



## CREST Cyber Olympiad (CCO)

### Previous Year Paper

### Class 9 (Set - A)

**Time Allowed: 1 hour**

**Maximum Marks: 60**

- 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.
- 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: \_\_\_\_\_

## Computers & IT (Each Question is 1 Mark)

1. In Flowchart, diamond shaped symbol is used to represent which of the following options?

- a. Decision box
- b. Statement box
- c. Error box
- d. If-statement box

2. Fill in the blank:  
The Operating System creates \_\_\_\_\_ from the physical computer.

- a. physical computer
- b. virtual computer
- c. virtual device
- d. physical device

3. A flowchart starts with which of the following symbol?



4. Which of these is a way to hide one image in the layer below another?

- a. Tweening
- b. Piling
- c. Masking
- d. Stacking

5. Image links can show a text label by adding which of the following HTML attribute?

- a. alt
- b. str
- c. structure
- d. alternative

6. In context to MS PowerPoint, what do we call the objects that can be seen in the slides and helps with text holding?

- a. Text Holders
- b. Auto layouts
- c. Object holders
- d. Placeholders

7. What do we call a program that is already in execution?

- a. Paging
- b. Demand page
- c. Process
- d. Virtual memory

8. 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

9. Communication using a modulated carrier to apply a data signal to a transmission medium in analogy form is \_\_\_\_\_.

- a. Local area network
- b. Modem
- c. Base band networking
- d. Broad band networking

10. Restart of computer is called \_\_\_\_\_ when computer is already ON.

- a. Cold booting
- b. Warm booting
- c. Shut down
- d. Logging off

11. Complete the sentence:  
Excel worksheet data can be shared with Word document by \_\_\_\_\_.
- inserting an Excel file into Word
  - copy and paste Excel worksheet into Word document
  - link Excel data in a Word document
  - any of the above
12. Identify the term with the help of the given description:  
It is a self-replicating program that infects computer and spreads by inserting copies of itself into other executable code or documents.
- Key logger
  - Worm
  - Virus
  - Cracker
13. Which type of animation uses still frames with a graphic that slightly changes position?
- Pre-production
  - Animation
  - Frame-based animation
  - Vector animation
14. In order to connect to ISP's server, you need \_\_\_\_\_.
- ISP Pin
  - Printer
  - Username and Password
  - None of the above
15. ASCII is a character encoding standard for electronic communication. It represent text in computers, telecommunications equipment, and other devices. What does ASCII stand for?
- American Stable Code for International Interchange
  - American Standard Case for Institutional Interchange
  - American Standard Code for Information Interchange
  - American Standard Code for Interchange Information
16. Which of the following MS Word features is used for monitoring all document changes?
- Edit Document
  - Monitor Change
  - Track Change
  - Track all
17. Which option can be used create a new slide show with the current slides but in a different order?
- Rehearsal
  - Custom Slide show
  - Slide Show Setup
  - Slide Show View
18. What is the maximum zoom percentage in Microsoft PowerPoint?
- 100%
  - 200%
  - 300%
  - 400%
19. State whether of the following is True or False:
- In the bus topology, heavy Network traffic slows down the bus speed.
  - Bus topology is a multipoint configuration.
- True, True
  - True, False
  - False, True
  - False, False
20. Fill in the blank:  
A \_\_\_\_\_ is a program that can infect other programs by modifying them. The modification includes a copy of the virus program, which can go on to infect other programs.
- Worm
  - Virus
  - Zombie
  - Trap doors

- 21.** Which of the following best explains the difference between system software and application software?
- System software is used for presentations; application software controls hardware.
  - System software includes antivirus programs only.
  - Application software is responsible for POST during booting.
  - System software runs the computer hardware; application software performs specific tasks.
- 22.** Which of the following statements are true?  
 A byte can represent 8 different values.  
 A byte can represent 256 different values.  
 A byte can represent 1024 different values.
- Only Statement 1
  - Only Statement 2
  - Only Statement 3
  - None of the above
- 23.** Convert the binary number 101101 to decimal.
- 45
  - 43
  - 51
  - 44
- 24.** Convert the decimal number 31 into its binary equivalent.
- 11111
  - 111001
  - 10101
  - 11110
- 25.** To remove a column permanently from a database table, which command should be used?
- DELETE COLUMN
  - DROP COLUMN using ALTER TABLE
  - REMOVE FIELD
  - CUT COLUMN
- 26.** Which of the following statements is true about deleting a record from a database table?
- It removes the entire database.
  - It removes all fields but keeps the primary key.
  - It removes the entire row from the table.
  - It only hides the data but does not actually delete it.
- 27.** Which tool in MS Access is used to automate the editing of many records at once?
- Query
  - Macro
  - Table View
  - Form Wizard
- 28.** Fill in the blank:  
 A loop variable should be \_\_\_\_\_ inside the loop to avoid infinite loops.
- reset
  - initialised
  - updated
  - printed
- 29.** Which of the following is NOT a basic data type in Python?
- float
  - int
  - bool
  - decimal
- 30.** What does a function help avoid in a Python program?
- Repetition of code
  - Use of variables
  - Input from user
  - Compilation errors
- 31.** What is the purpose of the padding in the box model?
- To create space between content and border
  - To separate the element from other elements
  - To create space inside the content
  - To apply background colours

- 32.** Fill in the blank:  
The outermost layer of the CSS box model is called \_\_\_\_\_.
- a. margin                      b. padding  
c. border                      d. content
- 33.** How is OLE different from a simple copy-paste?
- a. It adds borders to the object  
b. It links or embeds full applications for editing  
c. It works only on PDFs  
d. It removes the source file
- 34.** What happens when you type a website URL in your browser?
- a. The DNS server looks up the IP address of the domain  
b. The IP address changes  
c. The file opens from desktop  
d. The DNS blocks the page
- 35.** When creating a new project, which of the following is not needed?
- a. Canvas size              b. Export file name  
c. Frame rate                d. Timeline layer
- 36.** What is frame-by-frame animation?
- a. Animation using 3D rigs  
b. Each frame drawn separately  
c. Using a single image across all frames  
d. Automatic tweening
- 37.** Which of the following describes clarity in an algorithm?
- a. Uses complex language  
b. Can only be understood by experts  
c. Is easy to read and debug  
d. Avoids using comments
- 38.** Why is blockchain considered secure?
- a. It has a strong firewall  
b. It uses centralised password systems  
c. Each transaction is verified and stored in a tamper-proof manner  
d. It is printed on paper
- 39.** Which of the following helps reduce electronic waste?
- a. Using multiple chargers for one device  
b. Throwing away old computers  
c. Replacing devices every 6 months  
d. Recycling and reusing electronic components
- 40.** What kind of robots are used in hospitals for disinfection?
- a. Painting robots  
b. Vacuum bots  
c. UV light robots  
d. Toy robots

## Achievers' Section (Each Question is 2 Marks)

- 41.** What is the correct HTML tag for making a hyperlink?
- a. `<a url = "http://www.company.com">comp any.com</a>`  
b. `<a>http://www.company.com</a>`  
c. `<a href = "http://www.company.com">comp any</a>`  
d. `<a name="http://www.company.com">company.com<(1)w>`

42. Which of the following statement is false?
- The layered architecture of an IoT(Internet of Things) system is of no help in managing the layers of this system in an independent manner.
  - Virtualisation is key for providing cloud services as the physical location and extent of the hardware is removed from what clients are provided in a virtual manner.
  - In cloud computing, the organisation accesses different servers (application, database, storage, etc.) from a provider on the Internet. It uses client devices and an Internet connection to access these facilities.
  - Cloud computing is the method by which computing facilities and infrastructure are accessed over the Internet, without being hosted on the premises of the organisation.

43. Match the following online services with the names of the owner organisations in the table given below:

	Column A		Column B
1.	Online Video Streaming	a.	Amazon
2.	Online Shopping	b.	Dropbox
3.	Online Storage	c.	YouTube

- 1 – c, 2 – b, 3 – a
- 1 – a, 2 – c, 3 – b
- 1 – c, 2 – a, 3 – b
- 1 – b, 2 – a, 3 – c

44. Match the following MS-PowerPoint components in Column A with their description in Column B:

	Column A		Column B
1.	Slide Design	a.	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
2.	Auto Content Wizard	b.	These are the templates for Microsoft Office and PowerPoint that you can use to enhance your presentations
3.	Place Holder	c.	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
4.	Slide Pane	d.	It leads you through a series of questions so you can choose the best layout for your presentation

- 1 – b, 2 – d, 3 – a, 4 – c
- 1 – a, 2 – d, 3 – b, 4 – c
- 1 – c, 2 – a, 3 – d, 4 – b
- 1 – d, 2 – c, 3 – a, 4 – b

45. Identify category of Operating System with the help of the description given below:
1. It is an operating system that guarantees a certain capability within a specified time constraint
  2. It is an operating system intended to serve real-time applications that process data as it comes in, typically without buffer delays
  3. In this type of Operating System, the response is guaranteed within a specified timing constraint
- a. Mac Operating System
  - b. Real Time Operating System
  - c. Distributed Operating System
  - d. Open Source Operating System
46. Which of the following statements about the virtual private network (VPN) technology are true?
1. The VPN technology enables clients or employees of an organisation to connect to the organisation's network securely using the public Internet.
  2. The need for a VPN arises when the employees of an organisation or students of an educational campus need to securely access the networks of their organisations from outside.
  3. A VPN connection relies on authentication and encryption.
- a. Only 1
  - b. Only 2, 3
  - c. Only 1, 2
  - d. All 1, 2 and 3 are true
47. You want to share a Word document, but ensure nobody can edit it without a password. Which option is correct?
- a. Save as PDF only
  - b. Use "Restrict Editing" under the Review tab
  - c. Turn on Track Changes
  - d. Protect with watermark
48. What will be the output?  
print(2 \*\* 3)
- a. 8
  - b. 6
  - c. 9
  - d. 5
49. What do motion graphics mainly involve?
- a. Characters and storylines
  - b. Abstract visuals and text
  - c. 3D rigging
  - d. Realistic rendering
50. Why are loops useful in flowcharts and algorithms?
- a. They increase hardware use
  - b. They reduce code repetition
  - c. They change file types and sort them
  - d. They remove all conditions to create a better condition

## Answer Key

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