PAPER-II

Code No.: 021802CS

BOOKLET FOR OBJECTIVE TYPE TEST
Answer *all* the Questions.

Full Marks : **100**   Time Allowed : **1.30 Hours**

GENERAL INSTRUCTIONS

Candidates should read the following instructions carefully before answering the questions:

1. Verify the seriality of the page numbers. If there is any discrepancy, bring it to the Invigilator's notice.

2. All the boxes, ovals and the entries in the Answer Sheet must be filled up using **Black Ball-Point Pen** only.

3. Before you mark in the Answer Sheet, please fill the following in the appropriate places:
   - Write name of the **Examination Centre**.
   - Write your full name in **Capital Letters**.
   - Put your Left Thumb Impression and full signature.
   - Write your Roll No. (10 digits) and darken the corresponding 10 ovals.
   - Darken the oval corresponding to your **Category**.
   - Darken the oval to denote your **Gender**.

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4. All questions are of Multiple Choice answer type. Please darken only one of the four probable answers [A], [B], [C] or [D]. Darkening more than one oval means you are writing a wrong answer.

5. There will be negative marking for each wrong answer @1:4.

6. There are blank pages at the end of this Booklet for rough work.

7. **Hand over the OMR Answer Sheet to the Invigilator before leaving the Examination Hall.**

8. Please do not leave the Examination Hall until the examination is over.

9. Please do not fold, scratch, scrimp or tear any portion of the Answer Sheet by any chance as this will render the Answer Sheet unsuitable for computer evaluation. Keep the Sheet away from gum.

10. Please ensure that the blank dotted line along the left side of margin of side 1 as also the right side of side 2 is not damaged in any way as it may affect the computer evaluation.

11. If error is detected in any particular question the candidates are advised not to attempt the same. The Commission do not award any marks to questions having any type of error.

1. The declaration

   `int (*p) [5];` means

   (A) p is one dimensional array of size 5, of pointers to integers.

   (B) p is a pointer to a 5 elements integer array.

   (C) The same as int *p [

   (D) None of the above

2. Which of the following is the correct way of declaring a float pointer?

   (A) float ptr;

   (B) float *ptr;

   (C) *float ptr;

   (D) None of the above

3. Find the output of the following program.

   ```
   void main()
   {
   char*msg = "hi";
   printf(msg);
   }
   ```

   (A) hi

   (B) h

   (C) hi followed by garbage value

   (D) Error

4. What is the base data type of a pointer variable by which the memory would be allocated to it?

   (A) int

   (B) float

   (C) No data type

   (D) unsigned int

5. Which of the following operator takes only integer operands?

   (A) +

   (B) *

   (C) /

   (D) %

6. In C programming language, which of the following type of operators have the highest precedence?

   (A) Relational operators

   (B) Equality operators

   (C) Logical operators

   (D) Arithmetic operators

7. What is the output of the following statements?

   ```
   int i = 0;
   printf("%d %d", i, i++);
   ```

   (A) 0 1

   (B) 1 0

   (C) 0 0

   (D) 1 1

8. We can insert pre written code in a C program by using

   (A) #read

   (B) #get

   (C) #include

   (D) #put

9. The first expression in a for loop is

   (A) Step value of loop

   (B) Value of the counter variable

   (C) Any of the above

   (D) None of the above

10. Size of void pointer is

    (A) 1 byte

    (B) 2 byte

    (C) 4 byte

    (D) 8 byte

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11. What is correct order of precedence in C?

(A) Addition, Division, Modulus

(B) Addition, Modulus, Division

(C) Multiplication, Subtraction, Modulus

(D) Modulus, Multiplication, Subtraction

12. Margins option is associated with which menu item in MS Office?

(A) Review

(B) Page Layout

(C) Insert

(D) View

13. Which of the following is not a Font Effect in MS Office?

(A) Font Color

(B) Superscript

(C) Engrave

(D) Strike Through

14. In MS-Access to open new database press

(A) CTRL+N

(B) CTRL+O

(C) ALT+F4

(D) None of the above

15. Press the following keys in MS-Access to print the current or selected object:

(A) CTRL+P

(B) P or CTRL+P

(C) S

(D) C or ESC

16. What method can you use to add a new table to your database in MS-Access?

(A) Use Design View to create a table

(B) Enter data directly by using a datasheet

(C) Both of the above

(D) None of the above

17. Aggregate functions are functions that take a _____ as input and return a single value.

(A) Collection of values

(B) Single value

(C) Aggregate value

(D) Both (A) and (B)

18. Select count (____ ID)

from teaches

where semester = 'Spring' and year = 2010;

If we do want to eliminate duplicates, we use the keyword _____ in the aggregate expression.

(A) Distinct

(B) Count

(C) Avg

(D) Primary key

19. We can test for the nonexistence of tuples in a subquery by using the _____ construct.

(A) Not exist

(B) B. Not exists

(C) Exists

(D) Exist

20. In SQL Data Types and Schemas, dates must be specified in the format

(A) mm/dd/yy

(B) yyyy/mm/dd

(C) dd/mm/yy

(D) yy/dd/mm

Please Turn Over

21. Windows displays various options to shut down. Which is suitable at the end of day?
- (A) Shut Down
- (B) Restart
- (C) Sleep
- (D) Hibernate

22. Which of the following is suitable using Windows after you install new drivers?
- (A) Shut Down
- (B) Restart
- (C) Sleep
- (D) Hibernate

23. You can move a window to a different position on your screen by dragging it by its
- (A) Move handle
- (B) Tail
- (C) Status bar
- (D) Title bar

24. Which is the first program run on a computer when the computer boots up?
- (A) System software
- (B) Operating system
- (C) System operations
- (D) None of the above

25. Recently deleted files are stored in
- (A) Recycle bin
- (B) Desktop
- (C) Taskbar
- (D) My Computer

26. The Basic Input Output System (BIOS) resides in
- (A) RAM
- (B) ROM
- (C) The CPU
- (D) Memory Cache

27. A page fault occurs when
- (A) the Deadlock happens.
- (B) the Segmentation starts.
- (C) the page is found in the memory.
- (D) the page is not found in the memory.

28. Which one of the following is not a multitasking operating system?
- (A) DOS
- (B) Windows
- (C) Unix
- (D) Linux

29. A _____ is a flash memory storage device that plug-ins into a USB port.
- (A) USB snap-drive
- (B) USB flash-drive
- (C) USB memory maker-drive
- (D) None of the above

30. Which of the following is system software?
- (A) Operating system
- (B) Compiler
- (C) Utilities
- (D) All of the above

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31. Extensible authentication protocol is authentication framework frequently used in
- (A) wired personal area network
- (B) wireless networks
- (C) wired local area network
- (D) None of the above

32. Pretty Good Privacy (PGP) is used in
- (A) browser security
- (B) e-mail security
- (C) FTP security
- (D) None of the above

33. When a DNS server accepts and uses incorrect information from a host that has no authority giving that information, then it is called
- (A) DNS lookup
- (B) DNS hijacking
- (C) DNS spoofing
- (D) None of the above

34. Ping can
- (A) measure round-trip time
- (B) report packet loss
- (C) report latency
- (D) All of the above

35. ICMP is used in
- (A) Ping
- (B) Traceroute
- (C) Ifconfig
- (D) Both (A) and (B)

36. This allows to check if a domain is available for registration —
- (A) Domain Check
- (B) Domain Dossier
- (C) Domain Lookup
- (D) None of the above

37. Which of the following is related to ipconfig in Microsoft Windows ?
- (A) Display all current TCP/IP network configuration values
- (B) Modify DHCP settings
- (C) Modify DNS settings
- (D) All of the above

38. Choose the wrong statement.
- (A) Nslookup is used to query a DNS server for DNS data.
- (B) Ping is used to check connectivity.
- (C) Pathping combines the functionality of ping with that of route.
- (D) Ifconfig can configure TCP/IP network interface parameters.

39. Ethernet frame consists of
- (A) MAC address
- (B) IP address
- (C) Both (A) and (B)
- (D) None of the above

40. MAC address is of
- (A) 24 bits
- (B) 36 bits
- (C) 42 bits
- (D) 48 bits

41. Which protocol assigns IP address to the client connected in the internet?

    (A) DHCP

    (B) IP

    (C) RPC

    (D) None of the above

42. Which one of the following is not used in media access control?

    (A) Ethernet

    (B) Digital subscriber line

    (C) Fiber distributed data interface

    (D) None of the above

43. The common element which describe the web page, is

    (A) heading

    (B) paragraph

    (C) list

    (D) All of the above

44. HTML stands for

    (A) Hyper Text Markup Language

    (B) High Text Markup Language

    (C) Hyper Tabular Markup Language

    (D) None of the above

45. Correct HTML tag for the largest heading is

    (A) <head>

    (B) <h6>

    (C) <heading>

    (D) <h1>

46. Markup tags tell the web browser

    (A) how to organise the page.

    (B) how to display the page.

    (C) how to display message box on page.

    (D) None of the above

47. www is based on which model?

    (A) Local-server

    (B) Client-server

    (C) 3-tier

    (D) None of the above

48. A piece of icon or image on a web page associated with another web page is called

    (A) url

    (B) hyperlink

    (C) plugin

    (D) None of the above

49. Dynamic web page

    (A) is same every time whenever it displays

    (B) generates on demand by a program or a request from browser

    (C) Both (A) and (B)

    (D) None of the above

50. URL stands for

    (A) Unique Reference Label

    (B) Uniform Reference Label

    (C) Uniform Resource Locator

    (D) Unique Resource Locator

51. Continue statement is used for

(A) to continue to the next line of code.

(B) to stop the current iteration and begin the next iteration from the beginning.

(C) to handle run time error.

(D) None of the above

52. Difference between calloc() and malloc()

(A) calloc() takes a single argument while malloc() needs two arguments.

(B) malloc() takes a single argument while calloc() needs two arguments.

(C) malloc() initializes the allocated memory to ZERO.

(D) calloc() initializes the allocated memory to NULL.

53. Which one of the following below is valid C keywords?

(A) integer

(B) int

(C) null

(D) None of the above

54. Output of following program :

```
float x = 10.7;
int i;
i = (int) x;
print i;
```

(A) null

(B) error

(C) 10

(D) garbage value

55. rand() function returns

(A) float value

(B) integer value

(C) any type

(D) None of the above

56. Which operator in C can't be overloaded?

(A) %

(B) +

(C) ::

(D) –

57. Difference between structure and union is

(A) we can define functions within structures but not within a union.

(B) we can define functions within union but not within a structure.

(C) the way memory is allocated.

(D) there is no difference.

58. printf() belongs to which header file of C?

(A) stdlib.h

(B) stdio.h

(C) stdout.h

(D) stdoutput.h

59. What is the disadvantage of array in C?

(A) We can easily access each element

(B) It is necessary to declare too many variables

(C) It can store only one similar type of data

(D) None of the above

60. Which file format can be added to a PowerPoint show?

(A) .jpg

(B) .gif

(C) .wav

(D) All of the above

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61. In Microsoft PowerPoint the key on the keyboard can be used to view slide show
   (A) F1
   (B) F2
   (C) F5
   (D) F10

62. What is the function of Ctrl + B in Ms-Word?
   (A) It converts selected text into the next larger size of the same font.
   (B) It adds a line break to the document.
   (C) It makes the selected text bold.
   (D) It applies Italic formatting to the selected text.

63. What is the function of CTRL+R in MS-Word?
   (A) Open the Print dialog box
   (B) Update the current web page
   (C) Close the current window
   (D) None of the above

64. In MS-Word shortcut for paste is
   (A) CTRL+C
   (B) CTRL+X
   (C) CTRL+V
   (D) None of the above

65. Consider attributes ID, CITY and NAME. Which one of this can be considered as a super key?
   (A) NAME
   (B) ID
   (C) CITY
   (D) CITY, ID

66. Which one of the following attribute can be taken as a primary key in DBMS?
   (A) Name
   (B) Street
   (C) Id
   (D) Department

67. The relation with the attribute which is the primary key is referenced in another relation. The relation which has the attribute as primary key is called
   (A) Referential relation
   (B) Referencing relation
   (C) Referenced relation
   (D) Referred relation

68. The situation where the lock waits only for a specified amount of time for another lock to be released is
   (A) Lock timeout
   (B) Wait-wound
   (C) Timeout
   (D) Wait

69. Which of the following is a physical storage media?
   (A) Tape Storage
   (B) Optical Storage
   (C) Flash memory
   (D) All of the above

70. Which of the following stores several gigabytes of data but usually lost when power failure?
   (A) Flash memory
   (B) Disk
   (C) Main memory
   (D) Secondary memory

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71. Which is the cheapest memory device in terms of costs/bit?

(A) Semiconductor memory

(B) Magnetic disks

(C) Compact disks

(D) Magnetic tapes

72. A relational database consists of a collection of

(A) Tables

(B) Fields

(C) Records

(D) Keys

73. The term _____ is used to refer to a row.

(A) Attribute

(B) Tuple

(C) Field

(D) Instance

74. A domain is atomic if elements of the domain are considered to be _____ units.

(A) different

(B) indivisibile

(C) constant

(D) divisible

75. Main function of shared memory is

(A) to use primary memory efficiently.

(B) to do intra process communication.

(C) to do inter process communication.

(D) None of the above

76. Which scheduling policy is best suited for time-sharing operating systems?

(A) Shortest job first

(B) Round robin

(C) First come first serve

(D) Elevator

77. Memory protection is normally done by

(A) the processor and the associated hardware.

(B) the operating system.

(C) the compiler.

(D) the user program.

78. Which among the following scheduling algorithms give minimum average waiting time?

(A) FCFS

(B) SJF

(C) Round robin

(D) On priority

79. Size of virtual memory depends on

(A) size of data bus

(B) size of address bus

(C) size of main memory

(D) None of the above

80. Semaphores are used to solve the problem of

(A) race condition

(B) process synchronization

(C) mutual exclusion

(D) belady problem

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81. IPSec is designed to provide the security at the

    (A) transport layer

    (B) network layer

    (C) application layer

    (D) session layer

82. In tunnel mode IPSec protects the

    (A) Entire IP packet

    (B) IP header

    (C) IP payload

    (D) None of the above

83. Network layer firewall works as a

    (A) frame filter

    (B) packet filter

    (C) Both (A) and (B)

    (D) None of the above

84. WPA2 is used for security in

    (A) ethernet

    (B) bluetooth

    (C) wi-fi

    (D) None of the above

85. An attempt to make a computer resource unavailable to its intended users is called

    (A) denial-of-service attack

    (B) virus attack

    (C) worms attack

    (D) botnet process

86. Ethernet in metropolitan area network (MAN) can be used as

    (A) pure ethernet

    (B) ethernet over SDH

    (C) ethernet over MPLS

    (D) All of the above

87. A point-to-point protocol over ethernet is a network protocol for

    (A) encapsulating PPP frames inside ethernet frames.

    (B) encapsulating ehternet framse inside PPP frames.

    (C) for security of ethernet frames.

    (D) for security of PPP frames.

88. High speed ethernet works on

    (A) coaxial cable

    (B) twisted pair cable

    (C) optical fiber

    (D) None of the above

89. The maximum size of payload field in ethernet frame is

    (A) 1000 bytes

    (B) 1200 bytes

    (C) 1300 bytes

    (D) 1500 bytes

90. An ethernet frame that is less than the IEEE 802·3 minimum length of 64 octets is called

    (A) short frame

    (B) run frame

    (C) mini frame

    (D) man frame

91. Which depicts flow of control in program modules?

- (A) Flowchart
- (B) DFD
- (C) Both (A) and (B)
- (D) None of the above

92. Abbreviate the term HIPO.

- (A) Hierarchical Input Process Output
- (B) High-level Input Process Output
- (C) Huge Input Process Output
- (D) None of the above

93. Which model gives the overall reliability of the system that is projected and certified?

- (A) Sampling model
- (B) Component model
- (C) Certification model
- (D) Both (A) and (B)

94. Which aspect is important when the software is moved from one platform to another?

- (A) Maintenance
- (B) Operational
- (C) Transitional
- (D) All of the above

95. Which chart is a tool that depicts project as network diagram that is capable of graphically representing main events of project in both parallel and consecutive way?

- (A) PERT chart
- (B) Gantt chart
- (C) Both (A) and (B)
- (D) None of the above

96. A COCOMO model is _____ .

- (A) Common Cost Estimation Model
- (B) Constructive Cost Estimation Model
- (C) Complete Cost Estimation Model
- (D) Comprehensive Cost Estimation Model

97. SRD stands for _____ .

- (A) Software Requirements Definition
- (B) Structured Requirements Definition
- (C) Software Requirements Diagram
- (D) Structured Requirements Diagram

98. The tools that support different stages of software development life cycle are called _____ .

- (A) CASE Tools
- (B) CAME tools
- (C) CAQE tools
- (D) CARE tools

99. Software consists of _____ .

- (A) set of instructions + operating procedures
- (B) programs + documentation + operating procedures
- (C) programs + hardware manuals
- (D) Set of programs

100. The level at which the software uses scarce resources is _____ .

- (A) reliability
- (B) efficiency
- (C) portability
- (D) All of the above