

WORKSHEET – XI- INFORMATICS PRACTICES

UNIT I INTRPDUCTION TO COMPUTER SYSTEMS

1. What are the functional components of a computer?
2. 1 TB=_____ Bytes
3. Differentiate between primary memory and secondary memory.
4. Write about MICR.
5. Differentiate compiler and interpreter.
6. Define firewall?
7. What are cookies?
8. Explain the concept of Biometric sensor?
9. What is spam? How it has become a big internet issue?
10. What is firmware?
11. Write the functions of control unit
12. Differentiate impact and non-impact printers.
13. 1GB=_____Bytes
14. Define (a)Tracks (b) Cylinder
15. Define cache memory.
16. What is firmware?
17. How many bits form one byte?
18. Write the strength and weakness of computer?
19. Write about Trojan Horse?
20. What is port?
21. Write the functions of operating systems?

UNIT II INTRODUCTION TO PROGRAMMING

1. What is byte code in Java?
2. What do you mean by an event?
3. How non-graphic characters are represented in Java.
4. What is the similarity and difference between option buttons and check boxes?
5. What will be the values of following if j=5 initially?
 - i. $(5*++j)\%6$
 - ii. $(5*j++)\%6$
6. What are keywords? Give examples.
7. Write equivalent 'switch' statement for the following:

```
if(day==1)
    jTextField1.setText("Sunday");
else if(day==2)
    jTextField1.setText("Monday");
else if(day==3)
    jTextField1.setText("Tuesday");
else if(day==4)
    jTextField1.setText("Wednesday");
else if(day==5)
    jTextField1.setText("Thursday");
else if(day==6)
    jTextField1.setText("Friday");
else
    jTextField1.setText("Saturday");
```

8 What will be the output of the following code?

```
int m=100;
while(true)
{
    if(m<10)
        continue;
    m=m-10;
}
```

9 What are the jump statements in Java?

10 State the difference between = & ==.

11 Write the code in Java to display the following output.

```
1
1 2
1 2 3
1 2 3 4
```

12 Rewrite the code after making the corrections. Underline the corrections.

```
int sum=0;v=2;
int I;
for(i=0,i<=5,i++)
{
    v+=3;
}
jTextArea1.showText(“”+v);
```

13 Write the Java program to find the factorial of an integer given by the user at runtime.

14 What is a bit? What is a binary code?

15 Write about Trojan Horse?

16 What do you mean by RAD.

17 What are containers? Give example.

18 What is ternary operator? Write an equivalent code for the following using ternary operator?

```
int a,b=5;
if(a>10)
b=b+1;
else
b=b-1;
```

19 Distinguish while and do-while with example.

20 Explain types of errors.

21 Explain the term Pretty printing.

22 Explain two types of compile time errors.

23 What is the role of comments and indentation in a program?

24 What is documentation?

25 What are the different testing methods?

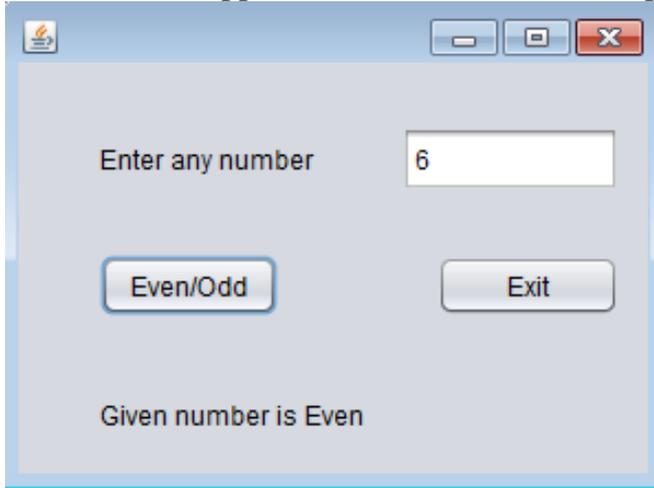
26 Define debugging.

27 What is echo printing?

28 Mention the steps to follow while writing a program.

29 What is entry-controlled loops and exit-controlled loops?

- 30 Write code to create GUI application that accepts a number from the user and displays even or odd in a label when the even/odd button is clicked and terminates the application when exit button is pressed.



UNIT III RELATIONAL DATABASE MANAGEMENT SYSTEM

- 1 Define DBMS.
- 2 Name the data structure used in network data model and hierarchical data model.
- 3 Consider a table has 4 rows and 5 columns. Write its degree and cardinality.
- 4 Explain different keys with simple table.
- 5 Differentiate ISNULL and IFNULL with example.
- 6 What is the purpose of the following commands in MySQL.
 - i. DESCRIBE
 - ii. CREATE
- 7 Write a query to create the database “School” and in “school” create the following table “department”.

Table Name: Department

Column Name	DeptID	Deptname
Datatype	Number	Char
Length	2	20
Key type	Primary key	
Null/Unique		Not null

8. What will be the output of the following?
 - i. Select round(70,-2);
 - ii. Select left(concat('informatics','practices'),10);
 - iii. Select substring('gulf sahodaya',3,5);
 - iv. Select 10 mod 3;
 - v. Select dayofmonth('2009-02-03');
- 9 Write query for the following questions:
 - i. Display number of characters in a string 'Informatics Practices'.
 - ii. Find the value of 5^3 .
 - iii. Display current date.
- 10 Differentiate DROP and DELETE commands in MySQL.
- 11 Answer the following questions:

- i. `Select concat('system', 'software');`
- ii. `Select substr('primary key',3,2);`
- iii. `Select sqrt(25);`
- iv. If Address is 'riyadh'
`Select length(address);`
- v. `Select mod(10,2);`
- vi. `Select concat(lower('class'),upper('xii'));`
- vii. If str="Informatics Practices"
`Select instr(str, 'ma');`

12 Write SQL commands for the following based on the table EMPLOYEE given below:

Ecode	Ename	Sex	Grade	Gross
1101	Brian	M	E3	12000
1102	Maithili	F	M1	18000
1103	Kushagra	M	M3	24000
1104	Vansh	M	M3	24000
1105	Samaira	F	E2	11000

- i. Display the table in ascending order of names.
 - ii. Display the details of employees whose name ends with 'a'.
 - iii. Display the names of employees whose Gross is between 10000 – 20000.
 - iv. Display the details of employees whose Grade is 'M3'.
 - v. Increase the gross of all employees by 100.
- 13 Write the output for the following SQL queries based on EMPLOYEE table.
- i. `SELECT * FROM EMPLOYEE
WHERE ENAME='VANSH' AND SEX='M';`
 - ii. `SELECT DISTINCT SEX FROM EMPLOYEE;`
- 14 Write a command to add column 'PLACE' of type char in the table EMPLOYEE.
- 15 Write any three date and time functions with example.

UNIT IV IT APPLICATIONS

- 1 Define e-learning.
- 2 What do you think is most outstanding feature of e-learning?
- 3 Define e-business.
- 4 Name any two e-Business websites.
- 5 Define e-Governance.
- 6 How e-Learning useful for the trainer.
- 7 What benefits does e-Business offers to the organization?