



INDIAN SCHOOL SOHAR
II TERM EXAM (2016-17)
INFORMATICS PRACTICES (065)

Class: XII

Date: 24 November, 2016

Marks: 70

Time: 3 Hours

Note: (i) All questions are compulsory

(ii) Answer the questions after carefully reading the text.

1. a) Which wireless communication channel is most appropriate in each of the following situations? 2
 - i) Communication in a hilly region
 - ii) Very fast communication between two offices in two different countries
- b) What is a MAC address? How is it different from an IP address? 2
- c) Write two advantages and two disadvantages of Optical Fiber cable. 2
- d) Write any two snooping methods used by hackers/crackers. 2
- e) Expand the following terms: OOO, ODF 2

2. a) What is the purpose of *break* statement in a *switch case* statement? 2
- b) Which HTML tags/attributes are used to define the following: 2
 - i) A combo box
 - ii) A textarea
- c) Write HTML code to set background colour as silver, "HTML" as header-1 text in blue colour. Also set top and left margins to 60. 2
- d) Define Class and Object with reference to Object Oriented Programming. 2
- e) What is inheritance? 2


3. a) Distinguish between Single Row and Aggregate functions of MySQL. 2
- b) Consider the table 'Company' 2

CompanyCode	Donations
C101	13000
C102	NULL
C104	7000
C105	4000

- What output will be displayed by the following SQL Statement?
 - i) SELECT AVG(Donations) FROM Company;
 - ii) SELECT MIN(Donations) FROM Company where donations>4000;
- c) What is the effect of *Commit* and *Rollback* statements on a transaction? 2
- d) Write a short note in Cartesian product. 2

e) Write any two advantages and two disadvantages of a Database Management System. 2

4. The students of “Shiksha Vidyalaya” work for different extracurricular 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 :



A student can participate in more than one activity. Each student gets 10, 12 and 15 points respectively for activities-namely Community Outreach Programme, Swachh Bharat Abhiyan and Traffic Safety Club. Help the programmer to write code for the following:

- i) Disable textfields for all activities along with the total score 1
 - ii) When ‘Calculate Total Score’ button is clicked, the points for each activity (that is selected) should be displayed in the textfield in front of that activity’s checkbox and the Total Score should be displayed in the appropriate textfield. 2
 - iii) When Clear button is clicked, all the textfields and checkboxes should be cleared. 1
 - iv) When Stop button is clicked, the application should close. 1
5. a) Find errors from the following code segment and rewrite the corrected code underlining the corrections made: 2

```
public static void main (String [] args){  
    Int N=Integer.parseInt(nTF.getText);  
    do (N<=32){  
        N==2*N;  
        System.out.print(N);  
    }while;  
}
```

b) Find the output: 2

```

main(String []args){
    long a=78345,s1=0,s2=0,r;
    while(a>0){
        r=a%10;
        if (r%4==0) s1+= r;
        else s2+=r; a/=10;
    }
    System.out.println("S1 =" + s1+"S2 =" + s2);
}

```

c) Rewrite the following code using 'for' loop: 2

```

inti=1, j=2;
while(i<=20){
    j+=i;
    i+=2;
}
System.out.println("i+j="+i+j);

```

d) Write a method that reads an integer as a parameter and returns true if the number is palindrome else returns false. 2

e) Given a String object namely 'subject', having value as "123" stored in it. What will be the result of following? 2

```

String subject="123";
jTextArea1.append(""+(subject.length()+Integer.parseInt(subject)));
jTextArea1.append("\n"+subject.substring(1,2));

```

6. a) Write the SQL command to create the following table including its constraints. 2

Table :**DOCTOR**

Column Name	Data Type	Size	Constraint
ID	Int	3	Primary Key
Name	Varchar	30	NOT NULL
Dept	Varchar	15	
Exp	Int	2	
DOA	Date		
Sex	Char	1	

b) Answer the questions based on the tables given below:

Table: Doctor

ID	Name	Dept	Exp	DOA	Sex
1	Pankaj	Cardio	10	2011-10-10	M
2	Shalini	Gyn	23	2010-01-01	F
3	Sanjay	Med	12	2010-12-12	M
4	Manvi	Gyn	9	2009-01-07	F
5	Govind	Ortho	15	2009-10-05	M

Table: Salary

ID	Basic	ConsFee	Allow
1	25000	200	2000
2	23000	150	1500
3	43000	210	4000
4	35000	160	3000
5	40000	280	4000

- i. Display the names of all male doctors who are in Medicine department having more than 10 years experience. 1
 - ii. Display the minimum basic in each department. 1
 - iii. Display the average salary of all doctors working in ENT department. (Salary=Basic+Allowance) 1
 - iv. Show name in uppercase joined with first three characters of department in lowercase. 1
 - v. Display details of doctors whose name start with 'S' but does not end with 'y' 1
 - vi. List details of medicine doctors getting allowances in the range 1000-2000 1
 - vii. List the doctor IDs whose basic is not 10000, 20000 or 30000. 1
 - viii. List the doctors appointed before 2010 1
 - ix. List a report as <Name> charges a consultation fee of <ConsFee> in the descending order of consultation fee. 1
 - x. Increase the consultation charges by 10%, if it is less than 200. 1
 - xi. Add a new column 'Phone' as int into Doctor table. 1
 - xii. Delete salary details of doctors getting allowances less than 150. 1
 - xiii. Add a not null constraint of Dept. 1
 - xiv. What will be the degree and cardinality of cross join of both the tables? 1
 - xv. Find the error(s): 2
 - I) Select Concat(Concat(Name, Exp),Dept) from Doctor;
 - II) Select TRIM(Trailing and Leading '#' from '##TWITTER##');
 - xvi. Predict the O/P of: 2
 - I) Select instr(substr("truncated",-5),'t');
 - II) Select Round(7659.760,-1), Truncate(7659.760,-1);
7. a) How has popularity of e-Business benefited a common man? Write domain name of one popular e-Business site as an example. 2
- b) Web address of national portal of India is: 1
- I) India.gov.in
 - II) GOI.gov.in
 - III) India.nic.in
 - IV) None of the above
- c) What are the major e-governance challenges for Indian villages? 1
- d) How has our society benefited from e-learning? 1

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