CREST Cyber Olympiad (CCO)
Sample Paper

Pattern and Marking Scheme				
Grade	**Topic/Section**	**No. of Questions**	**Marks per Question**	**Total Marks**
Grade 10	Computer & IT	40	1	40
	Achiever's Section	10	2	20
Grand Total		**50**		**60**

The total duration of the exam is 60 minutes.

Syllabus

Section 1: Fundamentals of Computer, Operating System, Word Processing Tool, Networking, MS PowerPoint, MS Excel, HTML, Internet, Database Management System (Functions, Types, MS Access), Latest Developments in the Field of IT.

Achievers Section: Higher Order Thinking Questions - Syllabus as per Section 1.
Questions are based on Windows 11 and MS Office 2016.

For more details, visit https://www.crestolympiads.com/cyber-olympiad-cco

1. Fill in the blank:
   In MS PowerPoint, notes that include the slide, as well as key comments, are known as _____.

   a. speaker handouts
   b. speaker notes
   c. student notes
   d. cheat sheet

2. What is the difference between Slide Design and Auto Content Wizard in MS PowerPoint?

   a. Slide Design is the alternate name for Auto Content Wizard
   b. Auto Content Wizard is just the wizard version of Slide Design
   c. Slide Design does not provide sample content but Auto Content Wizard provides sample content too
   d. Slide Design allows you to choose your design in steps but Auto Content Wizard does not let you make choices

3. Which of the following device is not used in setting up LAN connection?

   a.
   b.

   c.
   d. None of the above

4. Which of the following technology companies has been actively involved in expanding global internet access initiatives in recent years?

   a.
   b.

   c.
   d.

5. When a custom tab stop is set up in an MS Word document, what does Word do?

   a. Clears all default tab stops
   b. Does not clear any default tab stops
   c. Clears all default tab stops to the right of custom tab stop
   d. Clears all default tab stops to the left of the custom tab stop

6. Which process checks to ensure the components of the computer are operating and connected properly?

a. Booting
b. Processing
c. Saving
d. Editing

7. What happens when you boot up a PC?

a. Portions of the operating system are copied from disk into memory
b. Portions of the operating system are copied from memory onto disk
c. Portions of the operating system are emulated
d. The PC gets switched off

8. Which of the following is the odd one out regarding the importance of logging off from your computer in a computer lab?

a. Secures your files, passwords, etc.
b. Saves electricity & resources
c. Enhances overall computer performance
d. Ensures system security and privacy

9. Fill in the blank:
Your business has contracted with another company to have them host and run an application for your company over the Internet. The company providing this service to your business is called an _____.

a. Internet Service Provider
b. Internet Access Provider
c. Application Service Provider
d. Application Access Provider

10. With SQL, how can you return the number of records in the "Persons" table?

a. SELECT COUNT (*) FROM Persons
b. SELECT COUNT () FROM Persons
c. SELECT Column () FROM Persons
d. SELECT Column (*) FROM Persons

11. Which one of the following creates a text field in a HTML form?

a. < input name="mi" size="5" type="text" / >
b. < input checked="checked" name="gender" type="radio" value="M" / >
c. Major < select name="major" size="5" > < option value="CS" >Computer science < /option > < /select >
d. < input name="tennis" type="checkbox" / > tennis

12. Which of the following statement(s) is/are true?

a. When issuing a request from an HTML form either a get method or a post method can be used. The form explicitly specifies which of the two is used
b. If the GET method is used, the data request string as if they were submitted using a URL
c. If the POST method is used, the data in the form are packaged as part of the request file. The server program obtains the data by reading the file

d. All of the above

13. Which of the following best describes Internal Linking with respect to HTML?

a. Linking one part of a document on one computer to another part of the document on some other computer with the same file name
b. Linking one part of the document on one computer to another part of the document on some other computer in the same LAN
c. Linking one part of the document to another part of the same document
d. Linking one part of the document to another document on the same computer

14. Fill in the blanks:
IP is responsible for _____ communication, whereas, TCP is responsible for _____ communication.

a. host-to-host, process-to process
b. process-to-process, host-to-host
c. process-to-process, process-to-process
d. node-to-node, node-to-node

15. Which of the following device understands the format and contents of the data and translates messages from one format to another?

a. Gateway
b. Hub
c. Switch
d. Router

16. Which of the following is the term for a request for specific data contained in a database?

a. Question
b. Query
c. Inquiry
d. Quiz

17. Identify the term:
These programs allow parents as well as organizations to block out selected sites and set time limits on Internet access.

a. Plug-ins
b. Filters
c. FTP
d. DSL

18. Complete the sentence given below:
Microwave transmission is used in environments where installing physical transmission media is _____.

a. difficult or impossible and where line-of-sight transmission is unavailable
b. easy or promising and where line-of-sight transmission is unavailable
c. difficult or impossible and where line-of-sight transmission is available
d. easy or promising and where line-of-sight transmission is available

19. Which type of system puts the user into direct conversation with the computer through a keyboard?

a. Real time processing
b. Interactive computer
c. Batch processing
d. Time sharing

20. Fill in the blank:
The person who writes instruction that tells the computer how to handle input information is
_____.

a. data entry operator
b. computer programmer
c. computer operator
d. keypunch operator

21. An error in software or hardware is called a bug. What is the alternative computer jargon for
it?

a. Leech
b. Squid
c. Slug
d. Glitch

22. Fill in the blank:
A generalised software package produced to meet the bugs of a variety of data processing
users is known as _____.

a. utility programs
b. system software
c. operating system
d. application package

23. Match the following Keyboard shortcuts with their functions in MS PowerPoint:

Column A		Column B	
a.	F5	i.	Display the shortcut menu
b.	ESC	ii.	Start a presentation from the beginning
c.	Shift + F10	iii.	End a presentation

a. (a) - (ii), (b) - (iii), (c) - (i)
b. (a) - (i), (b) - (ii), (c) - (iii)
c. (a) - (iii), (b) - (ii), (c) - (i)
d. (a) - (iii), (b) - (i), (c) - (ii)

24. Fill in the blank:
The data type in MS Access that automatically generates and fills a number each time a
record is created is called _____.

a. identity
b. autonumber
c. autosum
d. sequence

25. Andrew's bank has a web page to collect some important personal details such as credit card
number etc. for financial transactions. These are confidential information which may be
misused if it falls in the hands of hackers. Which of the following protocols should the bank
use to protect the data of customers like Andrew?

a. HTTPS
b. HTTP
c. SMTP
d. FTP

26. What does the port number in a TCP Connection specify?

a. It specifies the communication process on the two end systems
b. It specifies the quality of the data connection

c. It specifies the size of data

d. All of the above

27. What is the term used for the error detection method that can detect more errors without increasing additional information in each packet?

a. Checksum

b. Even parity mechanism

c. Cyclic Redundancy Check

d. Odd parity mechanism

28. If there are n devices in a network, what is the number of cable links required for a mesh and a star respectively?

a. n, n-1

b. n(n-1)/2, n-1

c. n-1, n

d. n-1, n(n-1)/2

29. Which SQL Query is used to remove a table and all its data from the database?

a. Delete Table

b. Alter Table

c. Drop Table

d. Truncate Table

30. Is it possible to insert a table within another table using HTML code?

a. Yes, but there must be exactly 1 row and 1 column in first table

b. Yes, table can be inserted into cell of another table

c. Yes, but there must be no border in second table

d. No, it's not possible

31. Which of the following is the most commonly used HTTP methods?

a. PRE and POST

b. GET and SET

c. ASK and REPLY

d. GET and POST

32. Your company has a LAN in its downtown office and has now set up a LAN in the manufacturing plant in the suburbs. To enable everyone to share data and resources between the two LANs, what type of device(s) are needed to connect them?

a. Modem

b. Cable

c. Hub

d. Router

33. Fill in the blank:

To connect a computer with a device in the same room, you are likely to use_____.

a. a coaxial cable

b. a dedicated line

c. a ground station

d. a fiber optic cable

34. Which of the following connectivity device is used to extend a network on a purely mechanical basis?

a. Gateway

b. Switch

c. Router

d. Active hub

35. Now-a-days computers all over the world can talk to each other. Which among the following is the special accessory essential for this purpose?

a. Keyboard
b. Modem
c. Scanner
d. Fax

36. In MS Access, to create a new table, in which method you need to specify the field type and size:

a. Create table in Design View
b. Create table using Wizard
c. Create table by Entering data
d. Use a predefined template for the table

37. Fill in the blank:
_____ is an online shopping application that seals personal information in a free plug-in that can be invoked when making a purchase.

a. Digital Purse
b. Digital Wallet
c. Digital Buyer
d. All of the above

38. Fill in the blank:
The combination of Red, Green and Blue values from _____ gives a total of more than 16 million different colours to play with (256 x 256 x 256).

a. 0 to 254
b. 0 to 255
c. 0 to 256
d. 0 to 257

39. Which type of computers uses the 8-bit code called EBDIC?

a. Main computers
b. Microcomputers
c. Mainframe computers
d. Super computers

40. Fill in the blank:
_____ is a set of interactive telecommunication technologies which allows two or more location users to interact via two-way video and audio transmissions simultaneously.

a. Audio conference
b. Video conference
c. Visual collaboration
d. Both b and c

Achiever's Section (Each Question is 2 Marks)

41. Identify the term with the help of the description given below:
1. Like a virus, it is also a self-replicating program
2. The difference between a virus and it is that it does not create copies of itself on one system. It propagates through computer networks
3. It is a standalone malware computer program that replicates itself in order to spread to other computers.
4. It uses a computer network to spread itself, relying on security failures on the target computer to access it.

a. Key logger
b. Worm

c. Cracker
d. Trojan Horse

42. What result set is returned from the following SQL query?
SELECT CustomerName, telephone FROM customers WHERE city in ('Jakarta', 'Durban', 'Australia');

    a. The customer name of all customers who are not living in Jakarta, Durban or Australia
    b. The customer name and telephone of all customers
    c. The customer name and telephone of all customer living in Jakarta, Durban and Australia
    d. The customer name and telephone of all customer living in either Jakarta, Durban or Australia

43. Given below are several usages of the anchor tag in HTML. Which of the following is/are the correct usage of anchor tag?
    i. < a href="http://www.gate.ac.in/HTML/BASIC/testpage.html" >Test Me< /a >
    ii. < a href="../../../BASIC/testpage.html" >Test Me< /a >
    iii. < a href="testpage.html" >Test Me< /a >
    iv. < a href="testpage.html#test" >Test Me< /a >

    a. (i) and (ii)
    b. (i) and (iii)
    c. (i), (ii) and (iii)
    d. All of these

44. In CSS, how do you display a border with the following attribute values:
The top border = 10 pixels
The bottom border = 5 pixels
The left border = 20 pixels
The right border = 1 pixels

    a. border-width : 10px 20px 5px 1px
    b. border-width : 10px 1px 5px 20px
    c. border-width : 5px 20px 10px 1px
    d. border-width : 10px 5px 20px 1px

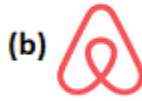**45.** Identify the term with the help of the description given below:
1. It is a self-learning course
2. It is an interactive instructional technique whereby a computer is used to present the instructional material and monitor the learning that takes place
3. It uses a combination of text, graphics, sound and video in enhancing the learning process
4. It is a program of instructional material presented by means of a computer or computer systems

    a. CAI (Computer-Aided Instruction)
    b. CAD (Computer-Aided Design)
    c. CAL (Computer-Aided Learning)
    d. DTP (Desk Top Publishing)

46. Match the following digital service providers with their area of services:

(a)   (i) Provides streaming media and video-on-demand online and DVD by mail.

(b)   (ii) An app-based transportation network and taxi company

(c)   (iii) An online marketplace and hospitality service, enabling people to lease or rent short-term lodging

a.   (a) - (i) (b) - (iii) (c) - (ii)   b.   (a) - (ii) (b) - (iii) (c) - (i)

c.   (a) - (iii) (b) - (ii) (c) - (i)   d.   (a) - (ii) (b) - (i) (c) - (iii)

47. Which of the following statement(s) is/are correct for the use of packet switching?

a.   The subdivision of information into individually addressed packets in conjunction with alternative routing arrangement enabled the transmission path to be altered in the event of congestion or individual link failure

b.   The employment of additional intelligence within the network enabled more sophisticated error control and link control procedures to be applied

c.   By employing wide bandwidth circuits for the trunk networks, substantial economies through extensive sharing of capacity could be achieved

d.   All of the above

48. The research and development department at your father's office has been experimenting with different technologies to help improve the performance of the network. One group has been examining the use of a broadband network.
Select the correct statement about broadband and baseband from the following:

a.   Broadband networks carry several channels on a single cable, whereas in a baseband network several cables carry one channel

b.   Baseband network carry a single channel on a single cable, whereas broadband networks carry several channels on a single cable

c.   Baseband refers to local area networks, and broadband refers to wide area networks

d.   Baseband operates at a standard bit rate, whereas broadband may operate at different rates as needed

49. Which among the following is the correct HTML code to define the target link on a new page?

a.   < a href="http://www.crestolympiads.com/" target="blank" >Click Here< /a >

b.   < a href="http://www.crestolympiads.com/" target="_blank" >Click Here< /a >

c.   < a href="http://www.crestolympiads.com/" target="#blank" >Click Here< /a >

d.   < a href="http://www.crestolympiads.com/" target="@blank" >Click Here< /a >

50. Match the following:

	Column A		Column B
a.	Spoofing	i.	It is the fraudulent attempt to obtain sensitive information such as usernames, passwords and credit card details by disguising oneself as a trustworthy entity in an electronic communication
b.	Phishing	ii.	It is an attempt to exploit a computer system or a private network inside a computer
c.	Stalking	iii.	This type of attack creates a situation in which a person or program successfully identifies as another by falsifying data, to gain an illegitimate advantage
d.	Hacking	iv.	It is unwanted and/or repeated surveillance by an individual or group toward another person

a. (a) - (i), (b) - (iii), (c) - (iv), (d) - (ii)
b. (a) - (ii), (b) - (iv), (c) - (i), (d) - (iii)
c. (a) - (iii), (b) - (i), (c) - (iv), (d) - (ii)
d. (a) - (iv), (b) - (i), (c) - (ii), (d) - (iii)

Answer Key

1.	b	2.	c	3.	b	4.	b	5.	d	6.	a	7.	a
8.	c	9.	c	10.	a	11.	a	12.	d	13.	c	14.	a
15.	a	16.	b	17.	b	18.	c	19.	b	20.	b	21.	d
22.	d	23.	a	24.	b	25.	a	26.	a	27.	c	28.	b
29.	c	30.	b	31.	d	32.	d	33.	a	34.	d	35.	b
36.	a	37.	b	38.	b	39.	c	40.	d	41.	b	42.	d
43.	d	44.	b	45.	a	46.	b	47.	d	48.	b	49.	b
50.	c												