CREST Cyber Olympiad (CCO)

Class 9 (Set - A)

Time Allowed: 1 hour　　　　　　　　　　**Maximum Marks: 60**

- Additional **10 minutes** will be allotted to fill up information on the OMR Sheet, before the start of the exam.
- Fill in all the mandatory fields clearly on the OMR Sheet.
- There are a total of **50 questions** in this booklet comprising **2 sections** namely the **Computer & IT and Achievers' Section** consisting of **40 questions (1 mark each) & 10 questions (2 marks each)** respectively.
- There is no negative marking. The use of a calculator is not permitted.
- There is **only ONE correct option** to a given question.
- Use **HB Pencil / Ball point pen (Blue / Black) only** for marking the correct choice of answers on the OMR Sheet.
- Rough work is to be done in the space provided in the test booklet. Extra plain sheet may be provided by the school for the rough work.
- The OMR Sheet is to be handed over to the invigilator at the end of the exam.
- No candidate is allowed to carry any textual material, printed or written, bits of paper, any electronic device, digital watches, etc. inside the examination hall.
- The use of unfair means may result in the cancellation of the exam. Any such instances must be reported at **+91-98182-94134** or **info@crestolympiads.com**

DO NOT OPEN THIS BOOKLET UNTIL ASKED TO DO SO

FILL IN THE DETAILS

Candidate Name: _____

Class: _____ Section: _____

CREST ID: _____

Computer & IT (Each Question is 1 Mark)

1. Which generation of computer uses LSI and VLSI chips?

   a. First   b. Third
   c. Fourth   d. All of these

2. What is a DOM in HTML?

   a. Hierarchy of objects in ASP.NET
   b. Application programming interface
   c. Convention for representing and interacting with objects in html documents
   d. None of the above

3. Which of the following represents billion characters?

   a. Megabytes
   b. Kilobytes
   c. Gigabytes
   d. None of these

4. What is the other name for the interactivity chart?

   a. IPO chart
   b. Problem analysis chart
   c. Flow chart
   d. Structure chart

5. In Windows 10, by typing which of the following options into the address bar of File Explorer can you check which files or folders you have shared over a network?

   a. \\localadmin   b. \\myhos
   c. \\local   d. \\localhos

6. Fill in the blank:
   The stacking order of viewing objects is decided by the order of the _____.

   a. Frames   b. Scenes
   c. Layers   d. Actions

7. In HTML, using the Hspace attribute adds what to your image?

   a. Space to the top and bottom
   b. Height to all sides
   c. Space to the left and right
   d. Breadth to all sides

8. What is the main function of a command interpreter?

   a. To provide the interface between the API and application program.
   b. To get and execute the next user-specified command.
   c. To handle the files in operating system.
   d. None of these

9. Every animation needs a starting and an ending point. Which of these options is used to set these?

   a. Artwork symbols
   b. Blank frames
   c. Key frames
   d. Beginning point

10. In context to Operating System, what do we call the process when several programs are run at the same time?

    a. Background programming
    b. Multitasking
    c. Symmetric
    d. Foreground Tasking

11. Which of the following multimedia applications do engineers use to design cars before they produce them?

    a. Computer-Aided Design
    b. Computer-Aided Coding
    c. Computer-Aided Development
    d. Computer-Aided Documentation

12. In MS PowerPoint, using which of the following do you get a chance to add text to a slide without even using the standard placeholders?

a. Line Tool
b. Drawing Tool
c. Text Tool Box
d. Auto shapes Tool

13. MPG is a type of file extension for which out of the following types of files?

a. Video
b. Image
c. Audio
d. Text

14. Which out of the following is used as an abbreviated form of English that can be used to outline a program logic?

a. Loop
b. Problem
c. Code
d. Pseudocode

15. In context to Visual Basic, what do we call the method in which the form is loaded into the memory and is then put up on screen?

a. Load
b. Display
c. Arrive
d. Show

16. Which out of the following function is used to return the time intervals between any two dates in the form of year or months in Visual Basic?

a. DateFix()
b. DiDate()
c. DiDiff()
d. DateDiff()

17. Which one of these was an early mainframe computer?

a. UNIC
b. FUNTRIA
c. ENIAC
d. BRAINIA

18. Which of the following term do we use for the output operations?

a. GET
b. READ
c. PRINT
d. RETURN

19. In the following Visual Basic statement,
Dim Days (7) As String
What part of the array does the number 7 refer to?

a. Array name
b. Datatype
c. Lowerbound
d. Upperbound

20. Given below is a piece of code of Visual Basic. Which of the following buttons will be the default button when this code is executed?

answer = MessageBox.Show("A", "B", MessageBoxButtons.YesNoCancel, MessageBoxIcon.Question, MessageBoxDefaultButton.Button2)

a. Yes
b. No
c. Cancel
d. None of the above

21. Fill in the blank:
An IF - THEN - ELSE statement is part of the _____ structure.

a. Selection
b. Iteration
c. Sequence
d. None of these

22. Which of the following is used to change an object from a circle to a square?

a. Mask
b. Shape tween
c. Motion tween
d. Morphing

23. Which of the following statement(s) is/are correct?
Statement 1: A computer stores and process data in binary form.
Statement 2: It is a combination of hardware and software.
Statement 3: The operating system executes the program and instructions given by the user.

a. Statement 1 and statement 3 are correct
b. Statement 2 and statement 3 are correct
c. Statement 1 and statement 2 are correct
d. All statements are correct

24. The system unit of a personal computer typically contains all of the following except:

a. Microprocessor
b. Disk controller
c. Serial interface
d. Modem

25. Fill in the blank:
The mouse is a primary input device but lacks the ability to easily transmit _____ information.

a. Graphical
b. Textual
c. Alpha numerical
d. Numerical

26. What kind of specialized monitor is especially used by graphic artists?

a. Flat-Panel monitor
b. CRT monitor
c. High-Definition television (HDTV)
d. E-books

27. Fill in the blank:
When you copy a file, Windows places a duplicate copy of the file in the temporary storage. The contents of that memory are lost when you shut down the computer. The temporary storage used while copying is called _____.

a. Program
b. Accessibility
c. Notepad
d. Clipboard

28. Using the Find command in MS Word, we can search for which of the following?

a. Characters
b. Formats
c. Symbols
d. All of the above

29. Fill in the blank:
A master document contains _____, each of which contains a pointer to a file on a disk.

a. placeholders
b. subdocuments
c. bookmarks
d. references

30. Multiple calculations can be made in a single formula using which of the following MS Excel feature?

a. Standard Formula
b. Array Formula
c. Complex Formula
d. Smart Formula

31. What will be the output if you format a cell in MS Excel containing 5436.8 as '#,##0.00'?

a. 5,430.00
b. 5,436.80
c. 5,436.8
d. 6.80

32. What will you use to record a sequence of keystrokes and mouse actions to play back later while working on MS Excel?

a. Media player
b. Sound Recorder
c. Calculator
d. Macro Recorder

33. Which of the following is the shortcut key to open the existing MS PowerPoint Presentation?

  a. Ctrl + L   b. Ctrl + N
  c. Ctrl + A   d. Ctrl + O

34. Fill in the blank:
In MS PowerPoint, when the mouse pointer appears as _____, it indicates that the Draw Table feature is on.

  a. Solid plus sign
  b. Solid arrow
  c. I-beam
  d. Pencil

35. Which of the following best describes the term Multiple Access?

  a. Accessing a computer from multiple locations
  b. A kind of network, MAN
  c. If the physical links are shared by more than two nodes
  d. None of the above

36. State whether of the following is True or False:
(i) In the bus topology, heavy Network traffic slows down the bus speed.
(ii) Bus topology is a multipoint configuration.

  a. True, True   b. True, False
  c. False, True   d. False, False

37. Which of the following is independent malicious program that do not need any host program?

  a. Trap doors   b. Trojan horse
  c. Virus   d. Worm

38. Fill in the blank:
The _____ is a code that recognizes some special sequence of input or is triggered by being run from a certain user ID by unlikely sequence of events

  a. Trap door   b. Trojan horse
  c. Logic Bomb   d. Virus

39. Fill in the blanks:
By default, _____ are displayed in web browser when ordered list is used, but the style can be changed using the _____ attribute.

  a. Roman numbers, Style
  b. Alphabets, Style
  c. Numbers, Type
  d. Bullets, Type

40. A search engine is a software program that provides the required information in the form of a list of related websites, based on a search criterion defined by the user. Which is the most commonly used search engine?

  a.   b.

  c.   d.

Achievers' Section (Each Question is 2 Marks)

41. Which of the following statement is true about the storage area network (SAN)?

  a. Storage area network (SAN) consists of hard disk arrays and is maintained separately on the network. However, to all the computers on the network, SAN appears to be an attached disk drive.

b. SAN enables many users and computers to share the same storage, which can be effectively backed up and protected centrally.

c. SAN provides flexibility in scaling up as only the storage unit needs to be upgraded, not the computer boxes using the storage.

d. All of the above

42. Which of the following statements is not true about the processor components and functions, RAM and cache?

a. Registers are essential components of a processor, which are fast storage devices that temporarily hold the data needed for computation.

b. RISC processors are more expensive compared to CISC processors, which could be slower.

c. CPUs come with different kinds of instruction sets such as Complex Instruction Set Computing (CISC) and Reduced Instruction Set Computing (RISC).

d. Latency of the CPU refers to the condition when the RAM of the computer is not fast enough to provide data to the CPU, which results in the CPU running empty cycles.

43. Match the models of IT outsourcing with their descriptions or characteristics – two statements for each model.
   a. Cloud-based model
   b. Joint venture
   i. Both the client and the vendor invest capital, but the vendor provides the skill and personnel and the client becomes the first customer of this new firm.
   ii. Clients enter into an agreement to use the cloud-based services of a vendor, with the arrangement that the vendor will provide the customisation of

the software application and maintenance of it.
   iii. The client and vendor partner to form a third company as a joint venture.
   iv. The software and hardware assets are owned by the vendor and the staff also remain on the vendor's site.

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

44. Which of the following statement(s) is/are false?
Statement 1: Cloud computing implies that computing facilities and infrastructure can be obtained over the Internet.
Statement 2: It is not possible to price cloud services according to the usage and needs of the client.
Statement 3: Applications that have large data streams with variety and high rates of accumulation are not best stored on cloud servers that can accommodate the scale.
Statement 4: Applications, which are characterized by the tight coupling between their hardware and software, cannot be easily moved to the cloud.

a. Statement 1 and Statement 2 are false
b. Statement 2 and Statement 3 are false
c. Statement 3 and Statement 4 are false
d. Statement 1 and Statement 4 are false

45. Match the following in context to MS PowerPoint:

Column A	Column B
a. Slide Design	i. These are the dotted-line containers on slide layouts that hold such content as titles, body text, tables, charts, SmartArt graphics, pictures, clip art, videos, and sounds.
b. Auto Content Wizard	ii. These are the templates for Microsoft Office and MS PowerPoint that you can use to enhance your presentations.
c. Place Holder	iii. It is a feature available in some programs, usually found on the left side of the window. It displays thumbnails of files or features available in the program.
d. Slide Pane	iv. It leads you through a series of questions so you can choose the best layout for your presentation.

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

46. Match the following in context to cloud computing:

Column A	Column B
a. Community cloud	i. The software that manages this cloud responds to
	cloud bursts by provisioning extra resources from the public cloud as required.
b. Private cloud	ii. This cloud is a truly shared facility that allows multiple clients to use the resources provided. It is the closest to the definition of a cloud infrastructure.
c. Public cloud	iii. It is a shared computing infrastructure that is used by a specified community of users that have common needs in terms of specifications.
d. Hybrid cloud	iv. Only one organisation uses this cloud and normally the physical server racks are also present on the organisation's premises.

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

47. Identify the term with the help of the description given below:

1. It is the maximum rate of data transfer across a given path
2. This is computed by taking the number of bits - in a Gigabit network, that would be 1 billion and dividing that by eight to determine the bytes
3. It is the capacity of a wired or wireless network communications link to transmit the maximum amount of data from one point to another over a
4. computer network or internet connection in a given amount of time, usually one second

a. Network   b. Bridge
c. Access time   d. Bandwidth

48. Identify the correct storage option with the help of the description given below:
    i. It is an encrypted connection over the Internet from a device to a network.
    ii. It is a service that creates a safe, encrypted online connection. Internet users may use this to give themselves more privacy.
    iii. It extends a private network across a public network and enables users to send and receive data across shared or public networks as if their computing devices were directly connected to the private network.

a. Virtual Network
b. Remote server
c. Virtual private network (VPN)
d. Integrated services Digital Network (ISDN)

49. Examine the HTML below and identify the number of rows and columns in the HTML table.

```
< table style="width:100%" >
< tr >
< th >Name< /th >
< th >Subject< /th >
< th >Marks< /th >
< /tr >
< tr >
< td >Kangna< /td >
< td >Maths< /td >
< td >91< /td >
< /tr >
< tr >
< td >Eshika< /td >
< td >Physics< /td >
< td >84< /td >
< /tr >
< tr >
< td >Jai< /td >
< td >English< /td >
< td >78< /td >
< tr >
< /table >
```

a. Rows = 2 and Columns = 2
b. Rows = 2 and Columns = 3
c. Rows = 3 and Columns = 4
d. Rows = 4 and Columns = 3

50. Identify the incorrect match:

a. Scalability: The IT infrastructure of a cloud has the ability to address a client's demand for increased resources in real.
b. Elasticity: The IT infrastructure of a cloud has the ability to both expand and contract depending upon the demand for its resources.
c. Heterogeneity: The heterogeneous systems or components of a cloud can be viewed and managed easily through the method of virtualization via a single interface.
d. Virtuality: It is a truly shared facility that allows multiple clients to use the resources provided. It is the closest to the definition of a cloud infrastructure.

Answer Key

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