AGA KHAN UNIVERSITY EXAMINATION BOARD

SECONDARY SCHOOL CERTIFICATE
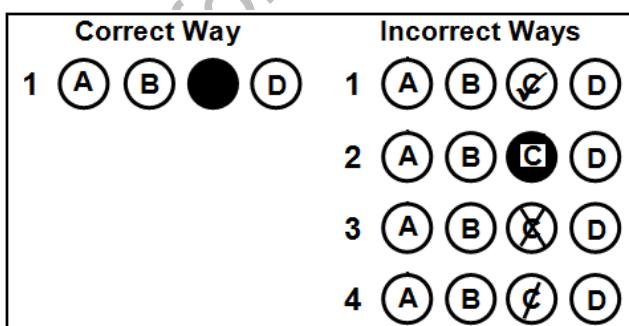
CLASS IX

ANNUAL EXAMINATIONS (THEORY) 2024

Computer Science Paper I

Time: 1 hour 10 minutes   Marks: 40

INSTRUCTIONS

1. Read each question carefully.

2. Answer the questions on the separate answer sheet provided. DO NOT write your answers on the question paper.

3. There are 100 answer numbers on the answer sheet. Use answer numbers 1 to 40 only.

4. In each question, there are four choices A, B, C, D. Choose ONE. On the answer grid, black out the circle for your choice with a pencil as shown below.

Candidate's Signature

5. If you want to change your answer, ERASE the first answer completely with a rubber, before blacking out a new circle.

6. DO NOT write anything in the answer grid. The computer only records what is in the circles.

7. You may use a simple calculator if you wish.

1. The generation of computers that started to use RAM and ROM for the first time is

   A. second generation.
   B. third generation.
   C. fourth generation.
   D. fifth generation.

2. Computers that work on supply of continuous signals as input and display output simultaneously are

   A. analog computers.
   B. digital computers.
   C. hybrid computers.
   D. personal computers.

3. The type of computer that is MOST suitable to stream online videos is

   A. minicomputer.
   B. supercomputer.
   C. microcomputer.
   D. mainframe computer.

4. Some devices are essential to perform specific tasks on a computer.

   Two essential devices to make a video call are

   A. webcam and printer.
   B. monitor and scanner.
   C. headphone and scanner.
   D. webcam and headphones.

5. A system needs to automatically unlock the door in a house during the day and lock it at night. The MOST suitable sensor to be used in this system is

   A. light sensor.
   B. pressure sensor.
   C. moisture sensor.
   D. temperature sensor.

6. A CPU contains all of the following components EXCEPT

   A. registers.
   B. input unit.
   C. control unit.
   D. arithmetic logic unit.

7. A signal that causes data transfer from main memory to a CPU register is sent from

   A. input unit.
   B. output unit.
   C. control unit.
   D. arithmetic logic unit.

8.   In contrast to RAM, one of the features of ROM is that it

   A.   can be increased in size to improve operational speed of a computer.
   B.   is used to store data, part of operating system (OS) currently in use.
   C.   is used to store BIOS and other data needed at start up.
   D.   can be written to and read from.

9.   Which of the following statements is FALSE about the cache memory levels?

   A.   Level 2 cache memory is located on the microprocessor.
   B.   Level 1 cache memory is located on the microprocessor.
   C.   Level 3 cache memory is slower than level 1 cache memory.
   D.   Level 3 cache memory is smallest in storage capacity than other two levels.

10.   Which of the following statements is TRUE about hard disk drive?

   A.   It is a volatile storage device.
   B.   It is a primary storage device.
   C.   It uses optical disks to store data.
   D.   It uses random access method to access the data.

11.   The TWO most common output devices used on the billing counter of a supermarket are

   A.   printer and keypad.
   B.   printer and speaker.
   C.   monitor and printer.
   D.   monitor and keypad.

12.   The function that is NOT associated with an operating system is

   A.   data analysis.
   B.   resource allocation.
   C.   process management.
   D.   memory management.

13.   The MOST common feature of user management systems is to

   A.   access control lists.
   B.   process scheduling.
   C.   manage virtual memory.
   D.   manage network protocol.

14.   As compared to graphical user interface, the command line interface

   A.   is easy to learn.
   B.   consists of menus.
   C.   requires less memory.
   D.   uses mouse as an input device.

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15. An essential component of a batch processing operating system is the

    A. interactive user interface.
    B. capability of multi-tasking.
    C. real-time processing algorithms.
    D. job scheduling and management.

16. Which of the following options is a characteristic of a multi-user operating system?

    A. It allows users to access the system simultaneously.
    B. It cannot be used for personal computers.
    C. It does not support system networking.
    D. It requires less memory to operate.

17. If a person is working on an MS Word file, then the keyboard shortcut to open another new MS Word file is

    A. Ctrl + O
    B. Ctrl + N
    C. Alt + O
    D. Alt + N

18. The shortcut key used to move the cursor at the beginning of the line is

    A. Home
    B. Alt+Home
    C. Ctrl+Home
    D. Shift+Home

19. Which of the following menu tabs provides the option for applying header and footer to a document?

    A. Home
    B. Insert
    C. Design
    D. Layout

20. Which of the following menu tabs provides the option for setting the margin of a document?

    A. Home
    B. Insert
    C. Design
    D. Layout

21. The transmission medium can be defined as the

    A. data to be transmitted.
    B. pathway to send the data.
    C. device to send or receive data.
    D. rule to govern the data communication.

22. Consider the given data to be transmitted via asynchronous transmission.

    10101010

    After adding start and stop bits, this data will become

    A.   1101010101
    B.   1101010100
    C.   0101010100
    D.   0101010101

23. All of the following are advantages of using guided media in the data communication EXCEPT

    A.   lower attenuation.
    B.   higher bandwidth.
    C.   less expensive than wireless media.
    D.   immune to electromagnetic interference.

24. Consider the given table showing the picture of a digital signal sent from point A and received at point B.

Signal Sent from Point A	Signal Received at Point B

    The signal which is received at point B in this form is due to

    A.   crosstalk.
    B.   distortion.
    C.   attenuation.
    D.   amplification.

25. A device that is used to access the internet via telephone line is
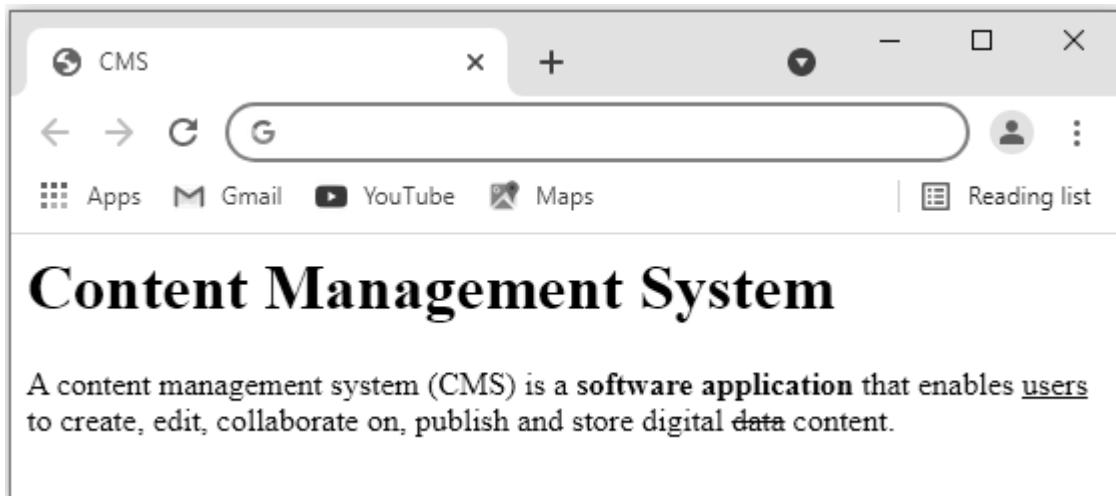
    A.   router.
    B.   switch.
    C.   dial-up modem.
    D.   network interface card.

26. Which of the following data transmission is measured in kilobits per second?

    A.   Data rate
    B.   Baud rate
    C.   Bandwidth
    D.   Signal-to-Noise Ratio

27. The number of bits in 8 bytes is

    A. 16
    B. 32
    C. 64
    D. 128

28. All of the following are the uses of a network EXCEPT

    A. file sharing.
    B. communication.
    C. word processing.
    D. hardware sharing.

29. A transmission mode which sends data only in one direction is called as

    A. simplex.
    B. full-duplex.
    C. peer-to-peer.
    D. client/ server.

30. In a point-to-point network, the minimum number of device(s) that can be connected is/ are

    A. one.
    B. two.
    C. three.
    D. four.

31. If a person creates a network with smartphone and shares the connection with his tablet, then the type of network is identified as

    A. LAN.
    B. PAN.
    C. WAN.
    D. MAN.

32. All of the following are uses of Bluetooth network EXCEPT

    A. connect I/O devices.
    B. wireless audio streaming.
    C. file sharing between devices.
    D. long-range wireless internet access.

33. A topology which is MOST expensive among other topologies is

    A. bus.
    B. star.
    C. ring.
    D. mesh.

34. A type of communication technology that provides the LOWEST internet connection speed is a/ an

   A. dial-up line.
   B. digital subscriber line.
   C. code division multiple access.
   D. integrated services digital network.

35. Which of the following HTML tags does NOT need a closing tag?

   A. <title>
   B. <head>
   C.
   D. <p>

36. Consider the given image of a webpage.

The following changes need to be made in the heading:

Font style: Calibri

Font color: Blue

Font size: 35 pixels

The HTML code that will make these changes is

A	Content Management System
B	Content Management System
C	Content Management System
D	Content Management System

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37. An image can be set as background of a web page by using the

    A.   background attribute in the body tag.
    B.   body attribute in the background tag.
    C.   href attribute in the background tag.
    D.   body attribute in the href tag.

38. Which of the following HTML codes should be used to display white text on a background having black color?

A	<body style="color: white; background-color: black;">Some text here</body>
B	<body "bgcolor=black fgcolor=white">Some text here</body>
C	<body backgroundcolor=black text=white> Some text here</body>
D	<body bgcolor=black foregroundcolor=white> Some text here</body>

39. Consider the given image of a web page.

Visit PIA Website

When someone clicks on Visit PIA Website then they are redirected to
https://www.piac.com.pk

The HTML code to insert this hyperlink is

A	<a>href="https://www.piac.com.pk">Visit PIA Website
B	<a Visit PIA Website : href="https://www.piac.com.pk"
C	<a Visit PIA Website : href="https://www.piac.com.pk">
D	<a>Visit PIA Website : href="https://www.piac.com.pk">

40. Two of the tags that are related to tables in HTML are

    A.   <tr> </tr> and <th> </th>
    B.
 </br> and <dt> </dt>
    C.   <tr> </tr> and
 </br>
    D.   <th> </th> and <dt> </dt>

END OF PAPER

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