Computer Programmer cum operator

Question Booklet Alpha Code: C

Maximum: 100 marks

Time: 1 hour and 15 minutes

1. Which of the following is printed on a commonly used fluorescent tube light?
   (A) 6500 K  
   (B) 220 K  
   (C) 273 K  
   (D) 6000 K

2. What is the Universal Product Code (UPC) adopted for?
   (A) Fire safety code in buildings  
   (B) Bar code  
   (C) Earthquake resistant building code  
   (D) Adulteration code in eatables

3. FTSE is the stock index of:
   (A) U.K.  
   (B) Germany  
   (C) France  
   (D) Canada

4. Nobel prize for Economics was started:
   (A) 1901  
   (B) 1969  
   (C) 1971  
   (D) 1948

5. The hormone insulin is:
   (A) Peptide  
   (B) Fatty acid  
   (C) Sterol  
   (D) Glycopid

6. Competitive examinations for the Indian Civil service began by:
   (A) Lord Canning  
   (B) Lord William Bentick  
   (C) Lord Wellesley  
   (D) Lord Dalhousie

7. One of the following institutions was stated as part of the 20-point Economic Programme of the Government of India:
   (A) NABARD  
   (B) Regional Rural Banks  
   (C) EXIM Bank  
   (D) SBI Group

8. The big three of the US auto makers consists of G.M., Ford and:
   (A) Leyland  
   (B) FIAT  
   (C) Mercedes  
   (D) Chrysler

9. The average salt content per kg of sea water is:
   (A) 35 gm  
   (B) 50 gm  
   (C) 65 gm  
   (D) 70 gm

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[P.T.O.]
10. India is the largest producer of:
   (A) Natural gas  (B) Mica
   (C) Chromites    (D) Tin

11. Lorenz curve stands for the measurement of:
   (A) Poverty line   (B) HDI
   (C) Inequality in the distribution of income and wealth
   (D) Smoothness of the road

12. The headquarters of the Indian Statistical Institute is located in:
   (A) Mumbai        (B) Calcutta
   (C) Pune          (D) New Delhi

13. The continent without a desert is:
   (A) Africa       (B) Australia
   (C) Antarctica    (D) Europe

14. Which of the following elements give colours to fireworks?
   (A) Strontium and barium (B) Zinc and sulphur
   (C) Chromium and nickel   (D) None

15. Ozone layer sets in an altitude of:
   (A) 20–30 km       (B) 15 and 55 km
   (C) 10–35 km       (D) 40–55 km

16. RAM is:
   (A) Erasable and dynamic
   (B) Non erasable and dynamic
   (C) Non erasable and static
   (D) Erasable and static

17. What is the short cut key for closing a window?
   (A) Alt + F4          (B) Ctrl + F9
   (C) Alt + F2          (D) Ctrl + Alt + Delete

18. The length of the diagonal of a square with side ‘a’ is:
   (A) $\sqrt{3}a$  (B) $\sqrt{3/4}a$
   (C) $a^{-1}$     (D) $\sqrt{2}a$

19. The symbol for measuring the acidity of the soil is:
   (A) H$_2$O    (B) pH
   (C) ak        (D) SO$_4$
20. HPCL is the product of the nationalization of:
   (A) Shell          (B) Oil India
   (C) ESSO           (D) Cairn India

21. Which of the following countries has got its name from the metal silver?
   (A) Brazil         (B) Chile
   (C) Tanzania       (D) Argentina

22. The first Indian to swim across the English Channel:
   (A) Arati Shaha    (B) Megellan
   (C) Mihir Sen      (D) Robert Perry

23. Penicillin was invented by:
   (A) Caxton         (B) Gillet
   (C) Flemming       (D) Bushwell

24. In an electric bulb, the filament is made of:
   (A) Copper         (B) Platinum
   (C) Nickel         (D) Tungsten

25. Meningitis affects:
   (A) Liver          (B) Brain
   (C) Eye            (D) Pancreas

26. The first Union Finance Minister of the independent India is:
   (A) T. T. Krishnamachary (B) Dr. John Mathai
   (C) R.K. Shannukham Chetty (D) C.D. Deshmukh

27. The modern Olympics was held:
   (A) Between April 15–24, 1896 (B) Between April 06–15, 1896
   (C) Between April 15–24, 1896 (D) Between March 16–25, 1896

28. The U.S. president during the beginning of the Great Depression of 1930's:
   (A) Franklin Roosevelt (B) Herbert Hoover
   (C) J.M. Keynes        (D) Richard Nixon

29. Which country guaranteed the right to information for the first time?
   (A) Finland          (B) Denmark
   (C) USA              (D) Sweden

30. The biggest drama of William Shakespeare is:
   (A) King Lear        (B) Othello
   (C) Antony and Cleopatra (D) As You Like It

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[P.T.O.]
31. Select the word that has most nearly the same meaning as the word IMBROGLIO:
   (A) Scandal  (B) Quarrel  
   (C) Decoration  (D) Underworld

32. Select the expression which means INSTALLMENT SCHEME:
   (A) Never never nest  (B) Window shopping  
   (C) Money Grubber  (D) Economic Geography

33. Fill up the blank selecting the correct word listed below:
   /BROADCAST is an example for _________ verb
   (A) Strong  (B) Auxiliary  
   (C) Weak  (D) Archaic

34. Identify the grammatically unacceptable sentence from the following:
   (A) I am crazy after English
   (B) I met John at the party last night
   (C) He is emigrating from Australia to New Zealand
   (D) When the fog had lifted, the plane took off

35. Pick out the correct sentence from the following:
   (A) The doctor concluded that the lady was killed twenty hours ago
   (B) Kerala is more thickly populated than any other state in India
   (C) The colour of your car is the same as that of my car
   (D) Much water has flowed under the bridge

36. Select a suitable question tag to the following statement:
   Let us go for a walk, _________
   (A) Shall we?  (B) Can't we?  
   (C) Do we?  (D) Will you?

37. Fill up the blank using suitable preposition from those given below:
   /Early rising is beneficial _________ health
   (A) to  (B) for  
   (C) of  (D) at

38. Substitute the underlined part in the following sentence with the suitable phrasal verb from the given alternatives:
   The sky looks a bit cloudy now, but I think it will become fine after rain
   (A) Clear up  (B) Clear away  
   (C) Clear off  (D) Clear out
39. Which one of the following is wrongly spelt?
   (A) Rendezvous
   (C) Tranquility
   (B) Genealogical
   (D) Complimentary

40. Find out the meaning of the word EQUESTRIAN:
   (A) Relating to equilibrium
   (C) Equal in value
   (B) Equidistant
   (D) Relating to horse

41. ‘Labourer’ is related to ‘wages’ in the same way as ‘Entrepreneur’ is related to:
   (A) Taxes
   (C) Interest
   (B) Profit
   (D) Loan

42. Some letters are missing in the series. The missing letters are given in the proper sequence as one of the alternatives. Find the correct alternative:
   - abba – bbba – abbb – aaa
   (A) baab
   (B) bbaa
   (C) babaa
   (D) baa

43. Choose the word which is least like other words in the group:
   (A) King
   (D) Knight
   (B) Queen
   (C) Minister

44. If SYSTEM is coded as SYSMET and NEARER as AENRER, then FRACTURE is coded as:
   (A) FRACTERU
   (B) RACFERUT
   (C) CARFERUT
   (D) RACFEURT

45. In a certain language, ‘loc pit tom’ means ‘singing is appreciated’ ‘tom jab nim’ means ‘dancing is good’ and ‘pit pon jab’ means ‘singing and dancing’ which of the following means ‘good’ in the language:
   (A) tom
   (C) jab
   (B) nim
   (D) loc

46. Choose the missing term out of the alternatives:
   (A) EBENTU
   (B) BENTUE
   (C) BENTUR
   (D) BNEMTUR
47. Statements are given followed by some conclusions. Decide which of the conclusions logically follows. Disregard commonly known facts.

Statements: All branches are flowers. All flowers are seeds.

Conclusions: I. All branches are seeds.
II. All seeds are branches.
III. All flowers are branches.
IV. Some seeds are branches.

(A) None follows
(B) Only I and IV follows
(C) Only II and III follows
(D) All follows

48. Pointing out to a lady, a girl said, "she is the daughter-in-law of the grandmother of my father's only son". How is the lady related to the girl?

(A) Mother-in-law
(B) Mother
(C) Sister-in-law
(D) Sister

49. Find the missing term in the series:
10, 12, 15, 20, 27, ?

(A) 36
(B) 37
(C) 38
(D) 39

50. If ‘-' stands for ‘division’, ‘+’ for ‘multiplication’, ‘+’ for ‘subtraction’ and ‘×’ for ‘addition’, then which one of the following equations is correct?

(A) \[ 4 \times 5 + 9 - 8 + 4 = 15 \]
(B) \[ 4 \times 5 + 9 + 4 = 16 \]
(C) \[ 4 - 5 + 9 \times 3 + 4 = 16 \]
(D) \[ 4 + 5 - 9 - 3 + 4 = 20 \]

51. Which of the following is the correct output for the program given below?

```c
#include<stdio.h>

void main()
{
    char str[] = "peace", s = str;
    printf("%s", s + + + 3);
}
```

(A) peace
(B) peace
(C) ace
(D) ce /

52. Which of the following is the correct output for the program given below?

```c
#include<stdio.h>

void main()
{
    int i = 3, *j = &i;
    printf("%d", i ** j + * j);
    printf("%d", 3 * 3 ** 2);
}
```

(A) 30
(B) 9
(C) 27
(D) 3

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53. Which of the following is the correct output for the program given below?
#include<stdio.h>
#define fn(a, b, c) (a>b?a:c; b>c?b:c)
void main()
{
    int x;
    x=fn(3+2, 2+7, 3+7);
    printf("%d", x);
}

(A) 5  
(B) 10  
(C) 9  
(D) 3+7

54. Which of the following statements correctly obtain the remainder on dividing 5.5 by 1.3?

(A) rem = 5.5% 1.3;  
(B) rem = modf(5.5, 1.3);  
(C) rem = fmod(5.5, 1.3);  
(D) cannot determine the remainder

55. What will be the output of the following program?
#include<stdio.h>
void main()
{
    int i = 2;
    printf("%d %d", ++i, i++);
}

(A) 2 3
(B) 3 2
(C) 3 3
(D) 4 2

56. Which of the following is the correct output for the program given below?
#include<stdio.h>
void main()
{
    int x, y, z;
    x=y=z=1;
    z+=x || ++y&&++x;
    printf("x=%d y=%d z=%d", x, y, z);
}

(A) x = 2 y = 1 z = 1
(B) x = 2 y = 2 z = 1
(C) x = 2 y = 2 z = 2
(D) x = 1 y = 2 z = 1

57. Which of the following is a functional language?

(A) Prolog
(B) Lisp
(C) Smalltalk
(D) Eiffel

58. Which of the following is the feature of stack?

(A) All operations are at one end
(B) It cannot reuse its memory
(C) All elements are of different data types
(D) Any element can be accessed from it directly

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59. The object-oriented paradigm includes which of the following properties?
   I. Encapsulation
   II. Inheritance
   III. Recursion
   (A) I only
   (B) II only
   (C) I and II only
   (D) I, II and III

60. Which of the following is false?
   (A) cout represents the standard output stream in C++
   (B) cout is declared in the iostream standard file
   (C) cout is declared within the std namespace
   (D) none of above

61. The number of processes completed per unit time is known as:
   (A) Output
   (B) Throughput
   (C) Efficiency
   (D) Capacity

62. A critical region:
   (A) is a piece of code which only one process executes at a time
   (B) is a region prone to deadlock
   (C) is a piece of code which only a finite number of processes execute
   (D) is found only in Windows NT operation system

63. The mechanism that bring a page into memory only when it is needed is called:
   (A) Segmentation
   (B) Fragmentation
   (C) Demand Paging
   (D) Page Replacement

64. The Banker’s algorithm is used:
   (A) to prevent deadlock in operating systems
   (B) to detect deadlock in operating systems
   (C) to rectify a deadlocked state
   (D) to avoid/deadlock in operating systems

65. ________ is a high level abstraction over Semaphore:
   (A) Shared memory
   (B) Message passing
   (C) Monitor
   (D) Mutual exclusion

66. Tests derived from behavioural class models should be based on the:
   (A) data flow diagram
   (B) object-relation diagram
   (C) state diagram
   (D) use-case diagram
67. The testing technique that requires devising test cases to exercise the internal logic of a software module is called:
   (A) behavioural testing  (B) black-box testing
   (C) grey-box testing  (D) white-box testing

68. Bottom-up integration testing has as its major advantage(s) that:
   (A) major decision points are tested early
   (B) no drivers need to be written
   (C) no stubs need to be written
   (D) regression testing is not required

69. In traditional software engineering, modules must serve in which of the following roles?
   (A) Control component
   (B) Infrastructure component
   (C) Problem domain component
   (D) All of the above

70. Cohesion is a qualitative indication of the degree to which a module:
   (A) can be written more compactly
   (B) focuses on just one thing
   (C) is able to complete its function in a timely manner
   (D) is connected to other modules and the outside world

71. The state diagram:
   (A) depicts relationships between data objects
   (B) depicts functions that transform the data flow
   (C) indicates how data are transformed by the system
   (D) indicates system reactions to external events

72. Which of the following items does not appear on a CRC card?
   (A) class collaborators
   (B) class name
   (C) class reliability
   (D) class responsibilities

73. The prototyping model of software development is:
   (A) A reasonable approach when requirements are well defined
   (B) A useful approach when a customer cannot define requirements clearly
   (C) The best approach to use for projects with large development teams
   (D) A risky model that rarely produces a meaningful product

74. Which of the following is element of the database?
   (A) data
   (B) constraints
   (C) relationships
   (D) all of the above
75. System catalogue is system-created database that describes:
(A) database objects
(C) user access information
(D) all of the above
(B) data dictionary information

76. VDL is used to specify:
(A) internal schema
(C) schema
(B) external schema
(D) entities and attributes

77. Immunity of the conceptual schemas to changes in the internal schema is referred to as:
(A) physical data independence
(C) conceptual independence
(B) logical data independence
(D) view independence

78. What is the degree of a table with 5000 rows and 50 columns?
(A) 50
(C) 5000
(B) 5050
(D) 25000

79. What is RDBMS terminology for a set of legal values that an attribute can have?
(A) tuple
(C) attribute
(D) domain
(B) relation

80. Which of the following is a transaction property?
(A) isolation
(C) atomicity.
(B) durability
(D) all of the above

81. Fetching past the last row of a cursor:
(A) Raises the NO_DATA_FOUND Exception
(B) Raises the VALUE_ERROR Exception
(C) Raises the CURSOR_NOT_FOUND Exception
(D) Does not raise an exception

82. Baseband transmission may be defined as the transmission of a signal over a link:
(A) by means of wires
(C) at a different band of frequencies
(B) which is relatively short
(D) without any change in frequency

83. The primary purpose of a Remote Concentrator Unit is:
(A) to provide economy through pair gain
(B) to connect subscribers that are beyond the maximum allowable distance from the LE/CO
(C) to aggregate small loads of traffic per line into a smaller number of correspondingly heavier loaded lines
(D) to reduce the number of subscriber cable pairs at a LE/CO
84. Loading the contents of routing tables into a router prior to it being put into service is an example of which routing protocol?
   (A) Distance vector  (B) Link-state shortest-path-first
   (C) Static  (D) Flooding

85. What is a MAC?
   (A) A Computer made by Apple  (B) Memory Address Corruption
   (C) Mediocre Apple Computer  (D) Media Access Control

86. FDDI is a:
   (A) ring network  (B) star network
   (C) mesh network  (D) bus based network

87. The communication mode that supports data in both directions at the same time is:
   (A) simplex  (B) half-simplex
   (C) full-duplex  (D) multiplex

88. The application layer of a network:
   (A) establishes, maintains and terminates virtual circuits
   (B) consists of software being run on the computer connected to the network
   (C) defines the user’s port into the network
   (D) all of the above

89. Local area networks can transmit:
   (A) slower than telecommunications over public telephone lines
   (B) faster than telecommunications over public telephone lines
   (C) using twisted-pair wiring or coaxial cables
   (D) both (A) and (C)

90. Devices on one network can communicate with devices on another network via a:
   (A) file server  (B) router
   (C) utility server  (D) gateway

91. Assuming the leftmost bit as the sign bit, the 2’s complement number 1011111 represents which of the following decimal number?
   (A) -33  (B) -32
   (C) +33  (D) +32

92. What logic function is produced by adding an inverter to each input of an AND gate?
   (A) NAND  (B) OR
   (C) XOR  (D) NOR

93. Compact Discs, according to the original CD specifications, hold how many minutes of music?
   (A) 60  (B) 74
   (C) 54  (D) 90

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Multiprogramming systems:
(A) Are easier to develop than single programming systems.
(B) Execute each job faster
(C) Execute more jobs in the same time period
(D) Are used only one large mainframe computers

LEX is a:
(A) Parser Generator
(B) Parser
(C) Lexical Analyser
(D) Lexical Analyser Generator

A distributed systems are:
(A) Loosely coupled software on loosely coupled hardware
(B) Loosely coupled software on tightly coupled hardware
(C) Tightly coupled software on loosely coupled hardware
(D) Tightly coupled software on tightly coupled hardware

What is the function of Drop Cap?
(A) it does not allow capital letters to be used in the documents
(B) it does not allow capital letters to be used in the documents apart from the first letter of every sentence
(C) it lets you begin a paragraph with a large dropped initial capital letter
(D) it automatically starts all paragraphs and sentences with capital letters

Which of the following is an absolute cell reference?
(A) A1
(B) A$1
(C) #A1
(D) A1

A worksheet can have a maximum of _________ number of rows:
(A) 256
(B) 1024
(C) 32,000
(D) 65,535

It is acceptable to let long text flow into adjacent cells on a worksheet when:
(A) Data will be entered in the adjacent cells
(B) No data will be entered in the adjacent cells
(C) There is no suitable abbreviation for the text
(D) There is no time to format the text
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