F.Y.B.Sc.IT Sem-2 -Sample Questions
Subject: OBJECT ORIENTED PROGRAMMING

1. OOP stands for
   A. Object Open Programming
   B. Open Object Programming
   C. Object Oriented Programming
   D. Open Oval Programming

2. POP stands for
   A. Procedure Oriented Programming
   B. Procedure Open Programming
   C. Procedure Over Programming
   D. Program Over Programming

3. To create an object of class "Animal" syntax is
   A. Class Animal
   B. Animal Class
   C. Animal obj1
   D. Class obj1

4. The blueprint of data members and member functions is known as
   A. Data
   B. Information
   C. Class
   D. List

5. The process of hiding irrelevant details from user is known as
   A. Inheritance
   B. Abstraction
   C. Message Passing
   D. Polymorphism

6. Which among the following is called first, automatically, whenever an object is created?
   A. Class
   B. Constructor
   C. New
   D. Trigger

7. The type of constructor which is called implicitly
   A. New
   B. Default
   C. Copy
   D. Custom

8. The type of constructor with arguments
   A. New
   B. Default
   C. Copy
   D. Parameterized

9. The type of constructor used to clone objects
   A. New
   B. Default

C. Copy
D. Parameterized
10. The pointer which is used to refer current object is
    A. New
    B. Current
    C. Thread
    D. this
11. One name may forms is _____ characteristic of Object Oriented Programming
    A. Abstraction
    B. Encapsulation
    C. Polymorphism
    D. Inheritance
12. _____ is compile time polymorphism
    A. Function overloading
    B. This pointer
    C. Virtual Functions
    D. Pointer Functions
13. _____ is runtime polymorphism
    A. Function overloading
    B. This pointer
    C. Virtual Functions
    D. Pointer Functions
14. _____ is a type of compile time polymorphism
    A. Operator overloading
    B. This pointer
    C. Virtual Functions
    D. Pointer Functions
15. Functions can be overloaded by changing _____ and _____ of arguments
    A. Shape and design
    B. Number and type
    C. Number and shape
    D. String and design
16. How can we define inheritance in OOP?
    A. reusing the code already written
    B. Using the code already written once
    C. Using already defined functions in another program
    D. Calling the data and functions into derived segment
17. How many inheritance are provided by OOP in C++?
    A. 5
    B. 4
    C. 6
    D. 3
18. In which mechanism one class acquires the property of another class
    A. Abstraction
    B. Data Hiding
    C. Inheritance
    D. Polymorphism
19. Hybrid Inheritance is combination of

A. Single and Multilevel
B. Multiple and Hierarchical
C. Single and Multiple
D. Multiple and Multilevel

20. Which inheritance has one base class and more than one derive class?
   A. Single
   B. Multilevel
   C. Multiple
   D. Hierarchical

21. What is the syntax of class template?
   A. template <parameters> class declaration
   B. Template <parameters> class declaration
   C. temp <parameters> class declaration
   D. Temp <parameters> class declaration

22. _____& _____ keyword can be used in template?
   A. Function & class
   B. Class & Typename
   C. Typename & function
   D. Class & object

23. :: template is used to perform what operation?
   A. Reusing
   B. Reusing & binding
   C. Binding & rebinding
   D. Rebinding & reusing

24. Define template.
   A. is a formula for creating a generic class
   B. is used to manipulate the class
   C. is used for creating the attributes
   D. Is used to create object for class

25. Which is not a non-type template parameter?
   A. integral type
   B. Pointer
   C. Reference to object
   D. Pointer to member

Subject : Microprocessor Architecture

1. Microprocessor was introduced in the year _____.
A. 1945
B. 1971
C. 1974
D. 1980

2. Flip – flops are used in a microprocessor to indicate _____.
A. Shift register
B. latches

C. counters

D. flag

3. The number of address lines required to access 64 Kbyte of memory of the microprocessor is
_____.

A. 16

B. 32

C. 20

D. 8

4. Flip –flops are used in a microprocessor to indicate   _____.

A. shift register

B. latch

C. counters

D. flag

5. The first microprocessor was   _____.

A. 4001

B. 8085

C. 4003

D. 4004

6. The number of flags in 8085 are   _____.

A. 4

B. 8

C. 6

D. 5

7. _____ bus is bi-directional.

A. Data

B. Address

C. Control

D. Memory

8. _____ Register is part of ALU.

A. A

B. B

C. C

D. D

9. Register A is of _____ bits in Microprocessor 8085.

A. 4

B. 8

C. 16

D. 32

10. A _____ instruction includes the op-code and operand in the same byte.

A. one-byte

B. two-byte

C. three-byte

D. four-byte

11. STA 4000 is_____byte instruction.
A. one
B. three
C. two
D. four

12. Stack pointer is a -------- register.
A. 16 bit
B. 8 bit
C. 32 bit
D. 4bit

13. If accumulator content is 88H, after execution of CMA accumulator content will be _____.
A. 77H
B. 93H
C. FFH
D. 80

14. LDA is ---------Instruction.
A. arithmetic
B. logical
C. branch
D. data transfer

15. In which of these modes, the immediate operand is included in the instruction itself?
A. register operand mode
B. immediate operand mode
C. register and immediate operand mode
D. none of the mentioned

16. A sequence of two registers that multiplies the content of DE register pair by two and stores the result in HL register pair (in 8085 assembly language) is _____.
A. XCHG & DAD B
B. XTHL & DAD H
C. PCHL & DAD D
D. XCHG & DAD H

17. The accumulator contains 85H, register B contains 68H, what is the content of accumulator and CY (carry) after executing the following code?
ADD B
DAA
A. 35H, 1
B. 53H, 0
C. 35H, 0
D. 53H, 1

18. Which instruction is required to rotate the content of accumulator one bit right along with carry?
A. RLC
B. RAL
C. RRC

D. RAR

19. The Pentium pro dramatically, increases the number of execution step to _____ from Pentium.
A. 12
B. 14
C. 16
D. 32

20. Pentium pro have integrated level _____ cache.
A. 1
B. 2
C. 3
D. 4

21. The new Pentium new extension uses page size of _____ bytes.
A. 1M
B. 2M
C. 4M
D. 8M

22. The Pentium 4 was released in _____.
A. 36831
B. 37196
C. 40483
D. 44136

23. A dual core processor has _____ internal processor.
A. 1
B. 2
C. 3
D. 4

24. If accumulator content is 88H, after execution of CMA accumulator content will be _____.
A. 77H
B. 93H
C. FFH
D. 80H

25. LDA is ---------Instruction.
A. arithmetic
B. logical
C. branch
D. data transfer

Web Programming

1) _____ is a method of exchanging digital messages from an author to one or more recipients.
A) Electronic Mail
B) Telegram

C) Fax
D) Telephone

2) SMTP stands for?
A) Scientific Method To Post
B) Science Mode To Post
C) Simple Mail Transfer Protocol
D) Simple Mode Test Protocol

3) Which one of the following is corect email address?
A) abc@gmail@domain.com
B) abc@domain.com
C) @xyz.com
D) xyz@yahoo.gmail.co.in

4) _____ is a network protocol used in any network (internet or LAN) for bidirectional text oriented communication.
A) Telnet
B) Mail
C) FTP
D) SMTP

5) HTML stands for
A) HighText Machine Language
B) HyperText and links Markup Language
C) HyperText Markup Language
D) HyperText Marquee Line

6) The correct sequence of HTML tags for starting a webpage is -
A) Head, Title, HTML, body
B) HTML, Body, Title, Head
C) HTML, Head, Body, Title
D) HTML, Head, Title, Body

7) Which of the following element is responsible for making the text bold in HTML?
A) <pre>
B) <a>
C) <b>
D)

8) Which of the following tag is used for inserting the largest heading in HTML?
A) <h3>
B) <h1>
C) <h5>
D) <h6>

9) Which of the following tag is used to insert a line-break in HTML?
A)
B) <a>
C) <pre>

D) <b>

10) _____ was basically designed to add interactivity in HTML pages and is directly embedded into HTML.
A) JavaScript
B) PHP
C) CSS
D) Python

11) Which of the following function of Number object forces a number to display in exponential notation?
A) toExponential()
B) toFixed()
C) toPrecision()
D) toLocaleString()

12) Which of the following function of String object is used to match a regular expression against a string?
A) concat()
B) match()
C) search()
D) replace()

13) Which of the following function of String object creates a string to be displayed as bold as if it were in a <b> tag?
A) anchor()
B) big()
C) blink()
D) bold()

14) What does XML stand for?
A) EXtra Modern Link
B) EXtensible Markup Language
C) Example Markup Language
D) X-Markup Language

15) Which statement is True?
A) All XML Elements Must Have A Closing Tag
B) All XML Documents Must Have A DTD
C) All XML Elements Must Be Lower Case
D) All XML must be used atleast once

16) Which of the following Strings are a correct XML name?
A) #myElement
B) My Element
C) _myElement
D) ?myElement

17) In XML Document comments are given as?
A) < !-- --!>

B) < !-- ?
C) < /-- -->
D) < ?-- ?

18) The output from PHP is _____
a) statically generated
b) dynamically generated
c) not generated
d) no output

19) PHP variables are preceded by _____
a) _
b) @
c) $
d) &

20) The datatype best suited to store currency values is _____
a) INT
b) FLOAT
c) DOUBLE
d) DECIMAL

21) Which statement is used to produce a stored function?
a) PRODUCE FUNCTION
b) CREATE FUNCTION
c) PRODUCE PROCEDURE
d) CREATE PROCEDURE

22) If there is no error, then what will the error() method return?
A) TRUE
B) FALSE
C) Empty String
D) 0

23) Which one of the following statements can be used to select the database?
A) $mysqli=select_db('databasename');
B) mysqli=select_db('databasename');
C) mysqli->select_db('databasename');
D) $mysqli->select_db('databasename');

24) Which one of the following methods can be used to diagnose and display information
about a MySQL connection error?
A) connect_errno()
B) connect_error()
C) mysqli_connect_errno()
D) mysqli_connect_error()

25) Which method retrieves each row from the prepared statement result and assigns the
fields to the bound results?
A) get_row()

B) fetch()
C) fetch_row()
D) row()

Numerical and Statistical Methods

1   _____ refers to how closely a computed or measured value agrees with the true value.

   A. Accuracy
   B. Precision
   C. Round-off
   D. Certainty

2   Formulations or model errors relate to bias that can be ascribed to _____.

   A. Complete Mathematical model.
   B. Incomplete mathematical model.
   C. Uncertainty in physical data.
   D. Rounding off errors

3   In falling parachutist problem, downward force can be calculated using Newton's 2nd law of motion as _____

   A. mgh
   B. mg
   C. $\frac{mv^2}{2}$
   D. $2mgh$

4   What is the rounding off of a number?

   A. To change a number to its nearest prime number
   B. To change a number to its nearest odd number
   C. To change a number to its nearest whole number
   D. To change a number to its nearest even number

5   A piece of iron rod was measured and found to be 120cms. But the actual value of the wood is 123cms. Find the relative error?

   A. 3%
   B. 2.5%
   C. 2.43%
   D. 3.43%

6   If in bisection method, $c = \frac{a+b}{2}$ and $f(a).f(c) < 0$ then the root of equation $f(x) = 0$ lies in interval _____.

   A. (c, b)
   B. (a, c)
   C. $(a/2, c/2)$

D. (c/2 , b/2)

7 In Newton Raphson Method we have $x_0 = 1, f(x_0) = 1$ and $f'(x_0) = 2$ then the next approximation is given by $x_1 = $ ___.

   A. -1
   B. 1
   C. -0.5
   D. 0.5

8 If values of x are not equidistant then we use _____formula for interpolation.

   A. Newton's Forward difference interpolation
   B. countable
   C. Lagrange's Interpolation
   D. Newton's Central difference interpolation

9 In Newton's forward difference interpolation formula, what is p

   A. $p = \frac{x-x_0}{h}$
   B. $p = x - x_0$
   C. $p = \frac{(x-x_0)^2}{h}$
   D. $p = \frac{x-x_n}{h}$

10 Secant Method is also called as?

   A. 1-point method
   B. 2-point method
   C. 3-point method
   D. 4-point method

11 Which of the following is not a valid row transformation?

   A. $R1 \leftrightarrow R3$
   B. $4R1 - R3$
   C. $R1 - 4$
   D. $R1 - 4R3$

12 In system of linear equation: $AX = b$, matrix [A|b] is called

   A. Complementary matrix
   B. Augmented Matrix
   C. Equivalent Matrix
   D. Transformation Matrix

13 To solve differential equation: $y' = y$ with $y(0) = 1$. using Euler's method, we have got _____.

   A. $x_0 = 0$ and $y_0 = 0$
   B. $x_0 = 1$ and $y_0 = 0$
   C. $x_0 = 0$ and $y_0 = 1$

D. $x_0 = 1$ and $y_0 = 1$

14 While using Modified Euler's method, we first use _____ to evaluate y_1 to substitute in RHS of modified Euler's formula

    A. Runge-Kutta Method of 2nd order
    B. Runge-Kutta Method of 4th order
    C. Taylor's series Method
    D. Euler's method

15 The process of evaluating a definite integral from as set of tabulated values of the integrand $f(x)$ is

    A. Numerical value
    B. Numerical differentiation
    C. Numerical integration
    D. Quadrature

16 If $N = 5, \Sigma X = 15, \Sigma Y = 80, \Sigma XY = 305$ and $\Sigma X2 = 55$ then we get value of a_1 as

    A. 6.5
    B. 3.5
    C. −6.5
    D. −3.5

17 Shreya makes small purses (x) and big purses (y). She can make no more than 8 purses a week. Which inequality represents the situation?

    A. $x + y \leq 8$
    B. $x + y \geq 8$
    C. $3x + 2y \leq 8$
    D. $3x + 2y \geq 8$

18 Mathematical model of Linear Programming is important because

    A. It helps in converting the verbal description and numerical data into mathematical expression
    B. Decision makers prefer to work with formal models
    C. It captures the relevant relationship among decision factors
    D. It enables the use of algebraic techniques

19 Least square estimation minimizes

    A. Summation of squares of errors
    B. Summation of errors
    C. Summation of absolute value of errors
    D. Random value

20 The diagram obtained by plotting Data values on a rectangular coordinate system is called

    A. Argand' s Diagram
    B. Schwartz's Diagram

C. Scatter Diagram
D. Cartesian Diagram

21 Discrete Random variable will have _____outcomes.

A. Finite
B. Countable
C. Zero
D. One

22 The mean of Binomial Distribution $X \sim B(n, p)$ is

A. P
B. np
C. pq
D. npq

23 Which of the following mentioned standard Probability density functions is applicable to discrete Random Variables?

A. Gaussian Distribution
B. Poisson Distribution
C. Normal Distribution
D. Exponential Distribution

24 Normal Distribution is symmetric is about _____

A. Variance
B. Mean
C. Standard deviation
D. Covariance

25 If Expectation of random variable X is given by $E(X) = 5$ then the value of $E(4X + 3)$ is

A. 20
B. 23
C. 80
D. 83

Subject: Green Computing

1. The concept where one server connects with many individual computers in known as
   A. Recycling
   B. Power Management
   C. Reuse
   D. Virtualization

2. The toxin which is present in circuit boards and semiconductors
   A. Lead
   B. Sodium

C. Cadmium

D. Potassium

3. The major toxin present in Cathode Ray Tube up to 6 percent is
   A. Potassium
   B. Nickel
   C. Mercury
   D. Lead

4. In which year the European countries banned the use of e-waste
   A. 1990s
   B. 1980s
   C. 1970s
   D. 1950s

5. The client which depends on other computers to function for its own self
   A. Server
   B. Printer
   C. Blade Client
   D. Thin Client

6. The tool to monitor server on a large scale used by administrators is
   A. IBM Power Executive
   B. Power Manager
   C. Server Manager
   D. Thin Manager

7. The low cost device used to monitor power is known as
   A. Device Manager
   B. Kill A watt
   C. Power Manager
   D. Watt manager

8. The efficiency of backup of data can be increased using
   A. Virtualization
   B. Thin Client
   C. Data Duplication
   D. Blade Server

9. The device that regulates the power and changes it to Alternating Current
   A. Solar Panel
   B. Invertor
   C. Executor
   D. Watt Panel

10. The panels used to absorb solar radiation
    A. Solar Panel
    B. Photovoltaic Panel
    C. Glass Panel
    D. Steel Panel

11. The supply chain management where environment supportive actions are implemented
    A. Fine supply
    B. Better supply
    C. Green supply

D. Good supply

12. The pyramid of analysis and actions will have the lowest layer as
    A. Individual
    B. Building
    C. National
    D. City

13. The pyramid of analysis and actions have highest layer as
    A. Global
    B. City
    C. Local
    D. Building

14. The organization should prefer _____ paper
    A. Post consumer
    B. Post consumer recycled
    C. Good Quality
    D. Average Quality

15. The organization must use janitors which are
    A. Sodium free
    B. Chlorine free
    C. Lead free
    D. Mercury free

16. The toxin found in glass TV and CRT
    A. Sodium
    B. Potassium
    C. Barium
    D. Lead

17. The famous place in Africa where most e-waste is there
    A. Computer Village
    B. San Village
    C. Mos Village
    D. E-waste Village

18. The number of shipping containers transferred every month to Lagos
    A. 100
    B. 500
    C. 20
    D. 10

19. _____ uses the datacenter's airconditioning system to adapt to changing workloads with sensors attached to the computers
    A. air-side economizer
    B. water-side economizer
    C. Static Smart Cooling
    D. Dynamic Smart Cooling

20. To deliver the precise cooling environment, _____ must be exchanged at a sufficient rate
    A. WATER
    B. AIR

C. STEAM
D. BREEZE

21. In high-density datacenters, air has to be exchanged __ times an hour
   A. 50
   B. 60
   C. 70
   D. 80

22. Which is considering as system in conjunction with the hot-aisle/cold-aisle design can equate to more energy efficiency.
   A. DATA MANAGEMENT
   B. EQUIPMENT MANAGEMENT
   C. CABLE MANAGEMENT
   D. DEVICE MANAGEMENT
   23. The data center density will depend on
      A. Higher rack size
      B. Lower rack size
      C. Rack percentage
      D. Rack ratio
24. WIFI APs announce their presence at regular intervals by sending a _____
   A. SSL PACKET
   B. TCP PACKET
   C. ARP PACKET
   D. BEACON PACKET

25. It's possible to manage many power settings using _____ in Windows or a similar tool in Linux and Mac environments
   A. SECURITY POLICY
   B. GROUP POLICY
   C. USAGE POLICY
   D. UTILITY POLICY