`
		`{`
		`case 1: r =7;`
		`break;`
		`case 2.1: r = r-1 ;`
		`break;`
		`default: r= -1;`
		`}`
			1

	Ans	`switch (7)`
		`{`
		`case 1: r =7;`
		`break;`
		`case 2.1: r = r-1 ;`
		`break;`
		`default: r= -1;`
		`}`
		`switch(7)` - In place of 7 there should be a variable or an expression .
		`Case 2.1` - case label cannot be of floating point/real data type.	

		(½ mark each for identifying both errors) ***Note : Full 1 mark to be awarded if rectified code is written.***	
		OR	
		Write the purpose of break inside the switch statement.	
	Ans	break statement is used to terminate the "case" and exit from the switch.	
		(1 mark for correct explanation) ***Note: Full 1 mark to be allotted if purpose is explained with a suitable example***	

	(b)	Write the values of pr and sum after execution of the following code:
		`int b = 2;`
		`int p = 3;`
		`int pr = 1;`
		`int sum = 5;`
		`for(int i = 1; i <= p; i++)`
		`{`
		`pr = pr * b;`
		`sum = sum + i;`
		`}`
			2

	Ans	`pr = 8` `sum = 11`	
		(1 mark each for each correct value)	

	(c)	**What values will be displayed in jTextField1 and jTextField2 when the following code is executed.**
		`int a, c;`
		`c = 30;`
		`a = 4;`
		`do`
		`{`
		`  a = a + c;`
		`  c = c - 5;`
		`}`
		`  while (c>10);`
		`jTextField1.setText(""+a);`
		`jTextField2.setText(""+c);`
			2

	Ans	`The content of jTextField1 is 94` `The content of jTextField2 is 10`	
		(1 mark for each correct output)	

	(d)	Write the following code using 'for' loop instead of 'while' loop
		`int K = 7;`
		`int I = -2;`
		`while (I<=7)`
		`{`
		`  K = K - 7;`
		`  I = I + 2;`
		`}`
			2

	Ans	`int K = 7;`
		`for (int I=-2;I<=7;I=I+2)`
		`{`
		`  K = K - 7;`
		`}`	

		(½ mark for initialization expression) ***(½ mark for test expression)*** ***(½ mark for update expression)*** ***(½ mark for body of loop)***	
		OR	
		How many times will the above 'while' loop execute?	
	Ans	5 times	
		(2 marks for correct answer)	

	(e)	Write the output that will be produced on jTextField1 by First Code and Second Code.
		
		First Code :
		
		`int counter = 1, x = 10;`
		`while (counter > x)`
		`{`
		`  x = x + 7;`
		`}`
		`jTextField1.setText(""+x);`
			2

Second Code :

```
int counter = 1, x = 10;
do
{
  x = x + 7;
}
while (counter > x);
jTextField1.setText(""+x);
```

Ans — Output of First Code : 10
Output of Second Code : 17

(1 mark each for correct output of each code)

(f)

(i) — 4

- When checkbox of an item is selected, **Amount**, **Tax** and **Total Amount** should be displayed in front of the item.
  For example if 'Vegetable Salad' is selected ,30.00 should be displayed in Amount field, 3.00 should be displayed in tax field and 33.00 should be displayed in Total Amount.
- When "Calculate" is clicked, the ***Grand Total Amount*** which is sum of total amount of all the items, ***Discount*** and ***Amount to Pay*** should be displayed.

(4 marks to be awarded to all the candidates who have correctly attempted any part of Q.No.4)

OR

(4 marks to be awarded to all the candidates, who have mentioned that Q.No.4 has error / is incomplete)

(ii) — When '`Clear`' button is clicked, all the textfields and checkboxes should be cleared. — 1

Ans

```
jTextField1.setText("");
jCheckBox1.setSelected(false);
```

(½ mark for clearing any text field)
(½ mark for clearing check box)
Note : NULL in place of `""` *should be accepted for clearing text field.*

(iii) — When '`Close`' button is clicked, the application should close. — 1

```
System.exit(0);
```

(1 mark for correct answer)

5. Consider the following table 'Activity'. Write SQL commands for the statements (i) to(viii) and write output for SQL queries (ix) and (x).

Table : Activity

PID	PARTICIPANT	GRADE	EVENT	POINTS	EVENTDATE	HOUSE
101	Amit Dubey	A	Running	200	2018-12-19	Gandhi
102	Shivraj Singh		Hopping bag	300	2019-01-12	Bose
103	Raj Arora	B	Skipping	200	2018-12-19	Gandhi

		104	Kapil Raj	A	Bean bag	250	2018-12-19	Bhagat
		105	Deepshikha Sen	A	Obstacle	350	2018-03-31	Bose
		106	Saloni Raj		Egg & Spoon	200	2018-12-20	Bose
	(i)	To display names of Participants and points in descending order of points.						1
	Ans	**SELECT PARTICIPANT,POINTS** **FROM Activity** **ORDER BY POINTS DESC;**						
		(½ mark for* SELECT*) ***(½ mark for* ORDER BY*)***						
	(ii)	To display names and points of participants who have scored points in the range 200 and 300 (both values included).						1
	Ans	**SELECT PARTICIPANT,POINTS** **FROM Activity** **WHERE POINTS BETWEEN 200 AND 300;** **OR** **SELECT PARTICIPANT,POINTS** **FROM Activity** **WHERE POINTS>=200 AND POINTS<=300;**						
		(½ mark for* SELECT*) ***(½ mark for* WHERE*)***						
	(iii)	To display House wise total points scored along with House name (i.e. display the HOUSE and total points scored by each HOUSE)						1
	Ans	**SELECT HOUSE,SUM(POINTS)** **FROM Activity** **GROUP BY HOUSE;**						
		(½ mark for* SELECT*) ***(½ mark for* GROUP BY*)***						
	(iv)	To display the names and EVENTDATE of participants who took part in the event anytime in the month of December of 2018.						1
	Ans	**SELECT PARTICIPANT,EVENTDATE** **FROM Activity** **WHERE EVENTDATE BETWEEN '2018-12-01' AND '2018-12-31';** **OR** **SELECT PARTICIPANT,EVENTDATE** **FROM Activity** **WHERE EVENTDATE>='2018-12-01' AND EVENTDATE<='2018-12-31';**						
		(½ mark for* SELECT*) ***(½ mark for* WHERE*)***						

	(v)	To display names of events that have 'bag' anywhere in the event names.	1
	Ans	**SELECT EVENT FROM Activity** **WHERE EVENT LIKE '%bag%';**	
		(½ mark for* SELECT*) ***(½ mark for* WHERE*)***	
	vi)	To change the name of Event "Egg&Spoon" to "Lemon&Spoon" everywhere in the table "Activity"	1
	Ans	**UPDATE Activity** **SET EVENT = 'Lemon&Spoon'** **WHERE EVENT = 'Egg&Spoon';**	
		(½ mark for* UPDATE*) ***(½ mark for* WHERE*)***	
	vii)	To display the average **POINTS** of all the Participants who have got some grade.	1
	Ans	**SELECT AVG(points)** **FROM Activity** **WHERE GRADE IS NOT NULL;**	
		(½ mark for* SELECT*) ***(½ mark for* WHERE*)***	
	viii)	To display HOUSE wise, Lowest points scored.(ie. Display house and lowest points scored for each house)	1
	Ans	**SELECT HOUSE, MIN(POINTS)** **FROM Activity** **GROUP BY HOUSE;**	
		(½ mark for* SELECT*) ***(½ mark for* GROUP BY*)***	
	ix)	**SELECT AVERAGE(POINTS) FROM Activity** **WHERE HOUSE = 'Gandhi' or HOUSE = 'Bose';**	1
	Ans	**AVERAGE(POINTS)** **250**	
		(1 mark for correct answer) ***Note: Full 1 mark to be awarded if error in question mentioned***	
	(x)	**SELECT COUNT(DISTINCT POINTS) FROM ACTIVITY;**	1
	Ans	**COUNT(DISTINCT POINTS)** **4**	
		(1 mark for correct answer) ***Note: ½ mark to be awarded if distinct points are mentioned.***	

6 (a) Write SQL query to create a table 'Transporter' with the following structure: 2

Field	Type	Constraint
OrderlId	Integer	Primary key
DriverName	Varchar(50)	NOT NULL
ItemTransported	Varchar(50)	
TravelDate	Date	
DestinationCity	Varchar(50)	

Ans

```
CREATE TABLE Transporter
( OrderlId INTEGER PRIMARY KEY,
  DriverName VARCHAR(50)NOT NULL,
  ItemTransported VARCHAR(50),
  TravelDate DATE,
  DestinationCity VARCHAR(50)
);
```

(½ mark for **CREATE TABLE** *)*
(½ mark for **PRIMARY KEY** *constraint)*
(½ mark for **NOT NULL** *constraint)*
(½ mark for Column Names with Data Types)

OR

What is the difference between PRIMARY KEY and UNIQUE constraint applied on Columns of a table? Explain with the help of example.

Ans

PRIMARY KEY	UNIQUE
Primary key is used to identify a row (record) in a table	Unique-key is used to prevent duplicate values in a column
A table can have only one primary key	A table can have multiple unique keys
Primary key does not accept NULL values.	Unique key may accept only one NULL value.

Example

Table: Results

STUDENTID	NAME	EXAMID	EMAILID
10	Leena	1	abc@gmail.com
11	Beena	2	xyz@hotmail.com
12	Samarth	1	
13	Shoaib	1	nml@gmail.com
14	Sheela	2	xyz@yahoo.com

Primary key : STUDENTID
UNIQUE key: EMAILID

(1 mark for ANY one correct difference)
(1 mark for example)
Note: Full 2 marks to be awarded if difference explained with example

(b) Consider the following tables **SUPPLIER** and **ITEM** and answer the questions that follow:

Table: SUPPLIER

SNo	SName	Area	Email
S01	Quant Computers	East	abc@gmail.com
S02	Superb Media	West	sss@hotmail.com
S03	Media Store	North	
S04	Avon Hardware	North	xyz@gmail.com
S05	AV Tech	South	tmt@hotmail.com

Table : ITEM

INo	IName	Price	SNo
N01	Mother Board	15000	S01
N02	Hard Disk	4000	S01
N03	Keyboard	800	S02
N04	Mouse	300	S01
N05	Mother Board	13000	S02
N06	Key Board	400	S03
N07	Hard Disk	4500	S03

Which column should be set as the Primary key for SUPPLIER table? Mr. Vijay, the Database Manager feels that Email column will not be the right choice for Primary key. State reason(s) why Email will not be the right choice. — 2

Ans Primary key for Supplier table : SNO
Email cannot be set as the primary key as Primary key column cannot be NULL. Many Suppliers may not have emailids.

(1 mark each for each part)

OR

Write the data type and size of INo column of 'ITEM' table.

Data Type: Char/Varchar
Size :3

(1 mark each for each part)
Note : Any size greater than 3 also to be accepted

(c) With reference to the above given tables (in Q6 b), Write commands in **SQL** for (i) to (iii)

(i) To display names of Items,SNo and Names of Suppliers supplying those items for those who have stores located in North area. — 2

Ans

```
SELECT IName,SNo,SName
FROM ITEM,SUPPLIER
WHERE ITEM.SNo=SUPPLIER.SNo
AND AREA = 'North';
```

OR

```
SELECT IName,SNo,SName
FROM ITEM I,SUPPLIER S
WHERE I.SNo=S.SNo AND Area = 'North';
```

		OR **SELECT ITEM.IName,ITEM.SNo,SUPPLIER.SNAME** **FROM ITEM,SUPPLIER** **WHERE ITEM.SNo=SUPPLIER.SNo AND SUPPLIER.Area = 'North';**	
		(½ mark for* SELECT*) ***(½ mark for* FROM*)*** ***(½ mark for correct use of join)*** ***(½ mark for correct use of condition)***	
	(ii)	To display Names of Items , SNo, Price and corresponding names of their suppliers of all the Items in ascending order of their Price.	2
	Ans	**SELECT INAME,SNo,Price, SName** **FROM ITEM,SUPPLIER** **WHERE ITEM.SNo=SUPPLIER.SNo** **ORDER BY Price;**	
		(½ mark for* SELECT*) ***(½ mark for* FROM*)*** ***(½ mark for correct use of join)*** ***(½ mark for correct use of order by)***	
	(iii)	To display Item Name wise, Minimum and Maximum Price of each item from the table Item. i.e. display IName ,minimum price and maximum price for each IName.	2
	Ans	**SELECT IName, MIN(Price),MAX(Price) FROM Item GROUP BY IName;**	
		(½ mark for SELECT) ***(½ mark for MIN)*** ***(½ mark for MAX)*** ***(½ mark for GROUP BY)***	
		OR	
		What will be the number of rows in the Cartesian product of the above two tables?	
	Ans	**35**	
		(2 mark for correct value)	
7	**(a)**	State one way with which an online shopper can be sure that he/she is using a secure website	1
	Ans	• By checking the URL of the website. If it begins with “https” instead of “http” it means that the site is secured . • By checking for the padlock icon on the browser window.	
		(1 marks for correct answer)	
	(b)	Write 2 precautions to be followed while doing Online shopping.	2
	Ans	• Verify authenticity of the website / vendor • Check the product details and past reviews • Verify the payment gateway provided by the website. • Avoid using public computers while doing online shopping . • Browse privately using incognito/InPrivate mode.	
		(1 marks for each valid correct precaution)	

	(c)	Mr. Ibrahim is creating a form for Hair Care Salon application. Help him to choose the most appropriate controls from ListBox, ComboBox, TextField, TextArea, RadioButton, CheckBox, Label and Command Button for the following entries: **S.No.** | **Function** 1. | To let the user enter **NAME** 2 | To let the user enter **PHONE NUMBER** 3 | To let the user choose **HAIR SERVICE** out of washing/ dyeing/ styling/ straightening. More than one service may be chosen. 4 | To let the user choose one **Mode of Payment** out of the categories : Cash/Credit Card/Debit Card/Paynn	2
	Ans	**S.No.** | **Control Name** 1. | Textfield 2 | Textfield 3 | ListBox/CheckBox 4 | Radiobutton/ Combobox ***(½ mark for each correct answer)***	