

परीक्षा दिनांक (6.11.191E)

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प्रश्न-पत्र पुस्तिका संख्या /
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विषय / SUBJECT :

Information Technology

समय : 2.00 घण्टे

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अधिकतम अंक : 100
Maximum Marks : 100

प्रश्न-पत्र पुस्तिका एवं उत्तर पत्रक के पेपर सील/पॉलिथीन बैग को खोलने पर परीक्षार्थी यह सुनिश्चित कर लें कि उसके प्रश्न-पत्र पुस्तिका पर वही प्रश्न-पत्र पुस्तिका संख्या अंकित है जो उत्तर पत्रक पर अंकित है। इसमें कोई भिन्नता हो तो वीक्षक से दूसरा प्रश्न-पत्र प्राप्त कर लें। ऐसा न करने पर जिम्मेदारी अभ्यर्थी की होगी।

The candidate should ensure that Question Paper Booklet No. of the Question Paper Booklet and Answer Sheet must be same after opening the Paper Seal / Polythene bag. In case they are different, a candidate must obtain another Question Paper. Candidate himself shall be responsible for ensuring this.

परीक्षार्थियों के लिए निर्देश

1. सभी प्रश्नों के उत्तर दीजिए।
2. सभी प्रश्नों के अंक समान हैं।
3. प्रत्येक प्रश्न का केवल एक ही उत्तर दीजिए।
4. एक से अधिक उत्तर देने की दशा में प्रश्न के उत्तर को गलत माना जाएगा।
5. प्रत्येक प्रश्न के चार वैकल्पिक उत्तर दिये गये हैं, जिन्हें क्रमशः 1, 2, 3, 4 अंकित किया गया है। अभ्यर्थी को सही उत्तर निर्दिष्ट करते हुए उनमें से केवल एक गोले अथवा बबल को उत्तर पत्रक पर नीले बॉल प्वाइंट पेन से गहरा करना है।
6. OMR उत्तर पत्रक इस परीक्षा पुस्तिका के अन्दर रखा है। जब आपको परीक्षा पुस्तिका खोलने को कहा जाए, तो उत्तर पत्र निकाल कर ध्यान से केवल नीले बॉल प्वाइंट पेन से विवरण भरें।
7. प्रत्येक गलत उत्तर के लिए प्रश्न अंक का 1/3 भाग काटा जायेगा। गलत उत्तर से तात्पर्य अशुद्ध उत्तर अथवा किसी भी प्रश्न के एक से अधिक उत्तर से है। किसी भी प्रश्न से संबंधित गोले या बबल को खाली छोड़ना गलत उत्तर नहीं माना जायेगा।
8. मोबाइल फोन अथवा इलेक्ट्रॉनिक यंत्र का परीक्षा हॉल में प्रयोग पूर्णतया वर्जित है। यदि किसी अभ्यर्थी के पास ऐसी कोई वर्जित सामग्री मिलती है तो उसके विरुद्ध आयोग द्वारा नियमानुसार कार्यवाही की जायेगी।
9. कृपया अपना रोल नम्बर ओ.एम.आर. पत्रक पर सावधानीपूर्वक सही भरें। गलत अथवा अपूर्ण रोल नम्बर भरने पर 5 अंक कुल प्राप्तांकों में से काटे जा सकते हैं।

चेतावनी: अगर कोई अभ्यर्थी नकल करते पकड़ा जाता है या उसके पास से कोई अनधिकृत सामग्री पाई जाती है, तो उस अभ्यर्थी के विरुद्ध पुलिस में प्राथमिकी दर्ज कराते हुए विविध नियमों-प्रावधानों के तहत कार्यवाही की जाएगी। साथ ही विभाग ऐसे अभ्यर्थी को भविष्य में होने वाली विभाग की समस्त परीक्षाओं से विवर्जित कर सकता है।

INSTRUCTIONS FOR CANDIDATES

1. Answer all questions.
2. All questions carry equal marks.
3. Only one answer is to be given for each question.
4. If more than one answers are marked, it would be treated as wrong answer.
5. Each question has four alternative responses marked serially as 1, 2, 3, 4. You have to darken only one circle or bubble indicating the correct answer on the Answer Sheet using BLUE BALL POINT PEN.
6. The OMR Answer Sheet is inside this Test Booklet. When you are directed to open the Test Booklet, take out the Answer Sheet and fill in the particulars carefully with blue ball point pen only.
7. 1/3 part of the mark(s) of each question will be deducted for each wrong answer. A wrong answer means an incorrect answer or more than one answers for any question. Leaving all the relevant circles or bubbles of any question blank will not be considered as wrong answer.
8. Mobile Phone or any other electronic gadget in the examination hall is strictly prohibited. A candidate found with any of such objectionable material with him/her will be strictly dealt as per rules.
9. Please correctly fill your Roll Number in O.M.R. Sheet. 5 Marks can be deducted for filling wrong or incomplete Roll Number.

Warning : If a candidate is found copying or if any unauthorized material is found in his/her possession, F.I.R. would be lodged against him/her in the Police Station and he/she would liable to be prosecuted. Department may also debar him/her permanently from all future examinations.

इस परीक्षा पुस्तिका को तब तक न खोलें जब तक कहा न जाए।

Do not open this Test Booklet until you are asked to do so.

06



1. The minimum number of edges in a connected cyclic graph of n vertices is

- (1) n (2) $n + 1$
(3) $n - 1$ (4) None

2. In Java Script, if you add a leading zero like "0127" the number system followed is

- (1) Decimal (2) Hexadecimal
(3) Binary (4) Octal

3. World Wide Web consortium was founded in 1994 by

- (1) Tim Berners
(2) Bill Gates
(3) Stephen Jobs
(4) Tim Kbarno

4. Which statement is incorrect for OSI model ?

- (1) A layer should be created where a different abstraction is needed.
(2) Each layer perform a well-defined function.
(3) Function for each layer defines as per internationally standardized protocol.
(4) The layer boundaries should be chosen to maximize the information flow across the interface.

5. The run time mapping from virtual to physical addresses is done by a hardware device called as

- (1) Monitor
(2) I/O device
(3) Register
(4) Memory-Management Unit

6. What would be the output of the following program ?

```
main()
{
    int num;
    num=fun (20);
    printf ("%d",num);
}

int fun (int num)
{
    num>20 ? return (100);
    return (200);
}
```

- (1) 100
(2) Not defined
(3) Return statement cannot be used within conditional operators.
(4) Recursive call for value '100' and then for '200'.

7. How many six letter passwords can be constructed using lower case letters and digits ?

- (1) 36^6 (2) 3^36
(3) 18^6 (4) None

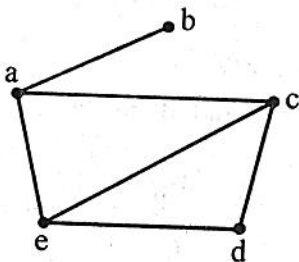
8. In serial communication, start and stop bits are used for

- (1) Synchronization
- (2) Error detection
- (3) Error correction
- (4) None

9. The DMA transfers are performed by a Control Circuit called as

- (1) Device interface
- (2) DMA controller
- (3) Data controller
- (4) Overlooker

10. The adjacency list in the given Graph for vertex 'a' and 'd' are



- (1) {b, c, e} and {a}
- (2) {c, e} and {a, e}
- (3) {b, c, e} and {c, e}
- (4) {b} and {c}

11. A solution to the critical-section problem must satisfy the following three requirements :

- (i) Mutual Exclusion
- (ii) Progress
- (iii) Deadlock
- (iv) Bounded waiting

- (1) (i), (ii), (iv) (2) (i), (iii), (iv)
- (3) (i), (ii), (iii) (4) (ii), (iii), (iv)

12. The transaction T2 could read a database object A that has been modified by another transaction T1 which has not yet committed, such concept is called as

- (1) dirty read (2) dirty write
- (3) lazy read (4) lazy write

13. A CPU has 16 bit program counter. This means that the CPU can address

- (1) 16 k memory location
- (2) 32 k memory location
- (3) 64 k memory location
- (4) 256 k memory location

14. Conversion or stack implementation of $A * B + C * D$ into $AB * CD * +$ is known as

- (1) Reverse Polish Notation
- (2) Polish Notation
- (3) Infix Notation
- (4) Annotation



15. Determine the value of base x if

$$(211)_x = (152)_8$$

- (1) 10 (2) 2
(3) 3 (4) 7

16. The principle of locality of reference is related to

- (1) DMA (2) Polling
(3) Cache Memory (4) None

17. Which function is used to map the contents of the memory to the cache memory ?

- (1) Assign function
(2) Construction function
(3) Mapping function
(4) None of the mentioned

18. When a packet is lost in transit, it should be handled by _____.

- (1) error control
(2) loss control
(3) sequence control
(4) duplication control

19. What is the minimum size of ROM required to store the complete truth table of an 8 bit * 8 bit multiplier ?

- (1) 64 k × 16 bits (2) 32 k × 16 bits
(3) 16 k × 32 bits (4) 64 k × 32 bits

20. Function used to create an instance of the XML Http request object, as per the browser type

- (1) createRequest()
(2) getRequest()
(3) putRequest()
(4) Request()

21. Client-side technology, such as _____ is used for validating user inputs.

- (1) JavaScript (2) ASP.NET
(3) PHP (4) None

22. To use Simple Network Management System (SNMP) we need

- (1) Servers (2) IP
(3) Protocols (4) Rules

23. Network layer firewall works as a

- (1) frame filter
(2) packet filter
(3) both frame filter and packet filter
(4) None

24. Which one of the following allows non-text data to be sent along with an email message ?

- (1) MIME (2) PEM
(3) MTA (4) PGP

25. Identify the equation for encryption using RSA algorithm.
- (1) $C = m^e \text{ mode}(n)$
 - (2) $C = m^e \text{ mod } (\phi(n))$
 - (3) $C = m^e \text{ (mod } n)$
 - (4) None
26. In cryptography, the order of the letters in a message is rearranged by
- (1) transpositional ciphers
 - (2) substitution ciphers
 - (3) both (1) and (2)
 - (4) None
27. Many packets present in the subnet degrades the performance which leads to
- (1) Congestion
 - (2) Digestion
 - (3) Ingestion
 - (4) None
28. In tunnel mode IPsec protects the
- (1) Entire IP packet
 - (2) IP header
 - (3) IP payload
 - (4) None

29. Which one of the following is not a search engine ?

- (1) Bing
- (2) Google
- (3) Yahoo
- (4) Windows

30. Data Encryption Standard (DES) encrypts data in block size of _____ bits each.

- (1) 64
- (2) 128
- (3) 32
- (4) 56

31. Matching between terminologies of Genetic Algorithms and Genetics

Genetic Algorithms	Genetics (Biology)
a. Representation structure	1. External disturbance, such as cosmic radiation
b. Crossover	2. Chromosomes
c. Mutation	3. Survivability
d. Selection	4. Sexual reproduction

The correct matching is

- | | a | b | c | d |
|-----|---|---|---|---|
| (1) | 2 | 3 | 4 | 1 |
| (2) | 2 | 4 | 1 | 3 |
| (3) | 4 | 1 | 2 | 3 |
| (4) | 4 | 1 | 3 | 2 |

32. What is the correct HTML for creating a hyperlink ?

- (1) `A`
- (2) `<a> B `
- (3) ` example `
- (4) ` example `

33. Which one is an example for case based learning ?
- (1) Decision tree
 - (2) Neural network
 - (3) Genetic algorithm
 - (4) k-nearest neighbour
34. _____ is the techniques in which existing heterogeneous segments are reshuffled, relocated into homogenous segments. Select correct option.
- (1) Clustering (2) Aggregation
 - (3) Segmentation (4) Partitioning
35. The _____ tag can be used to create hyperlinks.
- (1) anchor (2) arrow
 - (3) link (4) pointer
36. By electronic commerce we mean
- (1) Commerce of electronic goods
 - (2) Commerce which depends on electronics
 - (3) Commerce which is based on the use of internet
 - (4) Commerce which is based on transactions using computers connected by telecommunication network

37. Euler's totient function defines $\phi(n)$ as the number of positive integers less than n and relatively prime to n .

Find $\phi(35)$.

- (1) 35 (2) 21
 - (3) 24 (4) 1
38. The secret key between members needs to be created as a _____ key when two members contact KDC.
- (1) Public (2) Session
 - (3) Complimentary (4) None of these
39. The Cartesian product of $A = \{1, 2\}$ and $B = \{a, b, c\}$ is
- (1) $A \times B = \{(a, 1), (a, 2), (b, 1), (b, 2), (c, 1), (c, 2)\}$
 - (2) $A \times B = \{(1, a), (1, b), (1, c), (2, a), (2, b), (2, c)\}$
 - (3) $A \times B = \{(1, a, b, c), (2, a, b, c)\}$
 - (4) $A \times B = \{(a, b, c, 1), (a, b, c, 2)\}$
40. In Java Script, _____ is an object of the target language data type that encloses an object of the source language.
- (1) a wrapper (2) a link
 - (3) a cursor (4) a form

41. A process executes the code
- ```
fork();
fork();
fork();
```
- The total number of child processes created is
- (1) 3                      (2) 4  
(3) 7                      (4) 8
42. A system that uses a two-level page table has  $2^{12}$  byte pages and 32 bit virtual addresses. The first 8 bits of the address serve as the index into the first level page table. How many bits specify the second-level index ?
- (1) 14 bits                (2) 12 bits  
(3) 18 bits                (4) None
43. In unix which system call creates the new process ?
- (1) Fork                    (2) Create  
(3) New                     (4) None of these
44. The number of ways in which we can make up strings of four distinct letters followed by three distinct digit is
- (1)  $P(26, 4) \times P(10, 3)$   
(2)  $P(26, 4) / P(10, 3)$   
(3)  $P(26, 4) \times P(10, 3) / 4! \times 3!$   
(4)  $P(26, 4) \times 4! / P(10, 3) \times 3!$
45. Transport layer protocol deals with
- (1) Application to application communication.  
(2) Process to process communication.  
(3) Node to Node communication.  
(4) None of these.
46. Default gateway is used for handling the request for route which is not present in
- (1) Topology table  
(2) Routing table  
(3) Neighbour table  
(4) Use for finding best path
47. Cell Relay, also known as
- (1) ISDN                    (2) X.25  
(3) ATM                    (4) Frame Relay
48. Consider a system having 'm' resources of the same type. The resources are shared by 3 processes A, B, C. Which have peak time demands of 3, 4, 6 respectively. The minimum value of 'm' that ensures that deadlock will never occur is
- (1) 11                        (2) 12  
(3) 13                        (4) 14

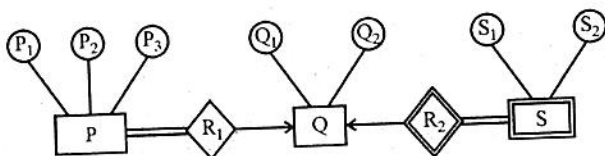
49. Which one of the following is a correct notation in ER diagrams ?

- (1) Entities are oval.
- (2) Relationships are rectangles.
- (3) Attributes are diamonds.
- (4) Weak entities are double rectangles.

50. What is the RDBMS terminology for a set of legal values that an attribute can have ?

- (1) Tuple                      (2) Relation
- (3) Attribute                (4) Domain

51. Consider the following ER diagram.



The minimum number of tables needed to represent P, S, Q, R<sub>1</sub>, R<sub>2</sub> is

- (1) 2                              (2) 3
- (3) 4                              (4) 5

52. \_\_\_\_\_ provides a basic electronic mail transport facility.

- (1) TELNET                      (2) SNMP
- (3) SMTP                        (4) UDP

53. Which of the following is not a data definition language statement ?

- (1) CREATE                      (2) ALTER
- (3) DROP                        (4) SELECT

54. Consider the following relation that stores information about offices, telephones and occupants of offices. Office (OfficeNum, TelephoneNum, Occupant)

Each office has a unique office number. There is only one telephone in each office and the telephone number is unique. Each office is occupied by only one person although a person may have more than one office. Occupant is a unique identification for persons occupying rooms.

Which one of the following is correct ?

- (1) OfficeNum and TelephoneNum are both candidate keys.
- (2) OfficeNum, TelephoneNum and (OfficeNum, TelephoneNum) are all candidate keys.
- (3) (OfficeNum, Occupant) and (TelephoneNum, Occupant) are the candidate keys.
- (4) OfficeNum must be the primary key.





55. The truth table

| X | Y | F(X, Y) |
|---|---|---------|
| 0 | 0 | 0       |
| 0 | 1 | 0       |
| 1 | 0 | 1       |
| 1 | 1 | 1       |

represent the Boolean function

- (1) X                      (2) X + Y  
(3) X Xor Y              (4) Y

56. The decimal equivalent of the octal number 630.4 is

- (1) 408.5                  (2) 30.5  
(3) 1166.5                (4) 608.25

57. Which of the following is correct ?

- (1) A Cartesian product of two relations is the same as their union.  
(2) A join of two relations is a selection on their Cartesian product.  
(3) A join is always an equi join or a natural join.  
(4) The degree of the equi join of two relation is the same as the degree of the natural join of the same relations.

58. In RSA,  $\phi(n) = \_\_\_$  in terms of p and q.

- (1)  $(p)/(q)$               (2)  $(p)(q)$   
(3)  $(p-1)(q-1)$       (4)  $(p+1)(q+1)$

59. The protocol used by TCP for connection establishment is

- (1) Three way handshake  
(2) One way handshake  
(3) Two way handshake  
(4) None

60. ISDN is an example of \_\_\_\_\_ network.

- (1) Circuit switched  
(2) Packet switched  
(3) Electric switch  
(4) None

61. Let

$P = \{ x \mid x \text{ is an even positive integer not larger than } 10 \}$

$Q = \{ x \mid x = y + z \text{ where } y \in \{1, 3, 5\}, z \in \{1, 3, 5\} \}$

Which of the following is true ?

- (1) Q is a proper subset of P.  
(2) P and Q are equal.  
(3) There is no relation between P and Q.  
(4) The difference of two sets is  $\phi$ .

62. Which of the following propositions is tautology ?

- (1)  $(p \vee q) \rightarrow q$       (2)  $p \vee (q \rightarrow p)$   
(3)  $p \vee (p \rightarrow q)$       (4) None

63. Which of the following are correct ?

- I. A graph in which there is a unique path between every pair of vertices is a tree.  
II. A connected graph with  $e = v - 1$  is a tree.  
III. A graph with  $e = v = 1$  that has no circuits is a tree.  
IV. A graph with  $e = v - 1$  is a tree.

- (1) only I  
(2) only I and II  
(3) only I, II and III  
(4) only I, III and IV

64. The decimal value 0.25

- (1) is equivalent to the binary value .1  
(2) is equivalent to the binary value .01  
(3) is equivalent to the binary value .00111  
(4) cannot be represented precisely in binary

65. \_\_\_\_\_ is another term for a packet of digital information.

- (1) Footer                      (2) Header  
(3) Data                         (4) Datagram

66. What will be output when you will execute following C code ?

```
#include <stdio.h>

int main (){

int check = 2;

switch (check){

Case 1 : printf ("D.W. Stey n");

Case 2 : printf ("M.G. Johnson");

Case 3 : printf ("Mohammad Asif");

default : printf ("M. Muralidaran");

}

return 0;

}
```

- (1) M. G. Johnson  
(2) M. Muralidaran  
(3) M.G. Johnson Mohammad Asif  
M. Muralidaran  
(4) Compilation error

67. The technique whereby the DMA controller steals the access cycles of the processor to operate is called

- (1) Fast conning  
(2) Memory conning  
(3) Cycle stealing  
(4) Memory stealing

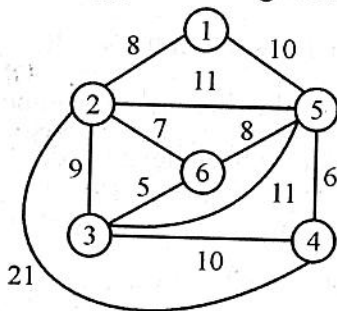
68. Consider the following program in C language :

```
#include <stdio.h>
main()
{
 int i;
 int *p = &i;
 scanf ("%d", p);
 printf ("%d\n", i+7);
}
```

Which one of the following statement is true ?

- (1) Compilation fails.
- (2) Execution results in a run-time error.
- (3) On execution, the value printed is 7 more than the integer value entered.
- (4) On execution, the value printed is 7 more than the address of variable i.

69. In a region, there are six thermal power stations, and electrical lining that is possible among various power stations are shown in fig. Cost of electrification (Rupees in crore) involved appear as weight on the edge.



Obtain the minimum possible connection cost (rupees in crore) among the thermal stations.

- (1) 36
- (2) 35
- (3) 34
- (4) 40

70. The postfix expression for the infix expression  $A + B * (C + D)/F + D * E$  is

- (1)  $AB + CD + * F/D + E *$
- (2)  $ABCD + * F/+ DE * +$
- (3)  $A * B + CD/F * DE ++$
- (4)  $A + * BCD/F * DE++$

71. #include <stdio.h>

```
int main()
{
 int i;
 if (printf ("0"))
 i = 3;
 else
 i = 5;
 printf ("%d", i);
 return 0;
}
```

Predict the output of above program ?

- (1) 3
- (2) 5
- (3) 03
- (4) 05

72. In the worst case the number of comparisons needed to search a singly linked list of length n for a given element is

- (1)  $\log_2 n$
- (2)  $n/2$
- (3)  $\log_2 n - 1$
- (4) n



73. Which of the following is not a software engineering paradigm ?

- (1) Waterfall model
- (2) Spiral model
- (3) Incremental process model
- (4) Generic model

74. The first step in software development life cycle

- (1) Software Requirement Specification
- (2) System Design
- (3) System Testing
- (4) None

75. Consider a binary max-heap implemented using an array. Which one of the following array represents a binary max heap ?

- (1) 25, 12, 16, 13, 10, 8, 14
- (2) 25, 16, 12, 13, 10, 8, 14
- (3) 25, 14, 16, 13, 10, 8, 12
- (4) 25, 14, 12, 13, 10, 8, 16

76. Which of the following is not true about OLAP ?

- (1) OLAP can deal with transactional data.
- (2) In OLAP storage size can vary from 100 GB upto 1 TB
- (3) OLAP can access Millions of records.
- (4) Dimensional view of data is flat relational view in OLAP.

77. Which is the technique used for discovering patterns in dataset at the beginning of data mining process ?

- (1) Kohonen map
- (2) Visualisation
- (3) OLAP
- (4) SQL

78. Integration testing in the small

- (1) Tests the individual components that have been developed.
- (2) Only uses components that form part of the line system.
- (3) Tests interactions between modulus or subsystems.
- (4) Tests interfaces to other systems.

79. Consider the following set of functional dependencies :

$A \rightarrow B$

$A \rightarrow C$

$CD \rightarrow E$

$B \rightarrow D$

$E \rightarrow A$

Which of the following functional dependencies is NOT implied by the above set ?

(1)  $CD \rightarrow AC$       (2)  $BC \rightarrow CD$

(3)  $BD \rightarrow CD$       (4)  $AC \rightarrow BC$

80. Quick sort algorithm is based on

(1) Divide and Conquer

(2) Dynamic Programming

(3) Greedy Method

(4) None

81. What is the value of public key and private key, if P and Q in RSA encryption have value 7 and 7 ?

(1) 5 and 72

(2) 6 and 77

(3) 5 and 77

(4) None of these

82. If an instruction takes time m if there is no page fault, and time n if there is a page fault, what is the effective instruction time if page fault occur once in every i instructions ?

(1)  $\frac{n}{i} + m - n$       (2)  $n + \frac{m}{i}$

(3)  $m + \frac{n - m}{i}$       (4) None

83. Which is not an object oriented Software Engineering Analysis method ?

(1) The Booch Method

(2) The Jacobson Method

(3) The Rumbaugh Method

(4) The Ri-jindale Method

84. A table has fields  $A_1, A_2, A_3, A_4, A_5$  with the following functional dependencies :

$A_1 \rightarrow A_3$

$A_2 \rightarrow A_4$

$(A_1, A_2) \rightarrow A_5$

In terms of normalization, this table is in

(1) 1NF

(2) 2NF

(3) 3NF

(4) None of these



85. The linear sequential model is an alternative name for

- (1) Waterfall model
- (2) Spiral model
- (3) Prototype model
- (4) RAD model

86. Which one of the following uses UDP as the transport protocol ?

- (1) HTTP                      (2) SMTP
- (3) Telnet                    (4) DNS

87. The average number of transaction completed in a given time is called as

- (1) response time
- (2) commit
- (3) throughput
- (4) serial schedule

88. Boundary value analysis is done through

- (1) White box testing
- (2) Black box testing
- (3) Regression testing
- (4) Conditional testing

89. Relationship between students and courses is

- (1) One : One            (2) One : Many
- (3) Many : Many    (4) None of these

90. The four fundamental characteristics of an effective data communication are

- (1) delivery, accuracy, timeliness and noise.
- (2) delivery, accuracy, timeliness and filter.
- (3) delivery, accuracy, timeliness and protocols.
- (4) accuracy, timeliness, filter and protocols.

91. Consider the 3 processes  $P_1$ ,  $P_2$  and  $P_3$  shown in table :

| Process Name | Arrival Time | Time unit required |
|--------------|--------------|--------------------|
| $P_1$        | 0            | 5                  |
| $P_2$        | 1            | 7                  |
| $P_3$        | 3            | 4                  |

The completion order of 3 processes under FCFS with CPU quantum of 2 time units is

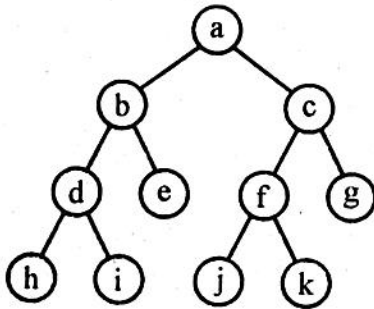
- (1)  $P_1, P_2, P_3$             (2)  $P_1, P_3, P_2$
- (3)  $P_3, P_2, P_1$             (4) None



92. Java provides a monitor like concurrency control for \_\_\_\_\_ synchronization.

- (1) Process                      (2) TLB
- (3) Program                    (4) Threads

93. The Pre-order traversal of Binary tree



- (1) Pre-order : hdibeajfkg
- (2) Pre-order : hidebjkfgca
- (3) Pre-order : abdhiectfjkg
- (4) Pre-order : abdhecifjkg

94. Identify the components of intrusion detection system :

- (1) Analysis Engine
- (2) Alert Database
- (3) Both (1) and (2)
- (4) None

95. Quality costs may be divided into costs associated with prevention, appraisal and

- (1) failure                      (2) compliant
- (3) control                      (4) normalization

96. The linear data structures are

- (i) Stack                      (ii) Array
- (iii) Tree                    (iv) Graph
- (1) (i) only                    (2) (i) & (ii) only
- (3) (iii)                      (4) (iv)

97. On a system using fixed partitions with sizes  $2^{16}$ ,  $2^{24}$  and  $2^{32}$ . How many bits must the limit register have ?

- (1) 8 bits                      (2) 16 bits
- (3) 24 bits                    (4) 32 bits

98. The message 11001001 is to be transmitted using CRC polynomial  $x^3 + 1$  to protect it from errors. The message should be transmitted is

- (1) 11001010
- (2) 11001001011
- (3) 1100100100111
- (4) None

99. Routers communicate with each other and forward the packets base on \_\_\_\_\_

- (1) MAC
- (2) IP Address
- (3) Host name
- (4) Neighbour table

100. The DES algorithm has a key length of

- (1) 128 bits                    (2) 32 bits
- (3) 64 bits                    (4) 16 bits

रफ कार्य के लिए स्थान / SPACE FOR ROUGH WORK

