



மாகாணக் கல்வித் திணைக்களம்
வடக்கு மாகாணம்

Provincial Department of Education – Northern Province



Second Term Examination 2022

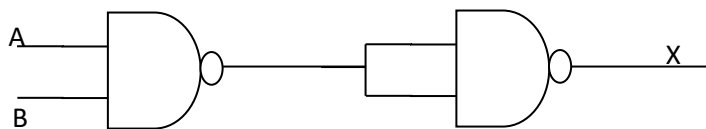
Grade 10	Information & Communication Technology	Time: Three hours
Index No:.....	80 E I	Additional Reading Time: 10 Minutes

Instructions:

- ❖ Answer all questions.
- ❖ In each of the questions 1 to 40, pick one the alternatives (1), (2), (3), (4) which is correct or most appropriate.
- ❖ Mark a cross (X) on the number corresponding to your choice in the answer sheet provided.

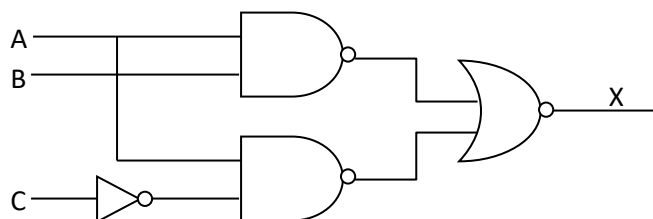
1. Who invented analytical engine?
(1) Blaise Pascal (2) Charles Babbage (3) Howard Aiken (4) Herman Hollerith
2. Which of the following characteristics were decreased when transistors were replaced by integrated circuits?
(1) speed, size (2) speed, capacity
(3) power consumption, size (4) speed, price
3. Which of the following device is used to scan the internal organs of human using x-rays?
(1) MRI (2) CT (3) ECG (4) EEG
4. Which of the following is not a data?
(1) Number of members in a family
(2) 100 students failed to attend the school today
(3) Marks obtained by a student
(4) 10% of students don't attend the school everyday
5. In which computer generation, EDVAC computers were used?
(1) 1st generation (2) 2nd generation (3) 3rd generation (4) 4th generation
6. Which of the following is an output device?
(1) Joystick (2) Microphone (3) Plotter (4) Touchpad
7. Which part of the hard disk stores the data?
(1) head (2) actuator arm (3) platter (4) spindle
8. Which of the following port can't be used for connecting the monitor to a computer?
(1) VGA (2) DVI (3) HDMI (4) PS/2
9. Which of the following is a non – volatile memory?
(1) Random access memory (2) Read only memory
(3) Cache memory (4) Memory registers
10. is used for connecting two different computer networks together.
(1) switch (2) NIC (3) router (4) firewall

11. The device used for scanning documents such as photos, exam papers, etc. and input them to computers
 (1) optical mark recognition (2) Magnetic ink character reader
 (3) Flatbed scanner (4) Barcode scanner
12. Which device is used to convert the digital data to be sent through the analog telephone line?
 (1) switch (2) NIC (3) MODEM (4) firewall
13. Which of the following is not an advantage of star topology?
 (1) easy to troubleshoot the network issues (2) requires more cables
 (3) possible for expansion (4) failure of a computer affects the network
14. Meena has **3 dogs** and **beautiful cats** in her house. The type of data mentioned in bold letters respectively belong to
 (1) quantitative, qualitative (2) qualitative, quantitative
 (3) quantitative only (4) qualitative only
15. If the binary number 1100111_2 represents the letter 'g' in ASCII coding system, What letter is represented by the decimal number 107?
 (1) j (2) i (3) k (4) h
16. Which of the following is not a valid BCD bits patten?
 (1) 1001 (2) 0111 (3) 1010 (4) 0010
17. Which of the following is equivalent to 56_{10} ?
 (1) 11000_2 (2) 111001_2 (3) 101000_2 (4) 111000_2
18. The binary equivalent of the octal number 625_8 .
 (1) 110010100_2 (2) 110010101_2 (3) 110000111_2 (4) 111010101_2
19. Which of the following is the largest number?
 (1) 135 (2) 10000010_2 (3) 215_8 (4) $6D_{16}$
20. How many characters can be represented in EBCDIC coding system?
 (1) 256 (2) 128 (3) 2^{128} (4) 2^{16}
21. Which of the following is the largest file size?
 (1) 2^{32} byte (2) 2^{20} KB (3) 10000 Byte (4) 2^{11} MB
22. The equivalent Boolean expression for NOT(NOT A AND NOT B) is
 (1) $\overline{A \cdot B}$ (2) $\overline{A} + \overline{B}$ (3) $\overline{A} \cdot \overline{B}$ (4) $\overline{\overline{A} \cdot \overline{B}}$
23. Which of the following logic gate has the same output of the given logic circuit?



- (1) NOT (2) AND (3) OR (4) NAND

24. If the output $X=1$, What are the Boolean values need to be given for the inputs A, B and C?



- (1) $A=0, B=1, C=1$ (2) $A=1, B=1, C=1$ (3) $A=1, B=1, C=0$ (4) $A=0, B=0, C=1$

25. A question paper consists of four questions. Students have to choose three questions for answering. Question 1 (Q1), Question 4 (Q4) are compulsory. Students may choose either Question 2 (Q2) or Question 3 (Q3) as the third question.

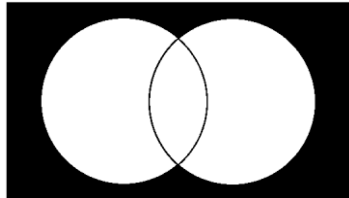
Which of the following expression correctly describes the above scenario?

- (1) Q1 AND Q2 AND (Q3 OR Q4) (2) (Q2 OR Q3) AND (Q1 OR Q4)
 (3) Q2 AND Q3 AND (Q1 OR Q4) (4) (Q2 OR Q3) AND Q1 AND Q4

26. What is the output of the expression $(1+1).(1+0)$ in Boolean algebra?

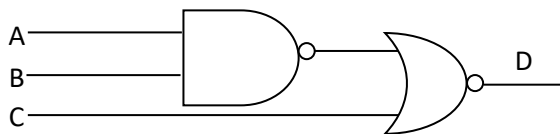
- (1) 2 (2) 0 (3) 1 (4) 3

27. The logic gate which is represented by the shaded section of the given figure



- (1) NOR (2) AND (3) OR (4) NAND

28. If the output $D=1$, What are the Boolean values need to be given for the inputs A, B and C?



- (1) A=0, B=0, C=0 (2) A=1, B=1, C=0 (3) A=1, B=1, C=1 (4) A=1, B=0, C=0

29. Which of the following is not an operating system?

- (1) Ubuntu (2) Macintosh (3) iOS (4) Ms word

30. Consider the following functions:

- (A) Managing files and folders
 (B) Managing input devices
 (C) Providing security

Which of the above is / are the function(s) of operating systems?

- (1) A only (2) A, B only (3) B,C only (4) All A, B, C

31. The type of software used for maintaining the computer by enhancing the performance of it.

- (1) Translator (2) Device driver (3) Utility software (4) Spreadsheet

32. Which is single user single task operating systems?

- (1) Windows 7 (2) Macintosh (3) Ms DOS (4) Ubuntu

33. Consider the following statements:

- (A) Disk formatting prepares a data storage device for storing data
 (B) Disk defragmentation rearranges fragmented files on a storage device
 (C) Disk partitioning divides an individual drive into multiple logical drives

Which of the above statements are correct?

- (1) A, B only (2) A, C only (3) B,C only (4) All A, B, C

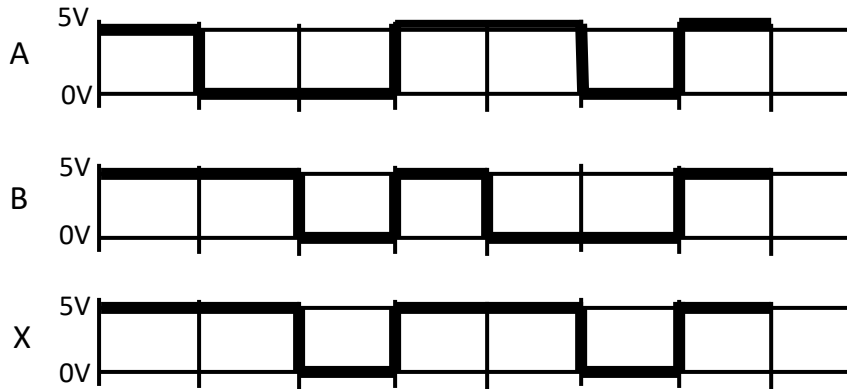
34. Which of the following is not a system software?

- (1) Operating systems (2) Translators (3) Word processing (4) Utility software

35. Which is the file extension of Ms word?

- (1) exe (2) pptx (3) docx (4) txt

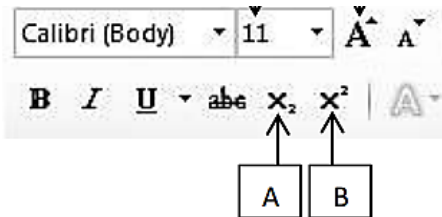
36. In the following graph, A, B are inputs and X is the output.



Which of the following expression obtained for output X?

- (1) A.B (2) A+B (3) $\overline{A.B}$ (4) $\overline{A+B}$

37. Which of the following is shown by the labels A and B respectively?



- (1) Superscript, increase font (2) Superscript, Subscript
 (3) Subscript, decrease font (4) Subscript, Superscript

38. What is the shortcut key for center alignment in word processing software?

- (1) Ctrl + C (2) Ctrl + A (3) Ctrl + E (4) Ctrl + R

39. Which of the following word processing software is available in cloud computers?

- (1) Ms word (2) Open office writer (3) Google docs (4) Libre office writer

40. Consider the following statements about word processing software.

- A) It allows to format characters into different sizes and styles
- B) It allows to insert text and shapes in pages
- C) It allows to add animations into pages

Which of the above is/are correct?

- (1) A only (2) A, B only (3) A,C only (4) All A, B, C