

Question Bank

Class : XII(2017-18)

Subject : Informatics Practices(065)

1. What is the purpose of modem? [1]
2. Define Domain Name Resolution. [1]
3. What do you mean by transmission media? Name the type of transmission media. [2]
4. What is the difference between Hub and Switch? [2]
5. What is optical fibre? [1]
6. Discuss the parts of optical fibre. [2]
7. Write any two advantages and disadvantages of Optical fibre. [2]
8. What is the significance of inheritance in OOPs? List any two points. [2]
9. What is the difference between Abstract class and concrete class? Give example of each. [2]
10. Observe the following GUI interface and answer the questions given:

The screenshot shows a graphical user interface for calculating a customer discount. The window is titled "Customer Discount". It features a "Product Name" dropdown menu currently set to "Washing Machine". Below this are three text input fields labeled "List Price", "Discount Price", and "Net Price". To the right of these fields is a "Choose a Type" section with two radio buttons: "Festival" and "Non Festival". At the bottom of the window, there are three buttons: "Calculate", "Reset", and "Exit".

ABC electronic shop offers special discount of 25% on festival season to his customer. The cost of each electronic item is given below. [6]

Electronic item	List price
Washing Machine	35000
LED	80000
Microwave oven	40000
Food Processor	25000
Home theatre	150000

- i. Write the code for Calculate button to calculate discount price and net price and display the same along with list price.
- ii. Write the code for Reset button to clear all text boxes. It should also set Non festival as default type and washing machine as default product name.
- iii. Write the code for Exit button to terminate the application.

11. Write the expanded form of FLOSS. [1]

12. What do understand by ODF? [1]

13. List four freedoms that free software provides to its user. [2]

14. Discuss substring() used in Java with an example. Also name the native class to which it belongs to. [2]

15. Write the difference between the following: [4]

i. Class and object

ii. MAC and IP

16. Following are some Indian language, which is supported by UNICODE.

Devnagari, Bengali, Gurmukhi, Gujarati, Kannada, Malayalam, Oriya, Tamil, Arabic, Telugu

17. Expand the following term:

(i) HTTP

(ii) TCP/IP

18. In a database STUDENT, there is a Table RESULT with the following contents:

Table :RESULT

REGNO	NAME	MARKS	SECTION	CLASSTEACHER	ADMNO
10004	Mohit	90	A	Ms Nathani	Z101
10211	Mukta	85	B	Mr. Gokhle	Z109
10923	Mohit	92	B	Mr. Gokhle	Z120
10313	Sana	80	A	Ms Nathani	Z234

(i) Identify the attributes, which can be chosen as Candidate Keys in the table RESULT.

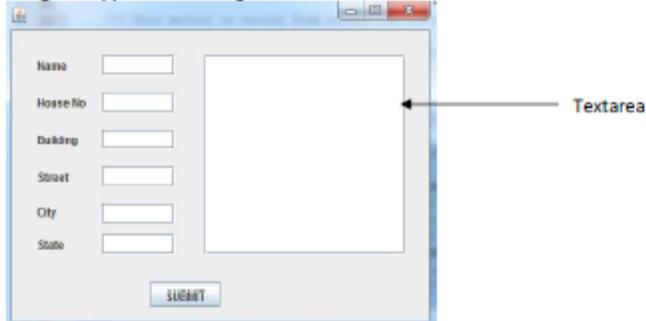
(ii) Write SQL Query to change the Marks of Mukta to 95 in the table RESULT.

19. How has popularity of e-Business benefited a common man? Write domain name of one popular e-Business site as an example.
20. Shobhit is creating a form for his company. Help her to choose most appropriate controls from ListBox, ComboBox, TextField, TextArea, RadioButton, CheckBox, Label and Command Button for the following entries:

SNo	Function
1	To enter NATIONALITY from all the nationalities given as options
2	To enter AGE between a range 20 to 25
3	To allow to select one or more FAVORITE SPORTS out of the given 6 options
4	To enter SUGGESTION in the form of a paragraph

21. Define a network. What is its need?
22. Write two advantages and disadvantages of networks.
23. What is communication channel? Name the basic type of communication channels available.
24. What is MAC address?
25. What are goals and applications of network?
26. What do you understand by Domain Name Resolution?
27. How are private members different from public members of a class?
28. What is java library? Give some examples.
29. What is OSS?
30. Define Freeware and Shareware.
31. Compare and Contrast
- i. Free software and Open source software
 - ii. OSS and FLOSS
 - iii. Proprietary software and Free software
 - iv. Freeware and Free software
32. What is GUI programming?
33. What is container component?
34. Write steps to create a GUI application in java.
35. Observe the following

Design an application having interface as shown below

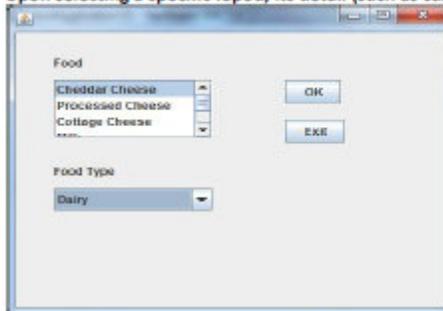


When the user clicks Submit button after entering data in textfields, all the entered information should be appended to text area. Recall that information can be appended to a text area using method `<textarea name>.append (" info_to_be appended");`

36. Observe the following GUI interface

Design a GUI application that displays food types in a combobox and foods pertaining to selected type in a list box.

Upon selecting a specific food, its detail (such as calories, fat content etc.) are displayed in a separate dialog.



37. what is RAD

38. What is the purpose of modem? [1]

39. What do you mean by transmission media? Name the type of transmission media. [2]

40. What is the difference between Hub and Switch? [2]

41. What is the significance of inheritance in OOPs? List any two points. [2]

42. What is the difference between Abstract class and concrete class? Give example of each. [2]

43. Discuss `substring()` used in Java with an example. Also name the native class to which it belongs to. [2]

44. Write the difference between the following: [4]

- Class and object
- MAC and IP

45. What is the purpose of Extends keyword in Java? [2]

46. Explain Polymorphism with example. [2]

47. How concrete class is different from abstract class? [2]

48. What is the purpose of showInputDialog() in context of JOptionPane? [2]

49. Rewrite the following program code using a if statement. [2]

```
int C=jComboBox1.getSelectedIndex( );
switch(C)
{
case 0: finalAmt=BillAmt;break;
case 1: finalAmt=0.9*BillAmt; break;
case 2: finalAmt = 0.5* BillAmt; break;
default: finalAmt=0;
}
```

50. What will be the values of variables “m” and “n” after the execution of the following code? [2]

```
int m, n=0;
for(m=1; m<=4; m++)
{
n+=m;
n--;
}
```

51. Write a program in Java that accepts the number(integer –“N”) from the user and it should print the reverse of the number. The program should not use the String class for reversing the number.

52. Discuss any two properties of jPasswordField. [2]

53. What is the purpose of substring() in Java? explain with example. [2]

54. Common wealth International is a bank. The bank provides three types of loans- car loan, House loan and Education loan. The following is the Interest rate and discount calculation form.

The image shows a Java Swing window with a light gray background. At the top, there is a title bar with standard window controls (minimize, maximize, close). Below the title bar, the text "Enter Loan Amount" is displayed next to a text input field. Underneath, there is a section titled "Loan Type" containing three radio buttons: "Car Loan", "House Loan", and "Education Loan". To the right of the radio buttons, there are three text input fields labeled "Discount Amt", "Interest Rate", and "Net Amount". At the bottom of the window, there are four buttons: "Show Interest Amount", "Calculate Discount", "Clear", and "Exit".

- i. Write the code for Clear button to clear all the text boxes and set car loan as default loan type.
- ii. Write the code for Show Interest Amount button to show the interest rate according to the criteria given below:
 Car Loan - 10%
 House Loan – 8.5%
 Education Loan – 5%
- iii. Write the code for Calculate Discount button to find the discount amount. The bank provides discount on the loan amount according to the following criteria:
 if loan amount $\leq 10,000,00$ then discount amount is 0.20% of loan amount
 if loan amount $> 10,000,00$ then discount amount is 0.25% of loan amount
 It should also display Net Amount(Net amount=Interest Amount – Discount amount)
- iv. Exit button should terminate the application.

55. What is Tuple? [1]

56. What are aggregate functions in MYSQL? Also write the name of any two aggregate functions. [1]

57. Which command is used to select a database? [2]

58. Consider the table EMPL and answer the questions given below: [6]

TABLE : EMPL

EmpNo	Ename	Job	Mgr	Hiredate	Sal	Comm	Deptno
8369	SMITH	CLERK	8902	1990-12-18	800.00	NULL	20
8499	ANYA	SALESMAN	8698	1991-02-20	1600.00	300.00	30
8521	SETH	SALESMAN	8698	1991-02-22	1250.00	500	30
8566	DEV	MANAGER	8839	1991-04-02	2985.00	NULL	20
8654	MOHIN	SALESMAN	8698	1991-09-28	1250.00	1400.00	30
8698	BINA	MANAGER	8839	1991-05-01	2850.00	NULL	30
8882	SHIVASH	MANAGER	8839	1991-05-09	2450	NULL	30

8888	SCOTT	ANALST	8566	1992-12-09	3000.00	NULL	20
8839	AMIR	PRESIDENT	NULL	1991-11-18	5000.00	NULL	10
8844	KULDEEP	SALESMAN	8698	1991-09-08	1500.00	0.00	30
8886	ANOOP	CLERK	8888	1993-01-12	1100.00	NULL	20
8900	JATIN	CLERK	8698	1991-12-03	950.00	NULL	30
8934	MITA	CLERK	8882	1992-01-03	1300.00	NULL	10

- a. Write a query to display employee name, salary and department number who are not getting commission.
- b. List all unique department numbers in the table.
- c. List the details of those employees who have four lettered names.

Consider the table EMPL and give the output for the following queries:

- i. SELECT ENAME FROM EMPL WHERE ENAME LIKE “_E%”;
- ii. SELECT * FROM EMPL WHERE SAL BETWEEN 2000 AND 5000;
- iii. SELECT * FROM EMPL WHERE COMM > SAL;

59. Which command is used to eliminate the duplicate values in MYSQL?

1

60. Consider the table “CLUB” and give the output for the following:

3

TABLE : CLUB

COACH_ID	C_NAME	SEX	AGE	SPORTS	DATE	Sal
1	Kukreja	M	35	Karate	1996-03-27	1000
2	Ravina	F	34	Karate	1998-01-20	1200
3	Karan	M	34	Squash	1998-02-19	2000
4	Tarun	M	36	Basketball	1998-01-01	1500
5	Zubin	M	36	Swimming	1998-02-24	1600
6	Chetana	F	39	Swimming	1998-02-20	1500
7	Ankita	F	37	Karate	1998-01-13	800
8	Shivani	F	41	Swimming	1999-02-19	750

9	Kush	M	37	Basketball	1998-01-12	1100
10	Sanjay	M	42	Squash	1998-03-20	1700

- a. SELECT UCASE(sports) from Club;
- b. SELECT SUBSTR(C_name,1,2) from Club where date > '1998-01-31';
- c. Select right(c_name,3) from Club where c_name like 'k%';

61. Consider the table Club and write the queries for the following: 3

- i. Display the C_name, dname for the coaches on which the day they joined.
- ii. Display the length of sports along with coach name.
- iii. Display the position of A in sports in every row

62. Name the function: 3

- i. Date function that returns a number
- ii. String function that returns a number
- iii. Date function that returns only date

63. What do you mean by Transaction?

64. Explain the following commands with example:

- a. Rollback
- b. Commit All
- c. Savepoint
- d. Set autocommit
- e. Start transaction
- f. Distinct

65. What is the purpose of the following in MySQL?

- a. Having
- b. Group by

66. What is the difference between single row function and aggregate function?

67. What is e-learning? List advantages and disadvantages of e-learning.

68. What is snooping ?

69. Explain equi-join and Cartesian product .

70. Differentiate between while and do...while.

71. Write any two advantages and disadvantages of Coaxial cable [2]