# ENTRANCE TEST - 2025
## School of Applied Sciences
## Information Technology

**Total Questions: 60**

**Roll No.**

**Time Allowed:    70 Minutes**

### Important Instructions for Candidates:

1. Candidates shall compulsorily use only **blue/ black ball point pen**. In no case gel/ink pen or pencil should be used.

2. Compulsorily write your **roll number** in the space provided at the top of this page of the question booklet.

3. Fill up the necessary information in the spaces provided on OMR Answer sheet including **Question Booklet Number** and **Question Booklet Series**.

4. OMR Answer sheet has an original copy and a candidate's copy glued beneath it at the top. While making entries in the original copy, candidate should ensure that the **two copies are aligned properly** so that the entries made in the original copy against each item are exactly copied in the candidate's copy.

5. All entries in the OMR Answer Sheet, including answers to questions, are to be recorded in the Original Copy only.

6. **Choose only one correct/most appropriate response** for each question among the options A, B, C and D and darken the circle of the appropriate response completely. Incompletely darkened circle is not correctly read by the OMR scanner and no complaint to this effect shall be entertained.

7. **Do not darken more the one circle of option for any question. A question with more than one darkened response shall be considered wrong.**

8. **There will be negative marking for wrong answers. Each wrong answer will lead to deduction of 0.25 marks per wrong answer from the score.**

9. Only those candidates who obtain positive score in Entrance Test shall be eligible for admission.

10. Do not make any stray mark on the OMR sheet as this may lead to errors while scanning.

11. OMR answer sheet must be handled carefully and it should not be folded or mutilated, as in such case it will not be properly evaluated by the machine.

12. No Electronic gadgets including calculators, mobiles, smart watches, blue tooth etc. shall be permitted inside the examination hall.

13. Rough work, if any, should be done on the blank sheets provided with the question booklet.

14. Ensure that the OMR Sheet is signed by the Examinee as well as by the invigilator.

15. At the end of the examination, fold the OMR Sheet along the crease on the top and tear off the top strip to separate the Original OMR Sheet from the Duplicate Copy.

16. Hand over the Original OMR answer sheet to the invigilator and retain the candidate's copy of OMR, Question Booklet and Admit card for your reference.

17. If any of the information in the response Sheet/Question Paper has been found missing or not mentioned as stated above, the candidate is solely responsible for that lapse.

18. Any deficiency on the OMR shall be the responsibility of the candidate himself/herself.

Q 1. How many prepositional phrases are there in the following sentence? "During the month of May we went on a trip with our friends to Dubai."
a)      2
b)      3
c)      4
d)      5

Q 2. What type of noun can be perceived by the five senses? (table, bird, school, beach…)
a)      Proper
b)      Concrete
c)      Collective
d)      None

Q 3. Teetotaller means
a)      One who abstains from taking malice
b)      One who abstains from taking wine
c)      One who abstains from meat
d)      One who abstains from theft

Q 4. Identify the correct one-word substitute: "One who loves books"
a)      lexicographer
b)      bibliographer
c)      philologist
d)      bibliophile

Q 5. Rearrange the following sentences:
1.      She submitted her research paper.
2.      The deadline was near.
3.      She stayed up all night to finish it.
4.      She was relieved in the morning.
Correct order:
a)      2,3,1,4
b)      3,2,4,1
c)      1,2,3,4
d)      3,1,2,4

Q 6. In the following questions elect the related word from the given alternatives.
Absurd : Bizarre :: Grateful : ?
a)      Ungrateful
b)      Obliged
c)      Thankless
d)      Jolly

Q 7. All roses are flowers. Some flowers fade quickly. Which of the following is definitely true?
a)      Some roses fade quickly.
b)      All flowers are roses.
c)      Some flowers are roses.
d)      All roses fade quickly.

Q 8. Choose the antonym of "Trivial":
a)      Significant
b)      Small
c)      Huge
d)      Insignificant

Q 9. If TABLE is coded as GZOOV, what is the code for CHAIR?
a)      XSZHV
b)      XSYHV
c)      XTYHV
d)      YSZHV

Q 10. Aman walks 5km north, then 3km east. How far is he from the starting point?
a)      8 km
b)      5 km
c)      $\sqrt{34}$ km
d)      6 km

Q 11. Choose if:
a) Statement I alone is sufficient
b) Statement II alone is sufficient
c) Both I and II together are sufficient
d) Neither is sufficient
What is the value of x?
I.      $x^2 = 49$
II.     x is a positive integer

Q 12. Table below shows the number of students enrolled in different courses over 5 years:

| Year | BCA | B.Sc(IT) | MCA | M.Sc(IT) |
|------|-----|----------|-----|----------|
| 2019 | 120 | 80 | 60 | 40 |
| 2020 | 150 | 90 | 65 | 50 |
| 2021 | 180 | 100 | 70 | 55 |
| 2022 | 160 | 110 | 75 | 60 |
| 2023 | 170 | 120 | 80 | 65 |

By what percent did MCA enrolments increase from 2019 to 2023?
a)      33.33%
b)      25%
c)      50%
d)      75%

Q 13. Statement:
All engineers are logical. Some logical people are creative.
Conclusion:
I.      Some engineers are creative.
II.     All creative people are logical.
a)      Only I
b)      Only II
c)      Neither I nor II
d)      Both I and II

Q 14. Eight persons are in three generations of family and two married couples. P is the son-in-law of H who has three children. M is the nephew of L. W is the father of K, who is the sister-in-law of U. U is the only daughter of H, who is the father of N. L is unmarried. N and K don't have any children.
Who among the following is the son-in-law of W?
a)   N
b)   P
c)   U
d)   None of the above

Q 15. Study the given pattern carefully and select the number that can replace the question mark (?) in it.
First Row: 18, 9, 27
Second Row: 40, 36, 140
Third Row: 40, 13, ?
a)      53
b)      54
c)      25
d)      45

Q 16. Read the statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.
Statements:
   I.  All T are N.
   II. No M is N.
      Conclusions:
   III. All T are M.
   IV. Some T are not M.
a)   Both Conclusions I and II follow
b)   Only Conclusions I follows
c)   None of the Conclusions follow
d)   Only Conclusions II follows

Q 17. What is the 10$^{th}$ term of the A.P. : 3, 7, 11, …?
a)      39
b)      41
c)      43
d)      45

Q 18. HCF of 24 and 36 is:
a)      6
b)      8
c)      12
d)      18

Q 19. Pipe A fills a tank in 6hrs, B in 3hrs. Together they fill in:
a)      2hrs
b)      1/2hrs
c)      2.5hrs
d)      3hrs

Q 20. Two stations B and M are 465km distant. A train starts from B towards M at 10AM with a speed of 65km/hr. Another train leaves from M towards B at 11AM at a speed of 35km/hr. Find the time when both trains meet.
a)      1PM
b)      2PM
c)      3PM
d)      4PM

Q 21. The Sum of the roots of the quadratic equation $2x^2 - 5x + 3 = 0$ is:
a)      5
b)      3
c)      5/3
d)      5/2

Q 22. In a geometric progression, if the first term is 5 and the common ratio is 3, what is the 4$^{th}$ term?
a)      135
b)      125
c)      115
d)      100

Q 23. What is the sum of squares of the first 10 positive integers?
a)      285
b)      385
c)      400
d)      425

Q 24. If the roots of the quadratic equation $ax^2 + bx + c = 0$ are 4 and -3, find the values of b and c.
a)      B = 1, c = -12
b)      B = -1, c = 12
c)      B = -1, c = -12
d)      B = 1, c = 12

Q 25. The slope of the line passing through the points (1,2) and (3,6) is:
a)      1
b)      2
c)      3
d)      4

Q 26. Which conic section is represented by $x^2 + y^2 = 1$?
a)      Parabola
b)      Circle
c)      Ellipse
d)      Hyperbola

Q 27. The transformation that shifts every point 3 units right and 2 units up is:
a)      Translation
b)      Rotation
c)      Scaling
d)      Reflection

Q 28. The condition for two lines to be parallel is:
a)      Their product of slopes $= -1$
b)      Their slopes are negative reciprocals
c)      They intersect at origin
d)      Their slopes are equal

Q 29. What is the degree of homogeneous partial differential equation, $\dfrac{\partial^2 u}{\partial t^2} - c^2 \dfrac{\partial^2 u}{\partial x^2} = 0$
a)      Second-degree
b)      First-degree
c)      Third-degree
d)      Zero-degree

Q 30. The order of the differential equation $\left(\frac{d^2 y}{dx^2}\right)^2 + y = 0$ is:

a)  1

b)  2

c)  3

d)  Not defined

Q 31. The general solution of $\cos x = 0$ is:

a)  $x = n\pi$

b)  $x = \frac{\pi}{2} + n\pi$

c)  $x = 2n\pi$

d)  $x = \frac{3\pi}{2}$

Q 32. What is the number of solutions of equation

$cot2x \cdot cot3x = 1 \ for \ 0 < x < \pi$?

a)  Only one

b)  Only three

c)  Only five

d)  More than five

Q 33. Events A and B are independent. If P(A)=0.4 and P(B)=0.5, then P (A∩B) is:

a)  0.1

b)  0.2

c)  0.9

d)  0.8

Q 34. In a normal distribution, which of the following is true?

a)  Mean > Median > Mode

b)  Mean < Median < Mode

c)  Mean = Median = Mode

d)  None of the above

Q 35. What is the mode of the data set: 3, 4, 4, 5, 6, 6, 6, 7, ?

a)  4

b)  6

c)  5

d)  3

Q 36. The correlation coefficient lies between:

a)  -1 to 1

b)  -2 to 2

c)  0 to 1

d)  $-\infty$ to $+\infty$

Q 37. What is the cardinality of the power set of a set with 4 elements?

a)  8

b)  12

c)  16

d)  24

Q 38. What is the domain of function $f(x) = \frac{1}{(x-2)}$?

a)  All real x

b)  All real x except x = 2.

c)  $X \geq 0$

d)  $X \neq 0$

Q 39. The total surface area of a cube of side 5 cm is:

a)  25

b)  150

c)  100

d)  125

Q 40. If A is an invertible matrix, then $A^{-1}$ satisfies:

a)  $A * A^{-1} = 1$

b)  $A + A^{-1} = 1$

c)  $A - A^{-1} = 1$

d)  $A * A^{-1} = 0$

Q 41. The Maximum data rate of a channel for a noiseless 2kHz binary channel is:

a)  2000 bps.

b)  1000 bps.

c)  4000 bps

d)  3000 bps

Q 42. The concept of Error Detection and Correction is primarily handled by which of the following OSI layers?
a) Data Link layer
b) Network layer
c) Transport layer
d) Application layer

Q 43. In CPU scheduling, which algorithm suffers from the "convoy effect"?
a) Round Robin
b) First-Come-First-Serve(FCFS)
c) Shortest Job First
d) Priority Scheduling

Q 44. In operating systems, thrashing is caused by:
a) Excessive CPU usage
b) Network bottle necks
c) Excessive paging and low CPU utilization
d) Disk failure

Q 45. What is the binary equivalent of the decimal number 42.625?
a) 101010.111100
b) 101010.101111
c) 101011.100101
d) 101010.101000

Q 46. The 8086 microprocessor supports how many addressing modes?
a) 4
b) 5
c) 6
d) 8

Q 47. On subtracting (01010)2 from (11110)2 using1's complement, we get_____
a) 10100
b) 01001
c) 11010
d) 10101

Q 48. The disadvantage/s of the hardwired approach is _____
a) It is less flexible
b) It cannot be used for complex instructions
c) It is costly
d) It is less flexible & cannot be used for complex instructions

Q 49. What does the new keyword do in C++?
a) It initializes the object.
b) It destroys the object.
c) It dynamically allocates memory for an object.
d) It calls the destructor of an object.

Q 50. In which memory allocation scheme does each process receive a fixed portion of memory that cannot be shared by other processes?
a) Static Partitioning.
b) Dynamic Partitioning
c) Paging
d) Segmentation

Q 51. Which sorting algorithm has a time complexity of O(n log n) in the best, average, and worst cases?
a) Bubble Sort
b) Merge Sort
c) Quick Sort
d) Insertion Sort

Q 52. A connected planar graph having 6 vertices, 7 edges contains _____ regions.
a) 15
b) 1
c) 3
d) 11

Q 53. What does normalization in a relational database help to eliminate?

a) Redundant data
b) Key constraints
c) Data anomalies
d) Data duplication

Q 54. Which concurrency control technique ensures that transactions are serializable?

a) Locking
b) Two-Phase Locking (2PL)
c) Timestamp Ordering
d) Optimistic Concurrency Control

Q 55. Which of the following is not part of the Structured Analysis phase?

a) Object-Oriented Design
b) Data Flow Diagram(DFD)
c) Process Descriptions
d) Data Dictionary

Q 56. What is the purpose of Project Management Tools like PERT and CPM?

a) To design user interfaces
b) To analyze user requirements
c) To test the functionality of a system
d) To schedule and manage project activities and tasks

Q 57. What is the main difference between Raster and Vector graphics?

a) Raster graphics use mathematical formulas, while vector graphics arepixel-based
b) Raster graphics are pixel-based, while vector graphics use mathematical formulas
c) Raster graphics are resolution-independent, while vector graphics depend on resolution
d) There is no difference between the two

Q 58. What is the purpose of frames in HTML?

a) To display multiple web pages within a single window
b) To create borders around images
c) To create video players
d) To define text styles

Q 59. Which of the following is a lossless audio format?

a) MP3
b) AAC
c) OGG
d) WAV

Q 60. In HTML, the <iframe> tag is used for:

a) Displaying images
b) Creating an inline frame for text
c) Embedding external content like videos or maps
d) Embedding a navigation menu

# ENTRANCE TEST-2024

## SCHOOL OF APPLIED SCIENCES AND TECHNOLOGY

## M.Sc. (IT)

**Question Booklet Series** [A]

Total Questions : 60

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Roll No. :

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SEAL

1. We usually face hard times in our life. I think I need to put _____ some money for hard times.

   (A) over

   (B) up

   (C) away

   (D) into

2. Three out of the four words are same/similar in a certain way and so belong to a group. Choose the odd word that does not belong to the group :

   (A) Racket

   (B) Din

   (C) Cacophony

   (D) Cadence

3. Three out of the four words are same/similar in a certain way and so belong to a group. Choose the odd word that does not belong to the group :

   (A) Orange

   (B) Pink

   (C) Indigo

   (D) Green

4. Three out of the four words are same/similar in a certain way and so belong to a group. Choose the odd word that does not belong to the group :

   (A) Hypothesis

   (B) Assumption

   (C) Experiment

   (D) Observation

5. A single word equivalent for the statement 'Speak falsely with deliberate intent' is :

   (A) equivocate

   (B) repudiate

   (C) spurn

   (D) disparage

6. Select the most appropriate alternative for the bold underlined idiom/phrase in the given sentence. The business partners now behave like enemies. They do not **see eye to eye** on all matters :

   (A) discuss matters with one another

   (B) agree with one another

   (C) fight with one another

   (D) want to see one another

7. The word 'connote' is most similar to which of the following words ?

   (A) provoke

   (B) infer

   (C) agree

   (D) insinuate

8. Categorize the listed four sentences as Fact (F), Inference (I), or Judgement (J). Facts denoted as F, which deal with pieces of information that one has heard, seen or read, and which are open to discovery or verification.

   Inferences denoted as I, which are conclusions drawn about the unknown, on the basis of the known.

   Judgements denoted as J, which are opinions that imply approval or disapproval of persons, objects, situations and occurrences in the past, the present or the future :

   I. The audience responded well to the Animal Movie.

   II. The movie had a budget of 200 Crores and grossed 900 Crores globally.

   III. The movie was terrible; though the acting was superb but message conveyed was detrimental for the society.

   IV. The director won the best director award.

   (A) FFIF

   (B) IFIF

   (C) IFJF

   (D) JFJF

9. Slack : _____ :: plucky : courageous.

    (A) tight

    (B) silent

    (C) negligent

    (D) cowardly

10. Household chores are still not evenly distributed even in the _____ countries, but things are much better especially how people talk about it. A young man was _____ for asking a woman whether her husband helps with the child care. He does not help but does his share, she responded.

    (A) elitist, rebuked

    (B) egalitarian, rebuked

    (C) developed, rebuked

    (D) non-partisan, rebuked

11. Choose the word which is least like the other words :

    (A) Barber

    (B) Carpenter

    (C) Blacksmith

    (D) Tailor

12. If yellow means green, green means white, white means blue, blue means violet, violet means black then which of the following will be the colour of the sky ?

    (A) Black

    (B) Blue

    (C) White

    (D) None of these

13. In a certain coding language if 3=10, 4=18, 5=28, then 23 = ?

    (A) 551

    (B) 552

    (C) 553

    (D) 554

14. In the number 421579368, how many such pairs of digits are there, each having the same number of digits between them as when they are placed in ascending order ?

    (A) Two

    (B) Three

    (C) Four

    (D) Five

15. If North becomes South-West and South-West becomes East and all the rest directions are changed in the same manner, what will be the direction for the East ?

    (A) North-East

    (B) North

    (C) West

    (D) North-West

16. Complete the following series 1, 3, 6, 11, 18, 29 :

    (A) 40

    (B) 41

    (C) 42

    (D) 43

17. Find the missing number in the sequence: 4896, 3360, _____, 1320, 720.

   (A) 2184

   (B) 2730

   (C) 1716

   (D) None of the above

18. A mobile seller sells mobile at 7000 per mobile. However, he gives two successive discounts of 8% and 5% respectively. But he recovers the sales tax on the net sale price from the customer at 5% of the net price. What price does one have to pay him to buy the mobile ?

   (A) 6423.7

   (B) 6423.9

   (C) 6118.7

   (D) 6118.9

19. In how many different ways can the letters of the word 'FRUSRUDWLRIA' be arranged so that the vowels always come together ?

   (A) 725760

   (B) 725770

   (C) 725880

   (D) 725890

20. A number which when divided by 3, 4, 5, 6 and 7 leaves the remainder 2, 3, 4, 5 and 6 respectively. Such smallest six-digit number is :

   (A) 100019

   (B) 100379

   (C) 100399

   (D) None of these

21. Saurabh, Santosh and Kumar work in a software company at same positions. However, their salaries are different. Saurabh's salary to Santosh's salary and Santosh's salary to Kumar's salary are in the ratio 4:3. If the total salary of all the three employees is Rs. 29230, what is the salary of Kumar ?

   (A) 7110 INR

   (B) 9480 INR

   (C) 8110 INR

   (D) 10480 INR

22. In how many ways team of 12 developers out of 24 developers can be made if 7 particular developers are always to be included and 5 particular developers are always to be excluded from the team ?

   (A) $^{24}C_{12}$

   (B) $^{12}C_{7}$

   (C) $^{12}C_{5}$

   (D) $^{19}C_{12}$

23. If $\log_{10} 23 = y$ what does $\log_{10} 230000$ equal ?

   (A) y

   (B) y + 229977

   (C) y + 4

   (D) y + log(229977)

24. If v, w, x are in H.P. w, x, y are in G.P. and x, y, z are in A.P. then $\dfrac{vx^2}{(2v-x)^2}$ is equal to :

   (A) w

   (B) x

   (C) y

   (D) z

25. For all 'x', $x^2 + 2px + (10 - 3p) > 0$, then the interval in which 'p' lies is :

   (A) $p < -5$

   (B) $-5 < p < 2$

   (C) $p > 5$

   (D) $2 < p < 5$

26. The equations $a + 2b + 3c = 1$, $a - b + 4c = 0$, $2a + b + 7c = 1$ have :

   (A) only one solution

   (B) two solutions

   (C) no solution

   (D) infinitely many solutions

27. Five different scientists are to be transported to another place through a secret tunnel. 15 security guards in total are to be inserted between the two scientists with at least three guards between every two scientists. The number of ways it can be done is :

   (A) 2000

   (B) 2400

   (C) 2800

   (D) 3200

28. The number of terms in the expansion of $\left(1 - 3\sqrt{2x}\right)^9$ is :

   (A) 10

   (B) 15

   (C) 20

   (D) 25

29. The equation of the line through $(-2, 3)$ with slope $-4$ is :

   (A) $x + 4y - 5 = 0$

   (B) $4x + y + 5 = 0$

   (C) $x + y + 1 = 0$

   (D) $3x + 4y - 5 = 0$

30. If two lines are perpendicular, then product of their slopes is equal to :

   (A) $m_1 m_2 = -1$

   (B) $m_1 m_2 = 0$

   (C) $m_1 m_2 = 1$

   (D) Any value $-1$ to $1$

31. Let R be a relation on the set N of natural numbers defined by $nRm$ if $n$ divides $m$. Then R is :

   (A) Reflexive, transitive and symmetric

   (B) Reflexive and symmetric

   (C) Transitive and symmetric

   (D) Reflexive, transitive but not symmetric

32. If the Set X contains 8 elements and Set Y contains 11 elements, then the number of one-one function from X to Y is :

   (A) $^{11}C_8$

   (B) $^{11}C_8 * 8!$

   (C) $11^8$

   (D) $8^{11}$

33. The number of all possible matrices of order $4 \times 4$ with each entry 0 or 1 is :

   (A) 16

   (B) 32

   (C) 64

   (D) None of the above

34. If A and B are two matrices such that AB = B and BA = A, then $A^2 + B^2 = $ ?

(A) A+B

(B) 2AB

(C) $(A+B)^2$

(D) AB

35. The probability of drawing a King from a pack of 52 well shuffled deck of cards is :

(A) 1/13

(B) 2/13

(C) 1/52

(D) 11/52

36. The correlation coefficient is the _____ of two regression coefficients.

(A) Arithmetic mean

(B) Geometric mean

(C) Harmonic mean

(D) Median

37. Which measure of dispersion is considered to be best and easiest to calculate respectively ?

(A) Range, Standard deviation

(B) Interquartile range, variance

(C) Variance, range

(D) Standard deviation, range

38. Let A be a finite set of size n. The number of elements in the power set of A × A is :

(A) $2^{2^n}$

(B) $2^{n^2}$

(C) $n^2$

(D) $2^n$

39. A square matrix is singular whenever :

(A) The rows are linearly independent

(B) The rows are linearly dependent

(C) The columns are linearly independent

(D) The columns are linearly dependent

40. The centres of a set of circles, each of radius 3, lie on the circle $x^2 + y^2 = 25$. The locus of any point with such circle is :

(A) $4 \leq x^2 + y^2 \leq 64$

(B) $x^2 + y^2 \leq 25$

(C) $x^2 + y^2 \geq 25$

(D) $3 \leq x^2 + y^2 \leq 9$

41. The process through which an illegitimate website pretends to be a specific legitimate website is known as :

(A) Sniffing

(B) Spoofing

(C) Cloning

(D) Phishing

42. In the carrier sense network, if prevailing condition is a 'channel busy' then which of the following technique is used ?

(A) 1-persistent then channel is continuously sensed

(B) Non-persistent then it results in randomised wait and sense

(C) P-persistent then randomised retransmission is done

(D) Both (A) and (B)

43. The HTTP request message is sent in _____ part of three-way handshake.

   (A) 1$^{st}$

   (B) 2$^{nd}$

   (C) 3$^{rd}$

   (D) None of the above

44. In a Class A subnet, IP address of one of the hosts and the mask is :

   IP address: 25.34.12.56

   Mask: 255.255.0.0

   What is the first network address?

   (A) 25.0.0.0

   (B) 25.34.0.0

   (C) 25.34.12.0

   (D) 25.34.12.56

45. Minimum average waiting time is possible in which of the following process scheduling algorithms?

   (A) First Come First Serve

   (B) Shortest Job First

   (C) Round Robin

   (D) Time Sharing

46. A system uses 3-page frames and Least Recently Used (LRU) page replacement policy for storing process pages in main memory. What is the total number of page faults that will occur while processing the page reference string given below : 6241, 6271, 6261, 6211, 6271, 6261, 6211, 6221, 6271, 6221 assuming that all the page frames are initially empty ?

   (A) 4

   (B) 5

   (C) 6

   (D) 7

47. Which of the following consists of bit-level striping with dedicated Hamming-code parity ?

   (A) RAID 2

   (B) RAID 3

   (C) RAID 4

   (D) RAID 5

48. A, B and C are the decimal integers corresponding to the 4-bit binary number 1100 considered in signed magnitude, 1's complement, and 2's complement representation. The 6-bit 2's complement representation of (A+B+C) is :

   (A) 110010

   (B) 110101

   (C) 111101

   (D) 111001

49. If we do not write our own construct; the following construct(s) will be automatically added to every class :

   (A) Copy Constructor

   (B) Assignment Operator

   (C) Constructor with a parameter

   (D) All of the above

50. How many solutions are there for 8 queens on 8*8 board?

   (A) 64

   (B) 92

   (C) $^{64}C_8$

   (D) $^{64}C_8$*8

51. The concept of locking can be used to solve the problem of :

1. Lost update
2. Uncommitted dependency
3. Inconsistent data
4. Deadlock

(A) 1, 2 and 3

(B) 1, 2 and 4

(C) 2, 3 and 4

(D) All can be solved

52. Insertion of a node in circular linked list requires modification of how many pointers ?

(A) 1

(B) 2

(C) Depends on the place of the node

(D) Multiple pointers need to changed

53. Program Evaluation Review Technique analysis is based on :

(A) optimistic time

(B) pessimistic time

(C) most likely time

(D) all of these

54. The for loop

    *for (i=0;i<10;++i)*

    *printf("%d", i & 1);*

will print the following output :

(A) 0000000000

(B) 0101010101

(C) 1010101010

(D) 1111111111

55. A standard for performance established early in the project for later comparisons :

(A) Baseline

(B) Scopeline

(C) Evaluation

(D) Performance line

56. If A has x tuples and B has y tuples, then the maximum and minimum size of join between A and B is :

(A) $x + y, 0$

(B) $2(x + y), 0$

(C) $(x + y)/2, 0$

(D) $xy, 0$

57. In order to avoid writing additional SQL statements to update a live database, you instantiate an object of which class ?

(A) DataAdapter

(B) DataReader

(C) DataSet

(D) DataProvider

58. Which of the following is not a colour specification format ?

(A) RGB

(B) TGA

(C) HSB

(D) CIE

59. The process of determining the appropriate pixels for representing a picture is called as :

(A) Rasterization

(B) Rendering

(C) Projection

(D) Representation

60. Which HTML element defines text with strong importance ?

(A) <b>

(B) <mark>

(C) <strong>

(D) <i>