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සියලු ම හිමිකම් ඇවිරිණි]

[முழுப் பதிப்புரிமையுடையது]

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ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව
 இலங்கைப் பரீட்சைத் திணைக்களம் இலங்கைப் பரීட்சைத் திணைக்களம் இலங்கைப் பரීட்சைத் திணைக்களம் இலங்கைப் பரීட்சைத் திணைக்களம் இலங்கைப் பரීட்சைத் திணைக்களம்
 Department of Examinations, Sri Lanka Department of Examinations, Sri Lanka Department of Examinations, Sri Lanka Department of Examinations, Sri Lanka Department of Examinations, Sri Lanka
 ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව
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අධ්‍යයන පොදු සහතික පත්‍ර (සාමාන්‍ය පෙළ) විභාගය, 2008 දෙසැම්බර්
 கல்விப் பொதுத் தராதரப் பத்திர (சாதாரண தர)ப் பரீட்சை, 2008 டி.செம்பர்
 General Certificate of Education (Ord. Level) Examination, December 2008

තොරතුරු හා සන්නිවේදන තාක්ෂණය	I	පැය එකයි
தகவல், தொடர்பாடல் தொழினுட்பவியல்	I	ஒரு மணித்தியாலம்
Information & Communication Technology I	I	One hour

Note: (i) Answer all questions.

(ii) In each of the questions 1 to 40, pick one of the alternatives (1), (2), (3), (4) which you consider as correct or most appropriate.

(iii) Mark a cross (X) on the number corresponding to your choice in the answer sheet provided.

(iv) Further instructions are given on the back of the answer sheet. Follow them carefully.

(v) After answering paper I and paper II, tie the two sets of answer scripts together and hand over.

1. Which one of the following does **not** contain information?

- (1) A weather report (2) A time table
 (3) A price list displayed in a super market (4) An unlabelled chart

2. is a very small computer that can be held in the palm of a person.

- (1) PC (2) Laptop (3) PDA (4) Minicomputer

3. Which one of the following is **not** a pointing device?

- (1) Light pen (2) Joystick (3) Trackball (4) Barcode reader

4. Consider the following statements regarding storage media.

- (A) A typical floppy disk has less storage capacity than a compact disk.
 (B) A modern hard disk has more storage capacity than a compact disk.
 (C) A digital versatile disk has more storage capacity than a modern hard disk.

Which one of the following is true?

- (1) (A) only (2) (B) only (3) (A) and (B) only (4) (C) only

5. After reading an article on digital images, which has been published on the school's wall paper, a student wanted to verify the following statements with his teacher.

- (A) A digital image consists of a large number of picture elements called pixels.
 (B) To store a digital image containing more colours or pixels, you need more computer memory.
 (C) Digital images look better with more colours and more pixels.

The teacher's answer would be :

- (1) only (A) is correct. (2) only (B) is correct.
 (3) only (A) and (C) are correct. (4) all (A), (B) and (C) are correct.

6. Television broadcast can be considered as an example of communication.

- (1) simplex (2) half duplex
 (3) full duplex (4) point to point

7. What is the topology of the computer network shown in Figure - Question 7?

- (1) Bus (2) Star
 (3) Ring (4) Tree

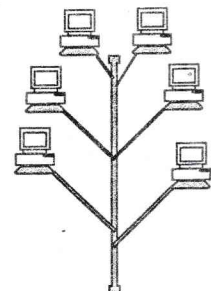


Figure - Question 7

8. In a Personal Computer (PC), an alphabetic, a numeric or a special character is represented by a
 (1) bit (2) nibble (3) byte (4) kilobyte
9. The binary equivalent of the octal number 36_8 is
 (1) 110011_2 (2) 101110_2 (3) 11110_2 (4) 11111111_2
10. A megabyte contains:
 (1) 2^6 kilobytes. (2) 2^{20} bytes. (3) 10^6 bytes. (4) 2^{20} bits.
11. The decimal equivalent of 111000_2 is
 (1) 7 (2) 38 (3) 56 (4) 70
12. The binary equivalent of the decimal number 33 is
 (1) 1111_2 (2) 011011_2 (3) 100010_2 (4) 100001_2
13. The value of $A9_{16}$ is equivalent to
 (1) 169_{10} (2) 10011010_2 (3) 1211_8 (4) both (1) and (3)
14. If $P=101_2$ and $Q=1010_2$ then $P+Q$ is
 (1) 1111_2 (2) E_{16} (3) F_{16} (4) both (1) and (3)

15. Which Boolean relation below gets verified by the truth table given in Figure - Question 15?

- (1) $A + \bar{A} = 1$ (2) $A \cdot \bar{A} = 0$
 (3) Both (1) and (2) (4) $A + A = A$

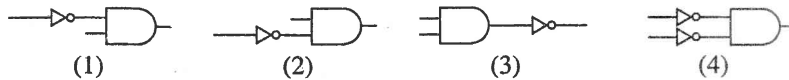
A	\bar{A}	Output
1	0	1
0	1	1

Figure - Question 15

16.

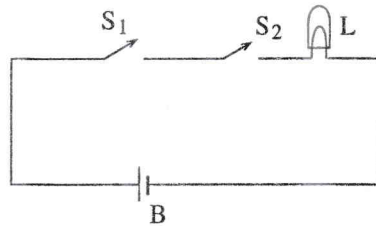


Which one of the following circuits indicates the construction of a NAND logic gate by using the above logic gates?



17. Which one of the following digital logic gates can be used to characterize the operation of the electrical circuit shown in Figure-Question 17?

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



- L - Lamp
 S_1 - Switch 1
 S_2 - Switch 2
 B - Battery

Figure - Question 17

18. Loading an operating system into the memory of a personal computer is known as
 (1) assigning (2) compiling (3) interpreting (4) booting
19. In word processing, which one of the following symbols indicates the aligning of text on both left and right margins of a document?
 (1) (2) (3) (4)
20. A note of text placed at the bottom of the page of a document that usually cites a reference for part of the main body of text is known as a/an
 (1) offset (2) header (3) footer (4) footnote
21. The general term that describes a collection of programs that facilitate storing, manipulating, maintaining and utilizing data is
 (1) Integrated Office Software (2) Database Management Software
 (3) Spreadsheet Processing Software (4) Desktop Publishing Software

22. An owner of a bookshop stores the details of books in a database for easy reference. A table in this database has a field named PRICE, which contains the price of each book. In which order should he sort the table using PRICE, to organize the data from the most expensive to the cheapest?
- (1) Ascending (2) Descending (3) Chronological (4) Numeric

23. The following formulae are entered into the cells A1, A2 and A3 of a worksheet respectively.

	A	B	C
= 2>=1	1		
= "A">"B"	2		
= AND (2>=1, "A">"B")	3		

Which of the above cell / cells, displays / display FALSE?

- (1) A1 only (2) Both A1 and A2 (3) Both A1 and A3 (4) Both A2 and A3
24. Figure - Question 24 shows a part of a worksheet.

A student tries the following ways to explore the alternative methods of getting the average value of the numbers as indicated in the worksheet.

Which one of the following would give an incorrect result?

- (1) = AVERAGE(A1:C3)
 (2) = (A1+B2+C3)/3
 (3) = SUM(A1:C3)/3
 (4) = SUM(A1:C3)/9

	A	B	C	D
1	12			
2		5		
3			10	
4				

Figure - Question 24

25. When answering a question paper, a student spends 10 minutes to read it and plan the answers, 40 minutes to write the answers and 10 minutes to check the answers. The best way to represent graphically, the time taken for each activity as a percentage of total time is to use a chart.

- (1) pie (2) line (3) column (4) XY (scatter)
26. If N is an Integer variable, the following code :

```
N=10
Do While N>=5
  N = N-1
Loop
```

- (1) executes 6 times. (2) executes 5 times. (3) never begins. (4) never ends.
27. The particular field of a table that uniquely identifies a record is the
- (1) key field (2) main field (3) alternate field (4) primary field

28. Consider the following three statements A, B and C.

- (A) Installing a new version of software in a computer is an example of uploading.
 (B) Submitting a video file to a web server is an example of uploading.
 (C) A client computer receiving an audio file from a web server is an example of downloading.

Which one of the following is false?

- (1) (A) only (2) (B) only (3) (C) only (4) (B) and (C) only
29. Which one of the following relationships is correct, regarding the contents in column X and Y of the table shown in Table-Question 29?

Column X	Column Y
(A) Syntax error	(P) wrong keyword
(B) Logic error	(Q) wrong punctuation
	(R) unexpected result

Table-Question 29

- (1) (A) with (P) and (R) (2) (A) with (Q) and (R)
 (3) (B) with (P) (4) (B) with (R)

30. The logical structure of the flowchart given in the *Figure - Question 30* shows :

- (1) a sequence.
- (2) a simple selection.
- (3) both sequence and simple selection.
- (4) an iteration.

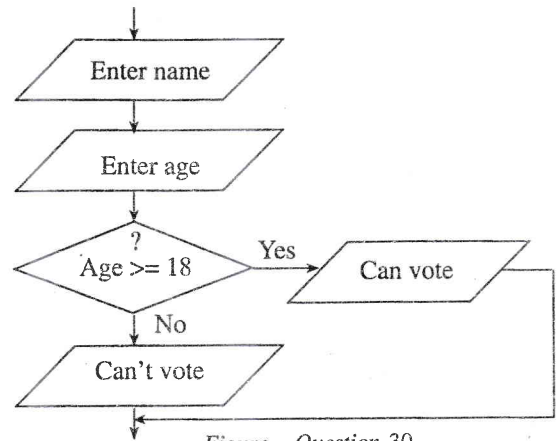


Figure - Question 30

31. The following is a brief description of a system that provides the motorists with information on traffic conditions on a motorway.

The system collects raw data such as the speed and the number of vehicles in a specific area of the motorway and transmits them to a road side computer. After analyzing the data, the computer, provides useful information to the motorists helping them to decide on alternative routes they can take when there is heavy traffic congestion.

The above scenario best describes a/an :

- (1) real time system.
 - (2) batch processing system.
 - (3) off line system.
 - (4) automated system.
32. Systems maintenance does **not** involve :
- (1) upgrading software.
 - (2) improving performance.
 - (3) introducing major changes.
 - (4) correcting minor faults.
33. World Wide Web can be best described as :
- (1) another name for the Internet.
 - (2) a world wide computer network.
 - (3) a system of interlinked hypertext documents accessed through the Internet.
 - (4) a large repository of electronic documents.
34. Vineetha borrows a book from her teacher, Miss. Maheshika, to read during the weekend. When she opens the book at home she finds a piece of paper inside the book containing the following note.
- Type of Internet connection: Dialup
 Date of connection : 26/07/2008
 User name : maheshika
 Password : akihseham
- She understands that it should be the details of her teacher's Internet connection. Which one of the following best describes her behaviour to be ethical?
- (1) Return the book as if she did not take any notice of it.
 - (2) Inform immediately about the incident and say sorry for it.
 - (3) Inform immediately about the incident and remind her to change the password.
 - (4) Use the above details to test the connection and then inform the teacher about the incident.
35. In computer applications, the acronym CAD generally stands for :
- (1) Computer Aided Drawing
 - (2) Computer Aided Design
 - (3) Computer And Data
 - (4) Customized Application Design
36. In relation to e-mail, **Re:** in the subject box stands for
- (1) Receive
 - (2) Reply
 - (3) Refer
 - (4) Regarding

37. A sequential file organization is most suitable for a /an :
- (1) airline seat reservation system. (2) payroll system.
(3) library system. (4) directory enquiry system.
38. Which one of the following allows you to insert a comment in an HTML document?
- (1) <@ (2) <* (3) <& (4) <!
39. The main parts of an HTML document are
- (1) <html> and </html> (2) title and body
(3) head and body (4) header and footer
40. A student writes the following three statements regarding high-level languages in a class assignment and submits it to the teacher.
- (A) A high-level language is a computer language that is easily understood by human.
(B) It needs no translation to machine language.
(C) An example of a high-level language is Java.
- The teacher cuts that part “is easily understood by human” in (A) and writes “resembles human languages”. He/she deletes (B) completely and leaves (C) unchanged.
- Which one of the following statements describes an **invalid** reason for the teacher’s action?
- (1) The teacher deletes the part mentioned above in (A) because it is incorrect.
(2) The teacher writes “resembles human languages” because it is more suitable.
(3) The teacher deletes (B) completely because it is incorrect.
(4) The teacher ignores (C) because it is correct.

* *