BLOOM Computer Olympiad (BCO)

Question Paper 2024-25

Class 10

Total Questions: **50+5** (Tie-Breaking Section)

Total Time Allotted : 60 minutes

Total Marks : 60

Instructions

1. There are **50 Multiple Choice Questions** in this booklet having 4 options out of which **ONLY ONE** is correct.

2. There are two sections in the Question Paper; **Section A** having 40 Questions carrying 1 Mark each & **Section B** having 10 Higher Difficulty Order Questions carrying 2 Marks each.

3. All questions are compulsory. There is **NO negative** marking for incorrect answers.

4. Total time allotted to complete the paper is 60 minutes.

5. Please fill in your details in the space provided on this page before attempting the paper.

OMR Sheet Instructions

1. Before starting the paper, fill in all the details in the OMR Sheet.

2. Additional 10 minutes will be provided to fill up the OMR sheet, before the start of the exam.

3. Use HB Pencil to darken the circle of the correct Option in OMR sheet. The correct way to darken the circle in OMR sheet is shown below.

   ● ○ ○ ○

4. Use black or blue ball point pen/HB pencil to fill the information in the OMR sheet. Partially filled OMR sheet will not be checked.

5. Return the OMR sheet to the invigilator after the exam.

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Founded by ✳arihant

Section A (1 Mark)

1. How to create a hyperlink in HTML?

   (a)
       thinkandlearn.com

   (b) <a> www.thinkandlearn.com
       <thinkandlearn.com /a>

   (c)
       thinkandlearn.com

   (d) <a url = "www.thinkandlearn.com"
       thinkandlearn.com /a>

2. What tag do you use to directly write the style rules within a document found within the document's head?

   (a) <css>   (b) <style>
   (c) <php>   (d) <script>

3. Which of the following statement is not true?

   (a) You can type text directly into a PowerPoint slide but typing in text box is more convenient.

   (b) From Insert menu choose Picture and then File to insert your images into slides.

   (c) You can view a PowerPoint presentation in Normal, Slide Sorter or Slide Show view.

   (d) You can show or hide task pane from View >> Toolbars.

4. Which of the following is not a Web Service ?

   (a) Using Diksha learning portal
   (b) Sending and receiving email
   (c) File transfer over Bluetooth
   (d) Using a banking portal for online transaction

5. Suhani asks her colleague for her project work and then copies the entire work and submits it to her team leader claiming it to be her own work. The act performed by Suhani is known as
   _____ .

   (a) Phishing   (b) Plagiarism
   (c) Spamming   (d) Virus

6. Which of the following is NOT an example of an event in VB?

   (a) Change the focus of a control
   (b) Click a control
   (c) Drag a control onto a form from the toolbox
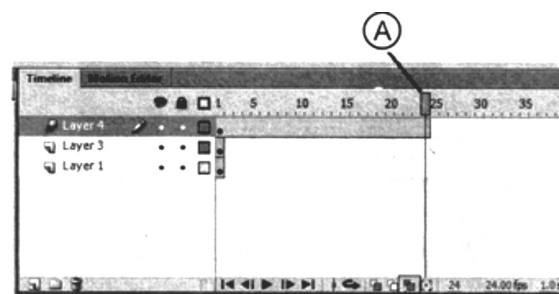   (d) Change the contents of a textbox

7. Which of these tags helps in the creation of a drop-down box or a combo box?

   (a) <input type = "dropdown">
   (b) <list>
   (c)
   (d) <select>

8. 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

9. View the given Flash CS6 image and answer the questions that follow:

   The icon marked by A is called as_____.

   (a) Key frame   (b) Play Head
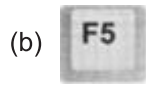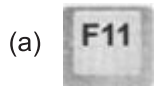   (c) Play status   (d) Current frame

10. What is the code to close a form in Visual Basic?

    (a) Form.Exit()   (b) Form.Close()
    (c) Me.Close()   (d) Me.Clear( )

11. The CSS property that is primarily used for giving a line over a text would be:

    (a) text-decoration: none
    (b) text-decoration: line-through
    (c) text-decoration: underline
    (d) text-decoration: overline

12. The shortcut key that is used to convert a selected object to a symbol in Adobe Animate (previously known as Flash) is _____.

(a) F11
(b) F5
(c) F8
(d) F9

13. What is the Scratch block used to change the direction of a sprite?

(a) Point Towards
(b) Turn To
(c) Face
(d) Rotate Towards

14. Which of the following section does not exist in a slide layout?

(a) Titles
(b) Lists
(c) Charts
(d) Animations

15. In HTML, how do we insert an image?

(a)
(b)
(c)
(d)

16. A website or online platform where individuals or groups regularly publish written content, typically in a reverse chronological order is known as

(a) News Group
(b) Blog
(c) Chat Group
(d) Social Networking

17. In Visual Basic we work with objects, which have.

(a) Projects, solutions, and procedures
(b) Properties, methods, and events
(c) Programmer preference
(d) Classes, actions, and disciplines

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

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

19. 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 the above

20. Which value is a slightly bolder weight than the standard bold in the font attribute?

(a) dark
(b) lighter
(c) light
(d) emphasize

21. 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 the above

22. The _____ is the arrangement of various flash elements, like panels, menus bars, windows etc.

(a) Tools Panel
(b) Menu
(c) Stage
(d) Workspace

23. What is the purpose of the "broadcast" block in Scratch?

(a) To share projects with others
(b) To send a message to other sprites
(c) To display text on the screen
(d) To create an animation effect

24. 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

25. Which HTML tag do we use for displaying the power in the expression, $(x^2 - y^2)$?

(a) <p> (b) <sub>
(c) <sup> (d) None of these

26. Which is considered a valid step for developing a Visual Basic application?

(a) Create a flowchart or pseudocode version of each method
(b) Make a list of the controls needed
(c) Make a list of methods needed for each control
(d) All of the above

27. _____ is an emerging branch in computer science, which interprets means and method of making computers think like human beings.

(a) Block chain (b) VR
(c) AI (d) Cloud computing

28. What is the correct way of sending mail in HTML?

(a) <mail ab@b</mail>
(b) <a href = "ab@b">
(c) <a href = "mailto: ab@b">
(d) None of the above

29. What is the mean of the Booting in the operating system?

(a) Restarting computer
(b) Install the program
(c) To scan
(d) To turn OFF

30. What does the "glide" block in Scratch do?

(a) It moves a sprite to a specific position smoothly.
(b) It plays a smooth animation for a sprite.
(c) It changes a sprite's appearance to look like it is gliding.
(d) It creates a smooth transition between different backdrops.

31. In this generation Time sharing, Real time, Networks, Distributed Operating System was used.

(a) 1st (b) 2nd
(c) 5th (d) 4th

32. Which of the following values is the correct value of this binary code 1011 and 1111?

(a) 11 and 14 (b) 12 and 15
(c) 11 and 15 (d) 12 and 14

33. Which of the following is NOT a Visual Basic Control?

(a) TextBox (b) Label
(c) Form (d) Algorithm

34. Which of the following is not the advantage of database?

(a) Sharing of data
(b) Reduce data redundancy
(c) Increase data inconsistency
(d) Data security

35. In HTML, the tags are _____.

(a) in upper case (b) case-sensitive
(c) in lowercase (d) not case sensitive

36. What is the purpose of the "broadcast and wait" block in Scratch?

(a) To pause the script execution for a certain time
(b) To send a message to other sprites and wait for their response
(c) To end the execution of all scripts in a sprite
(d) To display a message on the screen and wait for user input

37. How does the <bdo> element work?

(a) changes direction of the ltr text
(b) override the direction of the rtl text
(c) stops writing in current direction of text
(d) override the text direction

38. Which of the following supports Windows 64 bit?

(a) Windows XP (b) Windows 2000
(c) Windows 1998 (d) None of these

39. Char is a _____ length data type and varchar is a _____ length data type.

(a) Fixed, Variable
(b) Variable, Fixed
(c) Fixed, Fixed
(d) Variable, Variable

40. The letter S in the abbreviation HTTPS in context of Networking protocols, stands for:

(a) Single   (b) Static

(c) Secure   (d) Sensitive

Section B (2 Marks)

41. Geetika has recently created her social media accounts. She is very excited as she waited so long to go online. She has recently also got admission to a prestigious high school and does not know many students. When she logs into her social media a few days later, she finds that someone is posting negative, demeaning comments on her social media profile. She is also getting repeated emails from unknown people. Whenever she goes online, she is trolled by multiple unknown people.

Geetika is a victim of _____

(a) Eavesdropping   (b) Plagiarism

(c) Phishing   (d) Cyberstalking

42. Andrew's bank has web page to collect some important personal details such as credit card number etc. for the 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

43. What is the Output of the following code?

```
line = "What will have so will"
L = line.split('a')
for i in L:
    print(i, end=' ')
```

(a) ['What', 'will', 'have', 'so', 'will']

(b) Wh t will h ve so will

(c) What will have so will

(d) ['Wh', 't will h', 've so will']

44. What is the Output of the following code?

```
mylist = ['Python', 'Programming']
for i in mylist:
    i.upper()
print(mylist)
```

(a) ['PYTHON','PROGRAMMING']

(b) ['Python', 'Programming']

(c) ['None', 'None']

(d) Unexpected

45. **Assertion (A)** When you enter a query into a search engine, it retrieves and presents a list of web pages, documents, images, videos or other types of content that are relevant to your search.

Reason (R) The goal of information retrieval is to effectively and efficiently find and present information that matches the user's search criteria.

(a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).

(b) Both Assertion (A) and Reason (R) are true, but Reason (R) is not the correct explanation of Assertion (A).

(c) Assertion (A) is true, but Reason (R) is false.

(d) Assertion (A) is false, but Reason (R) is true.

46. Match the following.

	Column-I	Column-II
(i)		(a) Lasso Tool
(ii)		(b) Free Transform Tool
(iii)		(c) Sub selection Tool
(iv)		(d) Selection Tool

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

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

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

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

47. In the context of Python programming, choose the correct statements:

Statement 1 The print() function is used to display output on the screen.

Statement 2 The input() function is used to take input from the user and store it as an integer.

Statement 3 The if statement is used to execute a block of code if a certain condition is true.

(a) Statement 1
(b) Statement 3
(c) Both Statements 1 and 3
(d) None of the above

48. Identify the Foreign Key from the table "Sales".

Table Client

ClientID (Primary Key)

Clientname

Clientphone

Table Sales

SalesID (Primary Key)

ClientID

Profit

(a) SalesID   (b) Profit

(c) Clientname   (d) ClientID

49. You want to find the perimeter of a rectangular room whose sides are represented by dblLength and dblWidth. The statement to find the perimeter of this room is.................
(The * means multiplication)

(a) dblPerimeter = dblLength * dblWidth

(b) dblPerimeter = 2 * dblLength + 2 * dblWidth

(c) dblPerimeter = 2 * dblLength

(d) dblPerimeter = dblLength + dblWidth

50. Choose the incorrect statement out of the given statements:

  I. The SUM function in Excel adds the numbers in a range of cells.

  II. The AVERAGE function calculates the middle value of a data set.

  III. The VLOOKUP function is used to search for a value in the first column of a table.

  IV. The IF function is used to make logical comparisons between a value and what you expect.

(a) Only I   (b) Only II

(c) II and III   (d) Only IV

Tie-Breaking Section

Instructions

1. This section consists of 5 questions.
2. The score achieved in this section will not be included in the total marks.
3. If overall marks of two or more students are same, winner will be decided based on the score in this section.
4. Participation in this section is optional and students may choose to attempt it or not.

1. Match the following lists.

	List I		List II
A.	Memory Buffer Register	1.	Memory address of the next instruction.
B.	General Purpose Registers	2.	Address on the memory location from which data has to be read.
C.	Program Counter	3.	Store the result and intermediate results during a processing.
D.	Memory Address Register	4.	Data read from the location specified by the MAR.

Codes

	A	B	C	D
(a)	3	2	1	4
(b)	2	3	4	1
(c)	4	3	1	2
(d)	2	4	1	3

2. Identify proper menu options / word features where the options given are available.

(A) Insert Footnote (i) Insert (ii) Layout (iii) References

(B) New comment (i) Design (ii) Mailings (iii) Review

Codes

(a) A → i , B → ii
(b) A → iii, B → iii
(c) A → ii , B → iii
(d) A → ii , B → i

3. Identify the valid statements.

    I. Opera is a website.
   II. Each website can be reached by a unique IP address.

Codes

(a) Only I
(b) Only II
(c) Both I and II
(d) Neither I nor II

4. Which of the following statements is/are correct regarding Raster images?

    I. Raster images are more commonly called Pix map.

   II. Raster images are more commonly called Bitmap also.

Codes

(a) Only I   (b) Only II
(c) Both I and II   (d) Neither I nor II

5. Match the following lists.

	List I		List II
A.	and	1.	Relational operator
B.	>=	2.	Shorthand Assignment operator
C.	+=	3.	Logical operator
D.	%	4.	Arithmetic operator

Codes

	A	B	C	D
(a)	3	4	1	2
(b)	3	2	4	1
(c)	2	3	4	1
(d)	3	1	2	4