AMRITA VIDYALAYAM
ANNUAL EXAMINATION 2018 - '19

Class : XI   **Marks : 70**

Time : 3 hrs

INFORMATICS PRACTICES

SECTION - A

1. Explain the basic units of computer. Name the sub units of CPU and give the function of each units. **4**
2. What is the function of a bus? Explain the different communication bus. **3**
3. What are the major functions of an Operating system? **2**
4. Write short notes on. **3**
    a) Utility software   b) Device Driver   c) Language processors
5. Compare Digital Signature and Digital Certificate. **2**
6. Mention the points to be noted while deciding a password. **3**
7. What are various steps involved in the development of a new application? Explain. **4**
8. Explain the purpose of the following methods. Also mention the control you are using for this method. Give example. **2**
    a) setVisible()   b) setEditable()   c) toString()   d) setEnabled()
9. Is there any difference between "a" and 'a'? Justify your answer. **1**
10. Convert the following program code to switch statement. **2**

```
if(code==1)
      jLabel1.setText("One");
if(code==2)
      jLabel1.setText("Two");
if(code==3)
      jLabel1.setText("Three");
else
      jLabel1.setText("1234");
```

11. How many times the following loop will execute? **1**

```
int num=5;
do
{
      System.out.println("Hello World");
      num--;
}
while(num>2);
```

12. Write the output of the following code. **2**

```
int  x,y;
x=5;
y=1;
while(x>0)
{
      x=x-1;
      y=y*x;
      System.out.println(y);
}
```

13. Write a program in java to find the largest of two numbers. **3**

14. Read the following case study and answer the question that follows.

Mr. Santhakumar works in Hevean International School as a programmer. He is requested to develop a students record. The school offers two different streams Medical and non-medical, with different grading criteria.

The grading criteria is as follows.

Stream	Percentage	Grade
Medical	> = 80	A
	60 - 79	B
	< 60	C
Non-medical	> = 75	A
	50 - 74	B
	< 50	C

Control Name.

First term marks: txtFirst medical: - optMedical

Second term marks: txtsecond Non medical: optnonmedical

Percentage: txtper_grade Clear button: cmdclear

NB:- The data entry for first term is out of 100 and that of second term is out of 100. So total is out of 200.

a) Write the code to disable the textfields txtPercentage and clear button. **1**

b) Write the code for clear button to clear all controls (i.e. textfields and radio buttons) **1**

c) Write the code for Exit button. **1**

d) Write the code for Calculate Percentage and Grade button. **2**

15. Debug the following code. **2**

```
int a;b;
a=10,b=5;
If(a>b)
      jTextFied1("A is greater)
Else;
      jTextFied1("B is greater)
```

16. Write a program in java to check the voting eligibility of a person. **3**

17. Differentiate between entry controlled loop and exit controlled. Explain with an example. **3**

18. What is the use of break statement? **1**

SECTION - B

19. What is MySQL? What are the characteristics of MySQL? **3**

20. Differentiate between NULL and NOT NULL. **2**

21. Which command is used to list the tables in a database? **1**

22. Write the purpose of ALTER TABLE command. Write its syntax. **2**

23. Name the function in MySQL which returns the argument raised to the specified power. **1**

24. Create a table BANK with four columns by giving suitable names and data types. **3**

25. Find the output of the following. **4**

```
a) SELECT LOWER('ANNUAL EXAMINATION - IP');
b) SELECT ROUND(35675.8765,0);
c) SELECT SUBSTR('Class XI Computer',7,3);
d) SELECT MONTH('2009/08/15 01:02:03');
```

26. Write SQL command for question a) to f) and output for relation TEACHER.   **8**

TABLE :- TEACHER

No	Name	Department	Date of joining	Salary	Sex
1	Raja	Computer	1998/05/21	8000	M
2	Sangita	History	1997/05/21	9000	F
3	Ritu	Sociology	1998/08/29	8000	F
4	Kumar	Linguistics	1996/06/31	10000	M
5	Venkatraman	History	1999/10/21	8000	M
6	Sidhu	Computer	1986/05/21	14000	M
7	Aishwarya	Sociology	1998/01/11	12000	F

a) To select all information of teacher in Computer department.

b) To list the names of female teachers in History department.

c) To list the names of teachers with date of joining in ascending order.

d) To display all the details of teachers.

e) To add a new row to teacher table (8, 'Meera', 'Computer', '2000/01/01', 'M')

f) To list the names and department of all teachers who are in history department and getting salary less than 10000.

g) Give the output.

(i) `SELECT DISTINCT (salary) from TEACHER;`

(ii) `SELECT Name, Department from TEACHER where Date of joining>'1998/12/01;`