

8/18/2

Roll Number		
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SET A



INDIAN SCHOOL MUSCAT FINAL TERM EXAMINATION INFORMATICS PRACTICES

CLASS: XI

Sub. Code: 265

Time Allotted: 3 Hrs

19.02.2019

Max. Marks: 70

General Instructions:

1. Answer all the questions.
2. Answer all subdivisions of a question in order before attempting the next.
3. Answer the questions after carefully reading the text.

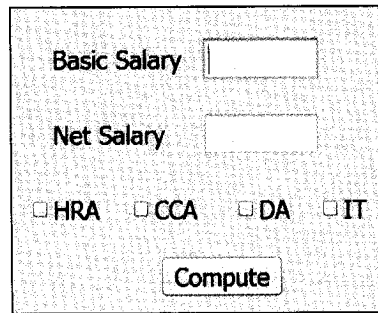
1.
 - (a) What is a digital certificate? 1
 - (b) Define a word processor. 1
 - (c) Expand ASCII. 1
 - (d) What is an interpreter? 1
 - (e) Distinguish between Free Formatting and Pretty Printing Styles of writing programs. 2
 - (f) Give a short note on Operating System and its functions. 4
2.
 - (a) Distinguish between a label and a text field. 1
 - (b) Which property is used to add items in a list? 1
 - (c) Write Java code to accept base and height of a triangle in two text fields and display its area in a text field(jTextField3) on clicking CALCULATE button. 2
 - (d) What is the value of x and y after the following code is executed? 2

```
int x,y,i;  
x=5;  
y=4;  
for (i=10;i<20;i=i+2)  
y=y+x;  
x--;
```
 - (e) Create a Java application using NetBeans the given form. 4
Write Java code to compute Net Salary of the employee according to the checkbox selected.
If HRA is selected, add 1000 to Basic salary
If CCA is selected, add 500 to Basic salary

If DA is selected, add 15% of Basic salary to Basic salary

If IT is selected, deduct 10% of Total salary (Total salary = Basic salary + HRA + CCA + DA) to compute net salary

Display the net salary in TextField2



3.

(a) What is the use of getText() method ?

1

(b) Ms. Shwetha has developed a Java application through which the students of her school can view their marks by entering their admission number. The marks are displayed in various text fields. What Java code should she give so that the students are able to view, but not change their marks in text fields?

2

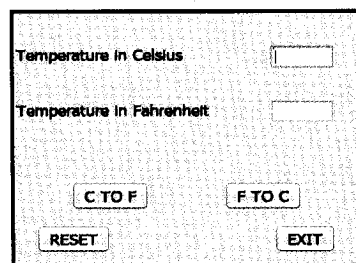
(c) Rewrite the following code using if statement :

2

```
int k;  
switch(k)  
{  
    case 1: System.out.print("BRONZE");  
        break;  
    case 2: System.out.print("SILVER");  
        break;  
    case 3: System.out.print("GOLD");  
        break;  
    default: System.out.print("NONE");  
}
```

(d) Create a Java application using NetBeans the following form

4



Write Java code to convert the temperature to Fahrenheit or Celsius according to the clicking of F to C or C to F button respectively and display in the respective text field. The application should terminate on clicking EXIT button. Clear the text fields on clicking RESET button. ($F=1.8 \times C+32$)

- (e) Ms. Sharma works as a programmer in 'ABC Car Rental Company' where she has designed a software to compute charges to be paid by the client. Client can take any car out of Deluxe/SemiDeluxe/Ordinary for rent. Client can also opt for services of a guide. Charges vary depending on the type of car opted. Charges of services of Guide are extra. A screenshot of the same is shown below :

Help Ms. Sharma in writing the code to do the following :

- (i) After selecting appropriate Radio button and check box (if required), when 'CALCULATE' button is clicked. Amount, Guide charges and Total Amount should be calculated and displayed in the respective text fields.

Category of Car	Amount (in ₹)
Deluxe Car	1000 per day
Semi Deluxe Car	800 per day
Ordinary Car	700 per day

Amount is obtained by multiplying per day charges of car with number of days for which the car is taken.

If 'Guide Required' checkbox is selected, Guide charges per day are ₹ 500.00

Guide Charges is calculated as : Number of days car required *500

Total Amount = Amount + Guide Charges

- (ii) When Clear button is clicked, all the Textfields and Checkboxes should be cleared.

- (iii) When Close button is clicked, the application should close.

- 4.
- (a) What is a candidate key? 1
- (b) Write SQL command to create a table LIBRARY with the fields BOOKNUM (integer), NAME (VARCHAR(30)), AUTHOR (VARCHAR(40)), PRICE (integer). Make BOOKNUM as Primary key. 2
- (c) Ms. Salma created a table with the fields EMPNO, NAME, DEPT and SALARY. He stored data of 100 employees in it. Give cardinality and degree of the table. 2

- (d) Given the following table **INTERIORS**, write SQL commands for (i) to (iv) based on the table.

4

ID	ITEMNAME	TYPE	DATEOFSTOCK	PRICE
S001	Royal Tiger	Sofa	2018-11-10	28000
D010	Dine Paradise	Dining Table	2019-01-21	11000
S005	Park Seater	Sofa	2018-04-14	13000
T002	Rough Wood	Office Table	2019-01-02	20000

- (i) To display the different types of items without duplicates.
- (ii) To display the name and type of items whose stock dates are between 1st January 2018 and 30th April 2018.
- (iii) To display names of the items which ends with the letter 'r'.
- (iv) To display item name and 10% of price (as the column alias Discount) of those items whose price is above 18000.

- (e) Write the outputs of the SQL commands (i) to (iv).

4

- (i) SELECT ROUND(456.78398,3);
- (ii) SELECT POWER(6,3);
- (iii) SELECT CONCAT("RAKESH", "KUMAR");
- (iv) SELECT INSTR("KAVITHA","IT");

5.

- (a) What is the relationship between a database and a table?

1

- (b) Write SQL commands to

2

- (i) Create a new database FINAL.
- (ii) To display the names of the tables in the database FIRST.

- (c) Given the following table **STUDENT**, write the output for (i) to (iv) based on the table.

4

S_ID	CLASS	NAME	GAME	GRADE
S101	7	Sameer	Tennis	B
S268	8	Veena	Swimming	A
S345	8	Arpit	Cricket	C
S167	7	Sujit	Tennis	A

- (i) SELECT NAME, CLASS FROM STUDENT WHERE GRADE='A' AND CLASS = 8;
- (ii) SELECT GAME FROM STUDENT WHERE GAME LIKE '%e%';
- (iii) SELECT S_ID, NAME FROM STUDENT ORDER BY NAME;
- (iv) SELECT NAME FROM STUDENT WHERE GAME = 'SWIMMING' OR CLASS=7;

6. Given the following table **CLUB**, write SQL commands for question (a) and write outputs for question (b) on the basis of the table **CLUB**.

C_ID	NAME	AGE	SPORTS	DOJ	PAY
1	RAVINA	35	KARATE	2000-03-12	22000
2	KARAN	33	SQUASH	2010-10-17	12000
6	TARUN	36	BASKETBALL	1998-08-27	16000
3	ANKITA	34	SWIMMING	1990-07-01	26000
4	ZAREEN	39	KARATE	2002-11-17	21000

DOJ – Date of Joining the club

- (a)
- (i) To display names of coaches who have joined the club after 1st June 2000.
 - (ii) To increase the pay by 10% for swimming coaches.
 - (iii) To change the datatype of Sports field to VARCHAR(30).
 - (iv) To add a new row with the following values
5, 'VIKAS', 30, 'BASKETBALL', '2019-01-25', 15000
 - (v) To remove the details of the coaches whose names have 'N' as its second letter.
 - (vi) To display all the details in descending order of pay.
- (b) Give the outputs of the following SQL commands on the basis of the table **CLUB**:
- (i) SELECT MONTH(DOJ) FROM CLUB WHERE C_ID=2;
 - (ii) SELECT LENGTH(NAME) FROM CLUB WHERE PAY=16000;
 - (iii) SELECT RIGHT(NAME,2) FROM CLUB;
 - (iv) SELECT SUBSTR(SPORTS,4,2) FROM CLUB WHERE C_ID>5;

- 7.
- (a) What is infomania?
- (b) Name any two major e-Governance Projects in India.
- (c) Give any two positive societal impacts of e-Business.
- (d) List the first four steps for solving an e-Application problem.

End of the Question Paper

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SET B



INDIAN SCHOOL MUSCAT FINAL TERM EXAMINATION INFORMATICS PRACTICES

CLASS: XI

Sub. Code: 265

Time Allotted: 3 Hrs

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Max. Marks: 70

General Instructions:

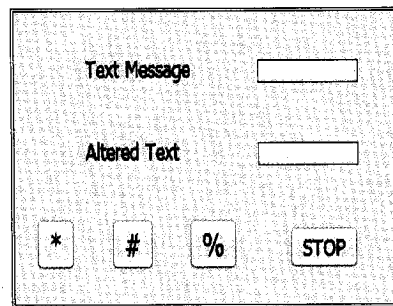
1. Answer all the questions.
2. Answer all subdivisions of a question in order before attempting the next.
3. Answer the questions after carefully reading the text.

1.
 - (a) Define a spreadsheet package. 1
 - (b) Expand ISCII. 1
 - (c) What is a compiler? 1
 - (d) What is a digital signature? 1
 - (e) Distinguish between Testing and Debugging process. 2
 - (f) Give a short note on e-waste and various methods of its disposal. 4
2.
 - (a) Which property is used to add items in a combo box? 1
 - (b) Distinguish between a check box and a radio button. 1
 - (c) Give the values of c and s after the execution of the following code : 2

```
int c=0,s=5;  
int i=23;  
while (i>12)  
{  
    s=s+i;  
    c++;  
    i=i-3;  
}
```
 - (d) Write Java code to accept length and breadth of a rectangle in two text fields and display its area in a text field(jTextField3) on clicking COMPUTE button. 2

- (e) Create a GUI Application for the form given below

4



Write Java code to prefix and suffix the given text with the special character according to the button chosen. Also include code to terminate the application on clicking STOP button.
For Example, if given Text Message is **Welcome**, on clicking % button, the altered text should be **%Welcome%**

- 3.
- (a) What is the use of parseInt() method ?
- (b) Rewrite the following code using switch statement :

1

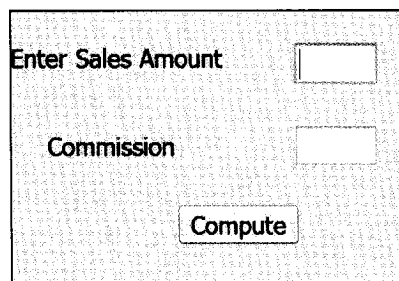
2

```
int x;  
if (x==10)  
    System.out.println("GOLD");  
else if (x==20)  
    System.out.println("SILVER");  
else if (x==30)  
    System.out.println("BRONZE");  
else  
    System.out.println("NONE");
```

- (c) Mr. Shriram has developed a Java application through which the students of his school can view their marks by entering their admission number. The marks are displayed in various text fields. What Java code should he give so that the text fields are disabled ?
- (d) Design a GUI Application with the form as designed below :

2

4



Write Java code to calculate commission of a salesman in Rupees according to the sales amount as given below and display in TextField2

Sales Amount	Commission (% of sales amount)
>50000	10%

25000 – 50000	5%
From 10000 upto 25000	3%
<10000	0%

- (e) The students of “Shiksha Vidyalaya” work for different extra-curricular activities like “Community Outreach Programme”, “Swachh Bharat Abhiyan” and “Traffic Safety Club”. The Programmer at the school has developed a GUI application as shown below : 6
- A student can participate in more than one activity.
 - Each student gets 10 points for each activity – namely Community Outreach Programme, Swachh Bharat Abhiyan and Traffic Safety Club.

Help the Programmer to write code for the following :

- When ‘Calculate Total Score’ button is clicked, the points for each activity (that is selected) should be displayed in the text field in front of that activity’s checkbox and the Total Score should be displayed in the appropriate Textfield.
- When Clear button is clicked, all the Textfields and Checkboxes should be cleared.
- When Stop button is clicked, the application should close.

4. 1
- (a) What is an alternate key? 1
- (b) Write SQL command to create a table STUDENT with the fields ADMNO (integer), NAME (VARCHAR(30)), SUBJECT (VARCHAR(20)), TNAME (VARCHAR(30)). Make ADMNO as Primary key. 2
- (c) Mr. Surya has created a table EMPLOYEE with the fields EMPNO, NAME, DEPT and SALARY. He stored data of 560 employees in it. Give the cardinality and degree of the table. 2
- (d) Given the following table **LAB**, write SQL Commands for (i) to (iv) based on the table. 4

ID	ITEMNAME	QUANTITY	DATEOFPURCHASE	COST
1	Printer	3	2018-11-10	15000
2	Scanner	2	2019-01-21	18000
3	Printer	1	2018-04-14	12000
4	Computer	4	2019-01-02	60000

- (i) To display the different items without duplicates.
- (ii) To display the name and cost of items whose purchase dates are between 31st January 2018 and 31st January 2019.
- (iii) To display names of the items which starts with the letter 'P' and ends with the letter 'r'.
- (iv) To display item name and 10% of cost (as the column alias Discount) of those items whose cost is above 15000.

(e) Write the outputs for the following SQL commands.

- (i) SELECT TRUNCATE(867.65478,3);
- (ii) SELECT POWER(8,3);
- (iii) SELECT CONCAT("SHAILESH", "GUPTA");
- (iv) SELECT SUBSTR("COMMERCE",5,3);

5. (a) Distinguish between DDL and DML commands in SQL.

(b) Write SQL commands to

- (i) Create a new database ENDTERM.
- (ii) To display the structure of the table REPORT in the database ENDTERM.

(c) Given the following table **GRADUATE**, write the output for (i) to (iv) based on the table.

SNO	NAME	STIPEND	SUBJECT	AVERAGE
1	ROBERT	4000	PHYSICS	68
2	RUBINA	5000	CHEMISTRY	76
3	DIVAKAR	4500	MATHEMATICS	78
4	ARUN	6000	PHYSICS	89

- (i) SELECT NAME, SUBJECT FROM GRADUATE WHERE AVERAGE > 75 AND STIPEND = 5000;
- (ii) SELECT SUBJECT FROM GRADUATE WHERE NAME LIKE 'R%E%';
- (iii) SELECT SNO, NAME FROM GRADUATE ORDER BY NAME;
- (iv) SELECT NAME FROM GRADUATE WHERE SUBJECT = 'PHYSICS' OR AVERAGE<70;

6. Given the following table **HOSPITAL**, write SQL commands for (a) and write outputs for (b) on the basis of table **HOSPITAL**.

ID	NAME	AGE	DEPARTMENT	DATEOFADM	CHARGES
1	Kareem	32	Surgery	2019-01-10	5000
2	Kush	43	ENT	2019-02-03	3000
3	Zarina	12	Cardiology	2018-12-24	7000
4	Ankita	38	ENT	2019-02-04	3500
5	Zubin	27	Cardiology	2018-12-15	6000

DATEOFADM – Date of Admission to the hospital

- (a)
 - (i) To display names of patients who are admitted in the hospital before 1st January 2019.
 - (ii) To add a new row with the following values
10, 'Shilpa', 30, 'Orthopedic', '2019-01-25', 12000

- (iii) To display all the details in descending order of charges.
- (iv) To increase the Surgery Department charges by 5% .
- (v) To add a new column DOCTOR with datatype VARCHAR(30).
- (vi) To remove the details of the patients of Cardiology Department whose names have the letter 'u' in it.

4

- (b) Give the outputs of the following SQL commands :
- (i) SELECT YEAR(DATEOFADM) FROM HOSPITAL WHERE ID=4;
 - (ii) SELECT UCASE(DEPARTMENT) FROM HOSPITAL WHERE AGE<30;
 - (iii) SELECT LEFT(NAME,3) FROM HOSPITAL WHERE CHARGES=7000;
 - (iv) SELECT INSTR(DEPARTMENT,"urge") FROM HOSPITAL WHERE ID<2;

7.

- (a) Define E-Business.
- (b) Name any forms of e-Governance model.
- (c) Name any two e-Learning portals.
- (d) Distinguish between Net Banking and Mobile Banking.

1

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End of the Question Paper