CANDIDATE'S RECEIPT

INSTRUCTIONS TO CANDIDATE

1. **Fill in all the information requested clearly in capital letters.**

TEST CODE | 0 | 1 | 2 | 2 | 9 | 0 | 1 | 0 |

SUBJECT INFORMATION TECHNOLOGY – Paper 01

PROFICIENCY GENERAL

REGISTRATION NUMBER | | | | | | | | | | |

FULL NAME _____
(BLOCK LETTERS)

SIGNATURE _____

DATE _____

2. **Ensure that this slip is detached by the Supervisor or Invigilator and given to you when you hand in this booklet.**

3. **Keep it in a safe place until you have received your results.**

INSTRUCTION TO SUPERVISOR/INVIGILATOR

Sign the declaration below, detach this slip and hand it to the candidate as his/her receipt for this booklet collected by you.

I hereby acknowledge receipt of the candidate's booklet for the examination stated above.

Signature _____
Supervisor/Invigilator

Date _____

CANDIDATE – PLEASE NOTE!

PRINT your name on the line below and return this booklet with your answer sheet. Failure to do so may result in disqualification.

FORM TP 2024091

TEST CODE **01229010**

MAY/JUNE 2024

CARIBBEAN EXAMINATIONS COUNCIL

CARIBBEAN SECONDARY EDUCATION CERTIFICATE® EXAMINATION

INFORMATION TECHNOLOGY

Paper 01 – General Proficiency

1 hour 15 minutes

31 MAY 2024 (a.m.)

READ THE FOLLOWING INSTRUCTIONS CAREFULLY.

1. This test consists of 60 items. You will have 1 hour and 15 minutes to answer them.

2. In addition to this test booklet, you should have an answer sheet.

3. Each item in this test has four suggested answers lettered (A), (B), (C), (D). Read each item you are about to answer and decide which choice is best.

4. On your answer sheet, find the number which corresponds to your item and shade the space having the same letter as the answer you have chosen. Look at the sample item below.

   Sample Item

   Which of the following pairs represents general purpose software tools?

   (A) Spreadsheet and database software
   (B) Word processor and accounting software
   (C) Student record system and database software
   (D) Insurance processing and spreadsheet software

   Sample Answer

   The best answer to this item is "Spreadsheet and database software", so (A) has been shaded.

5. If you want to change your answer, erase it completely before you fill in your new choice.

6. When you are told to begin, turn the page and work as quickly and as carefully as you can. If you cannot answer an item, go on to the next one. You may return to that item later.

DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD TO DO SO.

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1. Which part of the central processing unit (CPU) coordinates the activities of the entire unit?

   (A) Register
   (B) Control unit
   (C) Main memory
   (D) Arithmetic logic unit

2. Which of the following is true about the arithmetic and logic unit (ALU)?

   (A) Stores data permanently
   (B) Performs mathematical calculations
   (C) Is also called memory or main memory
   (D) Sequentially accesses and decodes program instructions

3. Which of the following can be termed 'application software'?

   (A) DOS
   (B) Linux
   (C) Mac OS
   (D) Microsoft Edge

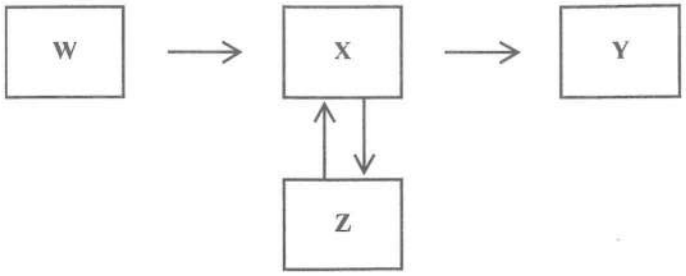
4. Which of the following activities would NOT be considered cloud storage?

   (A) Data stored on remote servers
   (B) Data stored and accessible on a LAN
   (C) Data back-up and storage devices on the Internet
   (D) Data managed by storage providers or hosting companies

5. Which of the following is NOT included in cabled transmission media?

   (A) Coaxial
   (B) Satellite
   (C) Fibre optics
   (D) Twisted pair

Item 6 refers to the following diagram which shows the basic operations of a general-purpose computer system.



6. Which of the following functions is carried out in Box Z?

   (A) Input
   (B) Output
   (C) Storage
   (D) Processing

7. The RP Secondary School has two campuses in different locations and wants the administrative staff to have access to all student and teacher data. Which of the following networks would be MOST suitable to enable such access?

   (A) LAN
   (B) WAN
   (C) MAN
   (D) WLAN

8. For which of the following interface types is the user required to remember specific instructions and syntax?

   (A) Menu-driven
   (B) Graphical user
   (C) Computer screen
   (D) Command-driven

GO ON TO THE NEXT PAGE

9. The device used for printing industrial quality architectural drawings is the

(A) plotter
(B) scanner
(C) laser printer
(D) dot matrix printer

10. Which of the following devices is used to input data into the computer?

(A) Mouse
(B) Monitor
(C) USB flash drive
(D) External hard drive

11. Which of the following countermeasures can ONLY be implemented as a software measure, to mitigate the effects of identified threats to a computer system?

(A) Firewall
(B) Encryption of data
(C) Backup and recovery
(D) Intrusion detection system

12. Unauthorized, real-time interception of a private communication on a computer network is referred to as

(A) propaganda
(B) identity theft
(C) industrial espionage
(D) electronic eavesdropping

13. Double entry data verification involves

(A) different data being entered once
(B) the data entered being copied to another device
(C) different data being entered once by two different persons
(D) the same data being entered once and then re-entered by another person

14. Part of a private network using Internet technology and public telecommunications that can be accessed by business suppliers, vendors, customers and partners is called an

(A) Internet
(B) Intranet
(C) Extranet
(D) Ethernet

15. Data was captured using a data-capture form. Which of the following data checks should be used to ensure that the data captured matches the source data?

(A) Range
(B) Visual
(C) Data type
(D) Consistency

16. Which of the following functions is performed by a modem?

(A) Modulates analog and digital signals
(B) Regulates analog and digital signals
(C) Prevents analog and digital signals from being uploaded
(D) Prevents analog and digital signals from being downloaded

17. Which of the following is true about an intranet?

(A) Offers unlimited access
(B) Allows access to suppliers
(C) Allows access to employees
(D) Offers limited access to employees and suppliers

18. Transferring data from your computer to a remote computer is referred to as

(A) browsing
(B) uploading
(C) data mining
(D) downloading

19. Which of the following types of technologies is commonly used by banks to read data on cheques?

(A) POS
(B) OCR
(C) OMR
(D) MICR

Items **20** and **21** refer to the following information.

Customers log in to an online application using a username and an encrypted password to submit a record of their monthly meter reading to a utility company.

20. Which file organization method is used for the filing of all the records submitted by customers online?

(A) Serial
(B) Random
(C) Sequential
(D) Index-sequential

21. Usernames and encrypted passwords are used to authenticate customers when they are logging into their accounts. Which of the following is the MOST efficient file access method to use to authenticate customers when they are logging into their accounts?

(A) Direct
(B) Serial
(C) Random
(D) Sequential

22. In order to use a program stored on a secondary storage device, the program MUST be transferred

(A) into ROM
(B) into RAM
(C) onto a flash drive
(D) onto an optical disk

23. Records on magnetic tape are stored

(A) directly
(B) randomly
(C) sequentially
(D) indexed-sequentially

24. A web developer is important to a company because this person

(A) is responsible for the company's website
(B) assigns web addresses to all users in a company
(C) backs up web files and stores the disks at another location
(D) monitors the shutting down of competitors' websites

25. Which of the following is the LEAST reliable instruction for keeping passwords to online accounts secure?

(A) Use only long and strong passwords.
(B) Change your passwords on a regular basis.
(C) Keep a copy of all passwords on your computer.
(D) Create passwords with numbers and special characters.

26. Which of the following examples describe a denial-of-service (DOS) attack?

I. A sudden excessive increase in the number of junk emails
II. Inability to reach regular websites because of too many requests
III. Decrease in network performance because of a flood of transactions

(A) I and II only
(B) I and III only
(C) II and III only
(D) I, II and III

27. Which of the following protocols is used to ensure that all web pages and servers communicate with each other?

(A) IP
(B) FTP
(C) VoIP
(D) HTTP

28. Which of the following is true of accessing files sequentially?

(A) Occurs in any order
(B) Starts with the first record
(C) Starts with the largest data field
(D) Starts with the smallest data field

29. Which of the following machine-readable documents is NOT a turnaround document?

(A) Lottery slips used to purchase lottery tickets
(B) Multiple choice sheets used in examinations
(C) Fillable electronic survey forms completed online
(D) Sheets used to record electric meter readings

30. Shaun's desktop computer on his home LAN suddenly loses its ability to access the Internet but his smartphone and other wireless devices continue to access the Internet using WiFi.

Which of the following MOST likely caused the problem?

(A) The modem is frozen and needs rebooting.
(B) No service on ISP telecommunication line.
(C) The computer and/or router needs rebooting.
(D) The network cable is loose or needs replacing.

31. Which of the following are NOT categorized as system software?

(A) Utilities
(B) Translators
(C) Productivity tools
(D) Operating systems

32. The order of connecting the hardware components of a LAN, starting from the ISP's telecommunication line, to a desktop computer is

(A) modem to router to switch
(B) switch to router to modem
(C) router to modem to switch
(D) modem to switch to router

Items **33** and **34** refer to the following information.

Before purchasing a computer, Alyssa was given a sheet with the following hardware specifications.

Intel Pentium IV 64 bit	
3.6 GHz	2 GB RAM
160 GB SATA HDD	7200 rpm

33. The CPU speed of the computer is

(A) 2 GB RAM
(B) 64 bit
(C) 7200 rpm
(D) 3.6 GHz

34. The speed of the hard drive in the computer is

(A) 2 GB
(B) 64 bit
(C) 7200 rpm
(D) 3.6 GHz

35. In the URL http://www.shoes.com, 'shoes.com' represents the

(A) extension
(B) domain name
(C) company name
(D) internet company

36. Which of the following is an example of a correctly formatted e-mail address?

(A) micah@loofa.net
(B) @micah.loofa.net
(C) micah.loofa@net
(D) micah@loofa@net

37. Which of the following symbols MUST be placed in front of the column letter and row number to create an absolute reference?

(A) *
(B) +
(C) $
(D) –

38. Selecting or highlighting a paragraph creates a

(A) file
(B) block
(C) merge
(D) document

39. The following formula is located in position B6 of a spreadsheet.

= B3 + B4 + B5

What would be the resulting formula if the initial formula was copied to the position located immediately to the right?

(A) C3 + C4 + C5
(B) A3 + A4 + A5
(C) A3 + A4 + B5
(D) C3 + C4 + B5

40. In creating a query, a student entered the following criteria for the date field.

> = 05/11/2022 and < = 05/14/2022

The output will show days

(A) after 14 May 2022 only
(B) from 11 to 14 May 2022
(C) before 11 May and after 14 May 2022
(D) between 14 May and 5 November 2022

41. Which of the following is used for executing HTML code?

(A) Browser
(B) Hyperlink
(C) Web server
(D) Uniform Resource Locator

42. Real numbers entered in a cell on a spreadsheet are automatically

(A) right justified with no decimal places
(B) right justified with decimal places
(C) left justified with decimal places
(D) centred with no decimal places

43. What type of cell addressing must be used to keep the cell address in a formula the same, when the cell address is copied to another cell?

(A) Fixed
(B) Direct
(C) Relative
(D) Absolute

Item **44** refers to the following sentence.

When the hen is ready to lay her eggs, then and only then will the hen find a secluded spot to lay them.

44. Which of the following features would be LEAST efficient when using the Find and Replace dialogue box to replace all occurrences of the word "hen" with the word "duck"?

(A) Skipping to each individual occurrence
(B) Having the text in parts of words replaced
(C) Finding each exact occurrence of the word "hen"
(D) Finding the word "hen" using 'whole words only'

Items **45** and **46** refer to the following spreadsheet.

	A	B	C	D	E	F	G
1	**FirstName**	**LastName**	**Birth date**	**Gender**	**Married**	**Phone**	**Exercise**
2	Roy	SINGH	02-Jan-97	M	TRUE	688-4444	020
3	Jamilla	JOHNSON	22-Mar-82	F	FALSE	720-9123	020
4	Tyson	BARRINGTON	23-Mar-96	M	TRUE	630-1234	010
5	Dennis	RAMPERSAD	04-Jul-78	M	FALSE	456-7890	050
6	Micheal	BAPTISTE	23-May-99	M	FALSE	456-6676	030
7	Joelle	BROWN	18-Jun-00	F	TRUE	620-0190	040
8	Smith	JONES	20-Dec-97	M	TRUE	640-2823	020
9	Micheal	JONES	18-Jun-96	M	TRUE	640-4929	050
10	Denise	CLEMENT	18-Jun-02	F	FALSE	640-9989	030
11							
17	**Exercise No**	**Exercise Name**	**Amount**				
18	010	Zumba	500				
19	020	Aerobics	400				
20	030	Spin	300				
21	040	Boxing	600				
22	050	Kick Boxing	800				

45. Which of the following formulas will display the exercise name "Zumba" in any cell where the formula is placed?

(A) =VLOOKUP (G4, A18 : C22, 2, FALSE)
(B) =VLOOKUP (G5, A18 : C22, 2, FALSE)
(C) =VLOOKUP (G4, A18 : C22, 3, FALSE)
(D) =VLOOKUP (G10, A18 : C22, 2, FALSE)

46. Which of the following formulas will count the number of customers whose gender is equal to M in Column D?

(A) =COUNT(D1 : D10, "M")
(B) =COUNTA(D2 : D10, "M")
(C) =COUNTIF(D1 : D10, "M")
(D) =COUNTIF(D2 : D10, "M")

47. Which of the following features allows the user to insert individual names in a primary document?

(A) Footer
(B) Header
(C) Mail merge
(D) Search and replace

48. When creating a database for a super-market, the MOST appropriate data type to use for the price of an item is

(A) text
(B) number
(C) currency
(D) autonumber

49. The field that uniquely identifies a record in a database is called the

(A) foreign key
(B) primary key
(C) alternate key
(D) secondary key

50. Which of the following characteristics must two database tables have in order for them to be linked?

(A) Composite keys
(B) The same data in all tuples
(C) At least two tuples in the table
(D) At least one common attribute name

Item **51** refers to the following algorithm.

```
Read (A, B)
If A < B Then
Print(A);
```

51. Which of the following tasks does the algorithm perform?

(A) Reads two numbers and prints the first number
(B) Reads two numbers and prints the smaller number
(C) Reads two numbers and prints the first number if it is smaller than the second number
(D) Reads two numbers and prints the first number if it is larger than the second number

52. You have been asked to write a program to calculate and print the seven times table from 1 to 12. Which FOR statement below has the correct high-level language syntax to accomplish the task?

(A) FOR count = 0 to 12 DO...END
(B) FOR count = 1 DOWNTO 12... END
(C) FOR count = 12 DOWNTO 1... ENDFOR
(D) FOR count = 1 to 12 DO... ENDFOR

53. When implementing a program, which of the following steps comes after executing?

(A) Linking
(B) Compiling
(C) Maintaining
(D) Interpreting

54. The MOST appropriate data type for storing the amount of interest earned on a sum of money is

(A) real
(B) char
(C) string
(D) integer

55. Which of the following terms is an invalid variable name?

(A) Sum
(B) 2count
(C) Vat15
(D) Count

56. The decision box of a program flow chart shows the

(A) link to another page
(B) test to be carried out
(C) calculations to be done
(D) input and output operators

57. A computer programmer is coding an algorithm which calculates the class average for a given exam. He creates a variable called class_avg. Which data type should he specify when declaring this variable?

(A) Real
(B) Integer
(C) Boolean
(D) Character

58. Claude was asked to write a pseudocode that will accept THREE numbers from the user, find and display their average.

He wrote the following.

Step 1: Start
Step 2: Read n1, n2, n3
Step 3:
Step 4: Write average
Step 5: Stop

Which of the following statements should be placed at Step 3?

(A) Set average ← (n1* n2* n3)
(B) Set average ← (n1+ n2+ n3)
(C) Set average ← (n1+ n2+ n3)/2
(D) Set average ← (n1+ n2+ n3)/3

59. Which of the following is an example of a conditional construct?

(A) REPEAT ... UNTIL
(B) FOR ... ENDWHILE
(C) IF ... THEN ... ELSE
(D) WHILE ... ENDWHILE

60. When testing an algorithm for correctness, which of the following manual testing methods is MOST effective in verifying the results?

(A) Trace table
(B) Desk check
(C) Test data
(D) Dry run

END OF TEST

IF YOU FINISH BEFORE TIME IS CALLED, CHECK YOUR WORK ON THIS TEST.

DO NOT
WRITE ON
THIS PAGE