

Roll No.

--	--	--	--	--	--	--

Candidates must write the Code on the title page of the answer-book.

- Please check that this question paper contains 7 printed pages.
- Code number given on the right hand side of the question paper should be written on the title page of the answer-book by the candidate.
- Please check that this question paper contains 7 questions.
- **Please write down the Serial Number of the question before attempting it.**
- 15 minute time has been allotted to read this question paper. The question paper will be distributed at 10.15 a.m. From 10.15 a.m. to 10.30 a.m., the students will read the question paper only and will not write any answer on the answer-book during this period.

## INFORMATICS PRACTICES

Time allowed : 3 hours]

[ Maximum marks : 70

### Instructions :

- All questions are compulsory.*
- Answer the questions after carefully reading the text.*

- A company has 3 departments namely Administrative, Sales, Production. Out of telephone cable, Optical Fiber, Ethernet Cable, which communication medium is best for high speed communication between departments ? 1
  - Name one open source Indian operating system. 1
  - What is the purpose of a Server in a network ? 1
  - What do the following top level domains signify ? 1
    - .com
    - .org
  - List 2 measures to secure a network. 2
  - Distinguish between MAC address and IP address with the help of example of each. 2
  - Distinguish between Phonetic text entry and keymap based entry of typing Indian language text. 2

2. (a) Write the value of t after the execution of the following code : 1
- ```
int t;
int s;
s=6;
t = (8 * s++) % 7;
```
- (b) Which tag is used to display a horizontal rule on a web page ? 1
- (c) In a SWITCH statement, what is the purpose of BREAK statements ? 1
- (d) Identify the error in the following HTML code. Rewrite the correct code. 1
- ```
<UL TYPE = "a" START = 4>
```
- (e) Write Java code to assign the value 70 to variable y. Then decrease the value of y by 5 and store it in variable z. 2
- (f) Write the output that will be generated by the code given below : 2
- ```
int i;
int t;
for (i = 5; i <=10; i = i+5)
{
    t = i+3;
    system.out.println(" "+t);
}
```
- (g) "With XML you invent your own tags." Explain this statement with the help of example. 2
3. (a) Sharmila wants to make the database named 'COMPANY' active and display the names of all the tables in it. Write MySQL commands for it. 1
- (b) Write SQL command to remove column named 'Hobbies' from a table named 'Student'. 1
- (c) Rewrite the following SQL statement after correcting error(s). Underline the corrections made. 1
- ```
INSERT IN EMP(EMPNO, SALES) VALUE (100, 20078.50);
```
- (d) A table STUDENT has 5 rows and 3 columns. Table ACTIVITY has 4 rows and 2 columns. What will be the cardinality and degree of the Cartesian product of them ? 1
- (e) Name the SQL commands used to : 2
- (i) Physically delete a table from the database.
- (ii) Display the structure of a table.
- (f) Write one similarity and one difference between UNIQUE and PRIMARY KEY constraints. 2
- (g) What effect does SET AUTOCOMMIT have in transactions ? 2

4. (a) The following code has some error(s). Rewrite the correct code underlining all the corrections made. 2

```
int written, interview;  
written = Integer.parseInt(jTextField1.getText());  
interview = Integer.parseInt(jTextField2.getText());  
    if (written <80) OR (interview <15)  
    {  
        System.out.println(Not selected);  
    }  
    Else;  
    {  
        System.out.println("Selected");  
    }
```

- (b) How many times will the following loop execute : 2

```
int z = 7, sum = 0;  
do  
    {  
        sum = sum + z;  
        z = z+2;  
        system.out.println(" "+z);  
    }  
while (z <=12);
```

- (c) Rewrite the following program code using IF ELSE IF instead of SWITCH statement. 2

```
String rem;  
int code = Integer.parseInt(jTextField1.getText());  
Switch (code)  
{  
    case 1 : rem = "Classes start on 8th April";  
            break;  
    case 2 : rem = "Classes start on 10th April";  
            break;  
    case 3 : rem = "Classes start on 12th April";  
            break;  
    default : rem = "Contact Admin Office";  
}
```

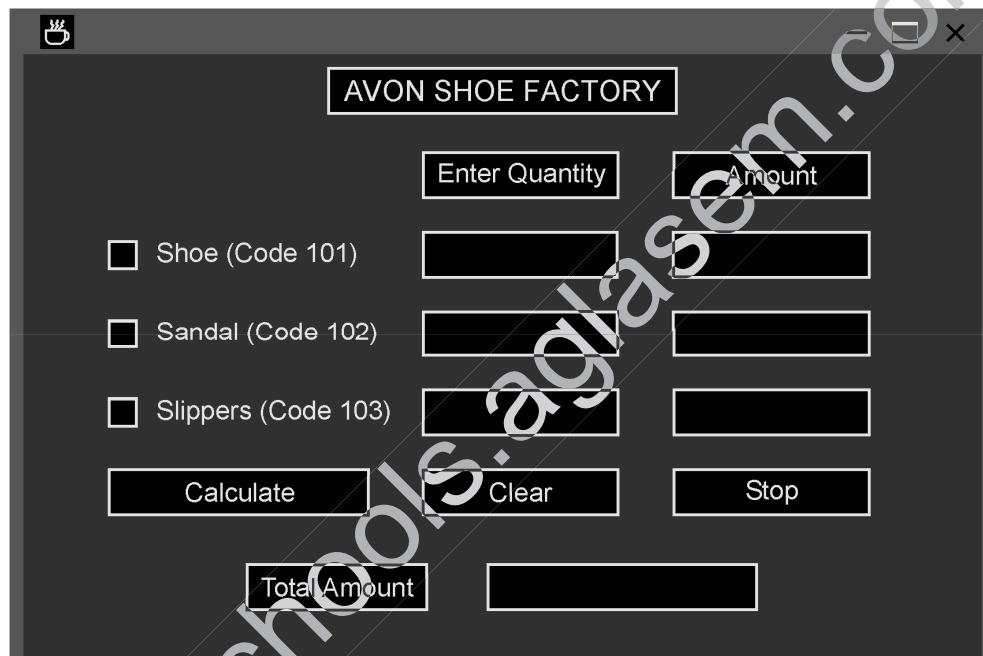
- (d) Write the values of sum and t after execution of the following code : 2

```
int sum,t;  
sum = 27;  
t = 3;  
sum = sum + 2 * (++t);
```

- (e) What will be the contents of jTextField1 and jTextField2 after executing the following code : 2

```
String s = "Best";  
String r = "Luck";  
String z;  
Z = r.concat(s);  
jTextField1.setText(z);  
jTextField2.setText(r.toUpperCase());
```

- (f) Seema is a junior programmer at 'Avon Shoe Factory'. She has created the following GUI in Netbeans.



- 3 items namely Shoes, Sandals and Slippers are manufactured by the factory.
- A buyer can buy more than one item at a time.
- Each pair of shoes costs ₹ 1,500.00, each pair of sandals costs ₹ 1,000.00 and each pair of slippers cost ₹ 500.00.
- The item bought will be selected by the user and the Quantity (number of pairs) bought will be entered by the user.
- Amount to be paid for that item will be displayed in front of the item.

For example if 'Shoe' is selected and Quantity entered is 20, then Amount should be displayed as 30000.

Help Seema write code for the following : 3

- (a) When 'Calculate' button is clicked, the amount should be displayed in front of each item (in the appropriate textfield) and Total amount (sum total of all the amounts) should be displayed in the appropriate textfield. 1
- (b) When Clear button is clicked, all the Textfields and Checkboxes should be cleared.
- (c) When Stop button is clicked, the application should close. 1

5. (a) Write one similarity and one difference between CHAR and VARCHAR data types. 2
- (b) Consider the following table named "GARMENT". Write command of SQL for (i) to (iv) and output for (v) to (vii).

Table : GARMENT

GCODE	GNAME	SIZE	COLOUR	PRICE
111	TShirt	XL	Red	1400.00
112	Jeans	L	Blue	1600.00
113	Skirt	M	Black	1100.00
114	Ladies Jacket	XL	Blue	4000.00
115	Trousers	L	Brown	1500.00
116	Ladies Top	L	Pink	1200.00

- (i) To display names of those garments that are available in 'XL' size. 1
- (ii) To display codes and names of those garments that have their names starting with 'Ladies'. 1
- (iii) To display garment names, codes and prices of those garments that have price in the range 1000.00 to 1500.00 (both 1000.00 and 1500.00 included). 1
- (iv) To change the colour of garment with code as 116 to "Orange". 1
- (v) `SELECT COUNT(DISTINCT (SIZE)) FROM GARMENT;` 1
- (vi) `SELECT AVG (PRICE) FROM GARMENT;` 1
- (vii) `SELECT GNAME FROM GARMENT WHERE SIZE IN ('M', 'L') AND PRICE > 1500;` 1
- (c) What is the degree and cardinality of 'Garment' table ? 1

6. (a) Write MySql command to create the table DEPARTMENT with given constraints. 2

Table DEPARTMENT

COLUMN_NAME	DATATYPE (SIZE)	CONSTRAINT
DepartmentID	int (4)	Primary key
DepName	varchar (50)	Not Null
ManagerID	char (4)	
Location	varchar (30)	

- (b) In a Database, there are two tables given below :

Table : EMPLOYEE

EMPLOYEEID	NAME	SALES	JOBID
E1	SAMIT SINHA	1100000	102
E2	VIJAY SINGH TOMAR	1300000	101
E3	AJAY RAJPAL	1400000	103
E4	MOHIT RAMNANI	1250000	102
E5	SHAILJA SINGH	1450000	103

Table : JOB

JOBID	JOBTITLE	SALARY
101	President	200000
102	Vice President	125000
103	Administration Assistant	80000
104	Accounting Manager	70000
105	Accountant	65000
106	Sales Manager	80000

Write SQL Queries for the following :

- To display employee ids, names of employees, job ids with corresponding job titles. 2
- To display names of employees, sales and corresponding job titles who have achieved sales more than 1300000. 2
- To display names and corresponding job titles of those employee who have 'SINGH' (anywhere) in their names. 2
- Identify foreign key in the table EMPLOYEE. 1
- Write SQL command to change the JOBID to 104 of the Employee with ID as E4 in the table 'EMPLOYEE'. 1

7. (a) Write one advantage and one disadvantage of e-learning to students. 2
- (b) What precaution must be taken with regard to making payments while shopping online ? 1
- (c) James works for a Garments company. He has created a form for the employees. Help him choose most appropriate controls from ListBox, ComboBox, TextField, TextArea, RadioButton, Checkbox, Label and Command Button for the following entries : 2

S. No.	Function
1.	To enter first name of employee
2.	To select gender (M/F)
3.	To choose category of employee (Permanent/Temporary)
4.	To allow entering remarks about the employee in the form of paragraph.

Central Board of School Education

**Marking Scheme 2015**

[Official]



# CBSE AISSCE 2015 Marking Scheme for Informatics Practices

(Sub Code:065 Paper Code 90/1 Delhi)

## General Instructions:

- Marking scheme is the final document for all references with regard to evaluation and cannot be altered under any circumstances
- The answers given in the marking scheme are SUGGESTIVE, Examiners are requested to award marks for all alternative correct Solutions/Answers conveying the similar meaning
- All programming questions have to be answered with respect to Java Language only
- In Java, ignore case sensitivity for identifiers (Variables / Functions / Structures / Class Names)
- In SQL related questions :
  - Both ways of text/character entries should be acceptable. For example: "AMAR" and 'amar' both are acceptable.
  - All date entries should be acceptable 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.

1	(a)	A company has 3 departments namely Administrative, Sales, Production. Out of telephone cable, Optical Fiber, Ethernet Cable, which communication medium is best for speed communication between departments?	1
	Ans	Optical Fiber	
		<i>(1 mark for correct answer)</i>	
	(B)	Name one Open Source Indian Operating System.	1
	Ans	BOSS OR Bharat Operating Systems Solutions	
		<i>(1 mark for any correct purpose)</i>	
	(c)	What is the purpose of a Server in a network ?	1
	Ans	A server manages network resources in a network.	
		<i>(1 mark for correct answer)</i>	
	(d)	What do the following top level domains signify ? (i) .com (ii) .org	1
	Ans	(i) .com - Commercial (ii) .org - Organization <b>Note:</b> Non-Profit Organization should also be accepted.	

# CBSE AISSCE 2015 Marking Scheme for Informatics Practices

(Sub Code:065 Paper Code 90/1 Delhi)

		( ½ mark for each correct answer)							
	(e)	List 2 measures to secure a network.	2						
	Ans	Measures to secure a network are: Use of (i) Login-Password (ii) Firewall (iii) Anti Virus Software (iv) File permissions <b>OR</b> Any other correct measure.							
		(1 mark each for any 2 correct measures)							
	(f)	Distinguish between MAC address and IP address with the help of example of each.	2						
	Ans	<table><tr><th>MAC Address</th><th>IP Address</th></tr><tr><td>MAC(Media Access Control) address e.g. 00.A0.C9:14:C8:35 is a unique 12 digit hexadecimal number assigned to each Network Interface Card.</td><td>IP (Internet Protocol ) address e.g. 192.168.0.2 is a numerical label that is assigned to a device participating in a computer network using Internet Protocol</td></tr><tr><td>Can never be changed.</td><td>Can be changed.</td></tr></table>	MAC Address	IP Address	MAC(Media Access Control) address e.g. 00.A0.C9:14:C8:35 is a unique 12 digit hexadecimal number assigned to each Network Interface Card.	IP (Internet Protocol ) address e.g. 192.168.0.2 is a numerical label that is assigned to a device participating in a computer network using Internet Protocol	Can never be changed.	Can be changed.	
MAC Address	IP Address								
MAC(Media Access Control) address e.g. 00.A0.C9:14:C8:35 is a unique 12 digit hexadecimal number assigned to each Network Interface Card.	IP (Internet Protocol ) address e.g. 192.168.0.2 is a numerical label that is assigned to a device participating in a computer network using Internet Protocol								
Can never be changed.	Can be changed.								
		(1 mark for any 1 correct difference) (1 mark for any 1 example of each)							
	(g)	Distinguish between Phonetic text entry and keymap based entry of typing Indian language text.	2						
	Ans	<table><tr><th>Phonetic text entry</th><th>Keymap based entry</th></tr><tr><td>In Phonetic text entry, traditional keyboards with English keys are used. While typing, letters are typed phonetically in English Script and then converted to corresponding Indian language .</td><td>In this method the keyboard keys are mapped to specific characters of Indian language using a keymap.</td></tr></table>	Phonetic text entry	Keymap based entry	In Phonetic text entry, traditional keyboards with English keys are used. While typing, letters are typed phonetically in English Script and then converted to corresponding Indian language .	In this method the keyboard keys are mapped to specific characters of Indian language using a keymap.			
Phonetic text entry	Keymap based entry								
In Phonetic text entry, traditional keyboards with English keys are used. While typing, letters are typed phonetically in English Script and then converted to corresponding Indian language .	In this method the keyboard keys are mapped to specific characters of Indian language using a keymap.								

# CBSE AISSCE 2015 Marking Scheme for Informatics Practices

(Sub Code:065 Paper Code 90/1 Delhi)

		<p><i>(2 marks for correct difference)</i>  OR  <i>(2 marks for explaining the difference with the help of example of each)</i></p>	
2	(a)	<p>Write the value of t after the execution of the following code:</p> <pre>int t; int s; s=6; t = (8 * s++) % 7 ;</pre>	1
	Ans	6	
		<p><i>(1 mark for correct answer)</i>  OR  <i>( ½ mark to be awarded if 0 is given as answer on account of student's knowledge about * and % operators)</i></p>	
	(b)	Which tag is used to display a horizontal rule on a web page ?	1
	Ans	<p>&lt;HR&gt;  OR  HR</p>	
		<i>(1 mark for correct answer)</i>	
	(c)	In a SWITCH statement, what is the purpose of BREAK statements?	1
	Ans	A BREAK statement causes control to exit the SWITCH statement.	
		<i>(1 mark for correct answer)</i>	
	(d)	<p>Identify the error in the following HTML code.Rewrite the correct code.</p> <pre>&lt;UL TYPE = "a" START = 4&gt;</pre>	1
	Ans	<pre>&lt;OL TYPE="a" START = "4"&gt; OR &lt;UL TYPE="circle"&gt; OR &lt;UL Type="disc"&gt; OR &lt;UL Type = "Square"&gt;</pre>	

# CBSE AISSCE 2015 Marking Scheme for Informatics Practices

(Sub Code:065 Paper Code 90/1 Delhi)

		( 1 mark for correct answer ) OR (½ mark for only identifying error)	
	(e)	Write Java code to assign the value 70 to variable y. Then decrease the value of y by 5 and store it in variable z.	2
	Ans	<code>y = 70;</code> <code>z = y - 5;</code> OR <code>y = 70;</code> <code>y = y - 5;</code> <code>z = y;</code> OR <code>y = 70;</code> OR <code>y = 70;</code> <code>y -= 5;</code> <code>z = y;</code>	
		( ½ mark for assigning 70 to y) ( 1 mark for decreasing value of y by 5) ( ½ mark for assigning decreased value to z)	
	(f)	Write the output that will be generated by the code given below: <pre>int t; int i; for (i = 5; i &lt;=10; i = i+5) {     t = i+3;     System.out.println(" "+t); }</pre>	2
	Ans	8 13	
		(1 mark for each correct line of output) OR (Full 2 marks to be given if 8 13 mentioned in the same line.) OR (Full 2 marks to be awarded, if any Question 2 is attempted correctly.)	

# CBSE AISSCE 2015 Marking Scheme for Informatics Practices

(Sub Code:065    Paper Code 90/1    Delhi)

	(g)	"With XML you invent your own tags." Explain this statement with the help of example.	2
	Ans	XML tags are created by the user as there are no standard tags. For example : To store name , the tag <name> may be used as : <name> Sumedha </name>	
		<i>( 2 marks for explanation with the help of example )</i> <b>OR</b> <i>(Full 2 marks should be awarded if only explanation is given)</i>	
3	(a)	Sharmila wants to make the database named 'COMPANY' active and display the names of all the tables in it. Write MySQL commands for it.	1
	Ans	USE COMPANY; SHOW TABLES;	
		<i>( ½ mark for each correct part)</i>	
	(b)	Write SQL command to remove column named 'Hobbies' from a table named 'Student' .	1
	Ans	ALTER TABLE Student DROP Hobbies; OR ALTER TABLE Student DROP (Hobbies);	
		<i>( ½ mark for ALTER TABLE)</i> <i>( ½ mark for DROP)</i>	
	(c)	Rewrite the following SQL statement after correcting error(s). Underline the corrections made. INSERT IN EMP(EMPNO, SALES) VALUE (100, 20078.50);	1
	Ans	INSERT <u>INTO</u> EMP (EMPNO, SALES) <u>VALUES</u> (100, 20078.50);	
		<i>( ½ mark for correcting INTO)</i> <i>( ½ mark for correcting VALUES)</i> <b>Note:</b> <ul style="list-style-type: none"> <li>• ½ mark for only identifying errors.</li> <li>• ½ mark to be awarded if the following is mentioned as correct statement: INSERT <u>INTO</u> EMP <u>VALUES</u> (100, 20078.50);</li> </ul>	
	(d)	A table STUDENT has 5 rows and 3 columns. Table ACTIVITY has 4 rows and 2 columns. What will be the cardinality and degree of the Cartesian product of them?	1

# CBSE AISSCE 2015 Marking Scheme for Informatics Practices

(Sub Code:065 Paper Code 90/1 Delhi)

	Ans	Cardinality=20 Degree=5	
		( ½ mark for Cardinality) ( ½ mark for Degree)	
	(e)	Name the SQL commands used to: (i) Physically delete a table from the database. (ii) Display the structure of a table.	2
	Ans	(i) DROP TABLE OR DROP TABLE <Table name>; (ii) DESCRIBE OR DESC OR DESCRIBE <Table name>; OR DESC <Table name>;	
		(1 mark each for both parts)	
	(f)	Write one similarity and one difference between UNIQUE and PRIMARY KEY constraints.	2
	Ans	<u>Similarity:</u> The UNIQUE and PRIMARY KEY constraints both ensure uniqueness of values for a column or set of columns. <u>Difference :</u> Primary key cannot have NULL value, but Unique key may be NULL.	
		( 1 mark for one correct similarity ) ( 1 mark for any one correct difference ) OR ( 2 marks for only defining Primary Key)	
	(g)	What effect does SET AUTOCOMMIT have in transactions?	2
	Ans	If AUTOCOMMIT is set to 1, each SQL statement is considered a complete transaction and committed by default when it finishes. If AUTOCOMMIT is set to 0, the subsequent series of statements acts like a transaction and no transaction is committed until an	

# CBSE AISSCE 2015 Marking Scheme for Informatics Practices

(Sub Code:065 Paper Code 90/1 Delhi)

		explicit COMMIT statement is issued.	
		( 1 mark for correct effect of AUTOCOMMIT set to 1) ( 1 mark for correct effect of AUTOCOMMIT set to 0)	
4	(a)	<p>The following code has some error(s). Rewrite the correct code underlining all the corrections made.</p> <pre> int written, interview; written = Integer.parseInt(jTextField1.getText()); interview = Integer.parseInt(jTextField2.getText()); if (written &lt;80) OR (interview &lt;15) {     System.out.println(Not selected); } Else; {     System.out.println("Selected"); } </pre>	2
	Ans	<pre> int written, interview; written = Integer.parseInt(jTextField1.getText()); interview = Integer.parseInt(jTextField2.getText()); if ( (written &lt;80)    (interview &lt;15) ) {     System.out.println(<u>"Not selected"</u>); } <u>else</u> {     System.out.println("Selected"); } </pre>	
		<p>( ½ mark each for correcting any four errors) OR (1 mark for only identifying any four errors - without making any corrections) NOTE : System.out.println may be accepted as error</p>	

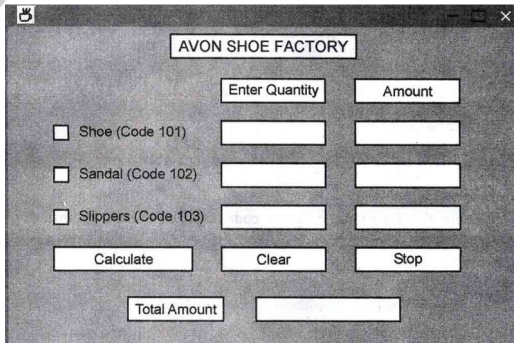
# CBSE AISSCE 2015 Marking Scheme for Informatics Practices

(Sub Code:065 Paper Code 90/1 Delhi)

	(b)	How many times will the following loop execute: <pre>int z = 7, sum = 0; do {     sum = sum + z;     z = z+2;     System.out.println(" "+z); } while (z &lt;=12);</pre>	2
	Ans	3 times	
		( 2 Marks for correct no.of times)	
	(c)	Rewrite the following program code using IF ELSE IF instead of SWITCH statement. <pre>String rem; int code = Integer.parseInt(jTextField1.getText()); Switch(code) {     case 1:    rem  = "Classes start on  8th April";               break;     case 2:    rem  = "Classes start on  10th April";               break;     case 3:    rem  = "Classes start on  12th April" ;               break;     default:   rem  = "Contact Admin Office"; }</pre>	2
	Ans	<pre>String rem; int code = Integer.parseInt(jTextField1.getText()); if (code==1)     rem = "Classes start on 8th April"; else if (code==2)     rem = "Classes start on 10th April"; else if (code==3)     rem = "Classes start on 12th April"; else     rem = " Contact Admin Office";</pre>	



**CBSE AISSCE 2015 Marking Scheme for Informatics Practices**  
(Sub Code:065    Paper Code 90/1    Delhi)

		( ½ mark for correct use of if -else statement) ( ½ mark for each correct condition )	
	(d)	Write the values of sum and t after execution of the following code: <pre>int sum,t; sum = 27; t = 3; sum = sum + 2 * (++t);</pre>	2
	Ans	sum = 35 t = 4	
		(1 Mark for correct value of sum) (1 Mark for correct value of t)	
	(e)	What will be the contents of jTextField1 and jTextField2 after executing the following code : <pre>String s = "Best"; String r = "Luck"; String Z; Z = r.concat(s); jTextField1.setText(z) ; jTextField2.setText(r.toUpperCase()) ;</pre>	2
	Ans	jTextField1 = LuckBest jTextField2 = LUCK	
		(1 mark for each correct output)	
	(f)	Seema is a junior programmer at 'Avon Shoe Factory'. She has created the following GUI in Netbeans. 	
		<ul style="list-style-type: none"> <li>• 3 items namely Shoes, Sandals and Slippers are manufactured by the factory.</li> <li>• A buyer can buy more than one item at a time.</li> <li>• Each pair of shoes costs Rs. 1,500.00, each pair of sandals costs Rs. 1,000.00 and each pair of slippers cost Rs. 500.00.</li> </ul>	

# CBSE AISSCE 2015 Marking Scheme for Informatics Practices

(Sub Code:065 Paper Code 90/1 Delhi)

		<ul style="list-style-type: none"> <li>The item bought will be selected by the user and the Quantity (number of pairs) bought will be entered by the user.</li> <li>Amount to be paid for that item will be displayed in front of the item.</li> </ul> <p>For example if 'Shoe' is selected and Quantity entered is 20, then Amount should be displayed as 30000.</p> <p>Help Seema write code for the following:</p>	
	(a)	When 'Calculate' button is clicked, the amount should be displayed in front of each item (in the appropriate textfield) and Total amount (sum total of all the amounts) should be displayed in the appropriate textfield.	3
	Ans	<pre>float qty1=0, qty2=0, qty3=0, amt1=0, amt2=0, amt3=0, total; if(jCheckBox1.isSelected())  qty1=Float.parseFloat(jTextField1.getText()); if(jCheckBox2.isSelected())     qty2= Float.parseFloat(jTextField2.getText()); if(jCheckBox3.isSelected())     qty3= Float.parseFloat(jTextField3.getText());  amt1= qty1*1500; amt2=qty2*1000; amt3=qty3*500; total=amt1+amt2+amt3; jTextField4.setText(""+amt1); jTextField5.setText(""+amt2); jTextField6.setText(""+amt3); jTextField7.setText(""+total);</pre>	
		<p><i>(½ mark for correct use of getText())</i></p> <p><i>(1 mark for checking conditions)</i></p> <p><i>(1 mark for Calculation of Amount and Total Amount)</i></p> <p><i>( ½ mark for displaying correct values in the text fields)</i></p>	
	(b)	When Clear button is clicked, all the Textfields and Checkboxes should be cleared.	1

# CBSE AISSCE 2015 Marking Scheme for Informatics Practices

(Sub Code:065 Paper Code 90/1 Delhi)

	Ans	<pre>jTextField1.setText(""); jTextField2.setText(""); jTextField3.SetText(""); ----- jCheckBox1.setSelected(false); -----</pre> <p>Note: NULL in place of “ ” should also be accepted.</p>							
		<p>( ½ mark for clearing any one text field)</p> <p>( ½ mark for clearing any one check box)</p>							
	(c)	When Stop button is clicked, the application should close.	1						
	Ans	<pre>System.exit(0);</pre>							
		<p>(1 mark for correct answer)</p>							
5	(a)	Write one similarity and one difference between CHAR and VARCHAR data types.	2						
	Ans	<p>Similarity :</p> <ul style="list-style-type: none"><li>Both are used for storing non numeric data.</li><li>Both can store 1 to 255 characters.</li><li>Values must be enclosed in single quotes or double quotes.</li></ul> <p>Difference :</p> <table><tr><th>CHAR</th><th>VARCHAR</th></tr><tr><td>Used for fixed-length string</td><td>Used for variable-length string</td></tr><tr><td>Padded to the specified length when stored</td><td>No padding takes place</td></tr></table>	CHAR	VARCHAR	Used for fixed-length string	Used for variable-length string	Padded to the specified length when stored	No padding takes place	
CHAR	VARCHAR								
Used for fixed-length string	Used for variable-length string								
Padded to the specified length when stored	No padding takes place								
		<p>( 1 mark for stating any one correct similarity)</p> <p>( 1 mark for stating any one correct difference)</p> <p>Note : Full 2 marks to be awarded if similarity / difference explained with the help of example.</p>							
	(b)	Consider the following table named "GARMENT". Write command of SQL for (i) to (iv) and output for (v) to (vii).							

# CBSE AISSCE 2015 Marking Scheme for Informatics Practices

(Sub Code:065    Paper Code 90/1    Delhi)

		Tab : GARMENT					
		GCODE	GNAME	SIZE	COLOUR	PRICE	
		111	TShirt	XL	Red	1400.00	
		112	Jeans	L	Blue	1600.00	
		113	Skirt	M	Black	1100.00	
		114	Ladies Jacket	XL	Blue	4000.00	
		115	Trousers	L	Brown	1500.00	
		116	Ladies Top	L	Pink	1200.00	
	(i)	To display names of those garments that are available in 'XL' size.					1
	Ans	SELECT GNAME FROM GARMENT WHERE SIZE = 'XL' ;					
		( ½ mark for SELECT) ( ½ mark for WHERE)					
	(ii)	To display codes and names of those garments that have their names starting with 'Ladies'.					1
	Ans	SELECT GCODE,GNAME FROM GARMENT WHERE NAME LIKE 'Ladies%' ;					
		( ½ mark for SELECT) ( ½ mark for LIKE)					
	(iii)	To display garment names, codes and prices of those garments that have price in the range 1000.00 to 1500.00 (both 1000.00 and 1500.00 included).					1
	Ans	SELECT GCODE,GNAME, PRICE FROM GARMENT WHERE PRICE BETWEEN 1000 AND 1500 ; OR SELECT GCODE,GNAME, PRICE FROM GARMENT WHERE PRICE>=1000 AND PRICE<=1500 ;					
		( ½ mark for SELECT) ( ½ mark for BETWEEN OR >= and <=)					
	(iv)	To change the color of garments with code as 116 to “Orange”.					1

# CBSE AISSCE 2015 Marking Scheme for Informatics Practices

(Sub Code:065    Paper Code 90/1    Delhi)

	Ans	UPDATE GARMENT SET COLOUR = 'Orange' WHERE GCODE = 116; OR UPDATE GARMENT SET COLOUR = 'Orange' WHERE GCODE = '116' ;																
		( ½ mark for correct use of UPDATE SET) ( ½ mark for WHERE)																
	(v)	SELECT COUNT(DISTINCT (SIZE)) FROM GARMENT;	1															
	Ans	3																
		(1 mark for correct output)																
	(vi)	SELECT AVG (PRICE) FROM GARMENT;	1															
	Ans	1800																
		(1 mark for correct output)																
	(vii)	SELECT GNAME FROM GARMENT WHERE SIZE IN ('M' , 'L') AND PRICE>15.0;	1															
	Ans	Jeans																
		(1 mark for correct output)																
	(c)	What is the degree and cardinality of 'Garment' table?	1															
	Ans	Degree = 5 , Cardinality = 6																
		( ½ mark each for correct Degree and Cardinality)																
6	(a)	Write MySql command to create the table DEPARTMENT with given constraints  Table : DEPARTMENT <table><tr><td>COLUM_NAME</td><td>DATATYPE (SIZE)</td><td>CONSTRAINT</td></tr><tr><td>Department ID</td><td>int(4)</td><td>Primary key</td></tr><tr><td>DepName</td><td>varchar (50)</td><td>Not Null</td></tr><tr><td>Manager ID</td><td>char (4)</td><td></td></tr><tr><td>Location</td><td>varchar (30)</td><td></td></tr></table>	COLUM_NAME	DATATYPE (SIZE)	CONSTRAINT	Department ID	int(4)	Primary key	DepName	varchar (50)	Not Null	Manager ID	char (4)		Location	varchar (30)		2
COLUM_NAME	DATATYPE (SIZE)	CONSTRAINT																
Department ID	int(4)	Primary key																
DepName	varchar (50)	Not Null																
Manager ID	char (4)																	
Location	varchar (30)																	

# CBSE AISSCE 2015 Marking Scheme for Informatics Practices

(Sub Code:065 Paper Code 90/1 Delhi)

	Ans	<pre>CREATE TABLE DEPARTMENT (     DEPARTMENTID INT(4) PRIMARY KEY,     DEPNAME VARCHAR(50) NOT NULL,     MANAGERID CHAR(4) ,     LOCATION VARCHAR(30) );</pre>																																														
		<p>( ½ mark for CREATE TABLE)</p> <p>( ½ mark for Column Names with Data Types)</p> <p>( ½ mark for PRIMARY KEY Constraint)</p> <p>( ½ mark for NOT NULL Constraint)</p>																																														
	(b)	<p>In a Database, there are two tables given below:</p> <p>Table : EMPLOYEE</p> <table><tr><th>EMPLOYEEID</th><th>NAME</th><th>SALES</th><th>JOBID</th></tr><tr><td>E1</td><td>SAMIT SINHA</td><td>1100000</td><td>102</td></tr><tr><td>E2</td><td>VIJAY SINGH TOMAR</td><td>1300000</td><td>101</td></tr><tr><td>E3</td><td>AJAY RAJPAL</td><td>1400000</td><td>103</td></tr><tr><td>E4</td><td>MOHIT RAMNANI</td><td>1250000</td><td>102</td></tr><tr><td>E5</td><td>SHAILJA SINGH</td><td>1450000</td><td>103</td></tr></table> <p>Table : JOB</p> <table><tr><th>JOBID</th><th>JOBTITLE</th><th>SALARY</th></tr><tr><td>101</td><td>President</td><td>200000</td></tr><tr><td>102</td><td>Vice President</td><td>125000</td></tr><tr><td>103</td><td>Administration Assistant</td><td>80000</td></tr><tr><td>104</td><td>Accounting Manager</td><td>70000</td></tr><tr><td>105</td><td>Accountant</td><td>65000</td></tr><tr><td>106</td><td>Sales Manager</td><td>80000</td></tr></table> <p>Write SQL Queries for the following:</p>	EMPLOYEEID	NAME	SALES	JOBID	E1	SAMIT SINHA	1100000	102	E2	VIJAY SINGH TOMAR	1300000	101	E3	AJAY RAJPAL	1400000	103	E4	MOHIT RAMNANI	1250000	102	E5	SHAILJA SINGH	1450000	103	JOBID	JOBTITLE	SALARY	101	President	200000	102	Vice President	125000	103	Administration Assistant	80000	104	Accounting Manager	70000	105	Accountant	65000	106	Sales Manager	80000	
EMPLOYEEID	NAME	SALES	JOBID																																													
E1	SAMIT SINHA	1100000	102																																													
E2	VIJAY SINGH TOMAR	1300000	101																																													
E3	AJAY RAJPAL	1400000	103																																													
E4	MOHIT RAMNANI	1250000	102																																													
E5	SHAILJA SINGH	1450000	103																																													
JOBID	JOBTITLE	SALARY																																														
101	President	200000																																														
102	Vice President	125000																																														
103	Administration Assistant	80000																																														
104	Accounting Manager	70000																																														
105	Accountant	65000																																														
106	Sales Manager	80000																																														
	(i)	To display employee ids, names of employees, job ids with corresponding job titles.	2																																													

# CBSE AISSCE 2015 Marking Scheme for Informatics Practices

(Sub Code:065 Paper Code 90/1 Delhi)

	Ans	<pre> SELECT EMPLOYEEID, NAME, E.JOBID,JOBTITLE FROM EMPLOYEE E, JOB J WHERE E.JOBID = J.JOBID; OR SELECT EMPLOYEEID, NAME, J.JOBID,JOBTITLE FROM EMPLOYEE E, JOB J WHERE E.JOBID = J.JOBID; OR SELECT EMPLOYEEID, NAME,EMPLOYEE.JOBID,JOBTITLE FROM EMPLOYEE, JOB WHERE EMPLOYEE.JOBID = JOB.JOBID; </pre>	
		<p>(½ mark for SELECT)</p> <p>(½ mark for FROM)</p> <p>(1 mark for correct use of join)</p>	
	(ii)	To display names of employees, sales and corresponding job titles who have achieved sales more than 1300000.	2
	Ans	<pre> SELECT E.NAME, E.SALES,J.JOBTITLE FROM EMPLOYEE E, JOB J WHERE E.JOBID = J.JOBID AND E.SALES &gt; 1300000; OR SELECT NAME, SALES,JOBTITLE FROM EMPLOYEE, JOB WHERE EMPLOYEE.JOBID = JOB.JOBID AND SALES &gt; 1300000; OR SELECT NAME, SALES,JOBTITLE FROM EMPLOYEE , JOB WHERE EMPLOYEE.JOBID = JOB.JOBID AND EMPLOYEE.SALES &gt; 1300000; </pre>	
		<p>(½ mark for SELECT)</p> <p>(½ mark for FROM)</p> <p>(½ mark for JOIN)</p> <p>(½ mark for CONDITION)</p>	
	(iii)	To display names and corresponding job titles of those employee who have 'SINGH' (anywhere) in their names.	2

# CBSE AISSCE 2015 Marking Scheme for Informatics Practices

(Sub Code:065 Paper Code 90/1 Delhi)

	Ans	<pre> SELECT  E.NAME, J.JOBTITLE FROM EMPLOYEE E, JOB J WHERE   E.JOBID   =   J.JOBID   AND   NAME   LIKE         '%SINGH%' ;  OR  SELECT  NAME, JOBTITLE FROM EMPLOYEE, JOB WHERE EMPLOYEE.JOBID = JOB.JOBID       AND NAME LIKE '%SINGH%' ;  OR  SELECT  NAME, JOBTITLE FROM EMPLOYEE E, JOB J WHERE E.JOBID = J.JOBID AND NAME LIKE '%SINGH%' </pre>	
		<p><i>(1/2 mark for SELECT)</i></p> <p><i>(1/2 mark for FROM)</i></p> <p><i>(1/2 mark for use of JOIN)</i></p> <p><i>(1/2 mark for CONDITION)</i></p>	
	(iv)	Identify foreign key in the table EMPLOYEE.	1
	Ans	JOBID	
		<i>(1 mark for correct answer)</i>	
	(v)	Write SQL command to change the JOBID to 104 of the Employee with ID as E4 in the table 'EMPLOYEE'	1
	Ans	<pre> UPDATE EMPLOYEE SET JOBID = 104 WHERE EMPLOYEEID = 'E4' ;  OR  UPDATE EMPLOYEE SET JOBID = '104' WHERE EMPLOYEEID = 'E4' ; </pre>	
		<p><i>( 1/2 mark for correct use of UPDATE SET)</i></p> <p><i>( 1/2 mark for WHERE)</i></p>	



# CBSE AISSCE 2015 Marking Scheme for Informatics Practices

(Sub Code:065 Paper Code 90/1 Delhi)

7	(a)	Write one advantage and one disadvantage of e-learning to students.	2										
	Ans	<p><u>Advantages</u></p> <p>Students can</p> <ul style="list-style-type: none"><li>• learn at their own pace.</li><li>• learn at any age.</li><li>• study anywhere provided they have access to a computer and Internet connection</li><li>• assess themselves and take feedback to enhance their learning.</li></ul> <p><u>Disadvantages</u></p> <ul style="list-style-type: none"><li>• As teacher-student personal interaction is absent, learners with low motivation or bad study habits may fall behind.</li><li>• Slow Internet connections may make accessing e-learning course material difficult.</li></ul>											
		<p><i>(1 mark for any one correct advantage)</i></p> <p><i>(1 mark for any one correct disadvantage)</i></p>											
	(b)	What precaution must be taken with regard to making payments while shopping online?	1										
	Ans	<ul style="list-style-type: none"><li>• Share payment information only with known or reputable vendors</li><li>• Before entering any personal or payment information, make sure that the URL should start with http</li><li>• Look for a small lock icon in web browser.</li></ul>											
		<p><i>(1 mark for ANY one correct precaution)</i></p>											
	(c)	<p>James works for a Garments company. He has created a form for the employees.Help him choose most appropriate controls from ListBox, ComboBox,TextField,TextArea, RadioButton, Checkbox, Label and Command Button for the following entries:</p> <table><tr><th>S.No.</th><th>Function</th></tr><tr><td>1</td><td>To enter first name of employee</td></tr><tr><td>2</td><td>To select gender (M/F)</td></tr><tr><td>3</td><td>To choose gender of employee (Permanent/Temporary)</td></tr><tr><td>4</td><td>To allow entering remarks about the employee in the form of paragraph.</td></tr></table>	S.No.	Function	1	To enter first name of employee	2	To select gender (M/F)	3	To choose gender of employee (Permanent/Temporary)	4	To allow entering remarks about the employee in the form of paragraph.	2
S.No.	Function												
1	To enter first name of employee												
2	To select gender (M/F)												
3	To choose gender of employee (Permanent/Temporary)												
4	To allow entering remarks about the employee in the form of paragraph.												

# CBSE AISSCE 2015 Marking Scheme for Informatics Practices

(Sub Code:065 Paper Code 90/1 Delhi)

	Ans				
		S.No.	Function	Control	
		1	To enter first name of employee	TextField	
		2	To select gender (M/F)	RadioButton/ ComboBox	
		3	To choose category of employee (Permanent/Temporary)	RadioButton/ ComboBox	
		4	To allow entering remarks about the employee in the form of paragraph.	TextArea	
		( ½ mark for each correct answer)			