

Department of Examinations, Sri Lanka பொதுத் தகவல் தொழினுட்பவியல் பரீட்சை, 2013 General Information Technology Examination, 2013		GIT01 E I, II
பொதுத் தகவல் தொழினுட்பவியல் பரீட்சை, 2013 General Information Technology Examination, 2013		
பொதுத் தகவல் தொழினுட்பவியல் General Information Technology	I, II I, II I, II	மூன்று மணித்தியாலம் Three hours

General Information Technology I

Important : * Answer all questions on the Answer Sheet provided.

* Write your Index Number in the space provided on the answer sheet.

* Instructions are given on the back of the answer sheet. Follow them carefully.

* In each of the questions 1 to 40, pick one of the alternatives (1), (2), (3), (4) which is correct or most appropriate and mark your response on the answer sheet in accordance with the instructions given therein.

1. What is the binary equivalent of the decimal number 57?
 (1) 101001 (2) 110001 (3) 111011 (4) 111001
2. The Central Processing Unit (CPU) comprises of
 (1) Arithmetic Unit and Control Unit.
 (2) Logic Unit and Control Unit.
 (3) Arithmetic and Logic Unit (ALU) and Control Unit.
 (4) Arithmetic and Logic Unit.

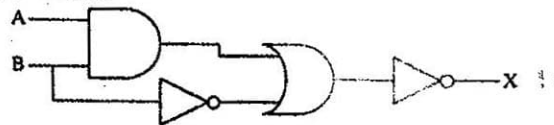
3. Consider the following truth table:

Input	Output
0 0	0
0 1	1
1 0	1
1 1	1

What is/are the logic gate(s) that represent(s) the above truth table?

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

4. Consider the following logic circuit:

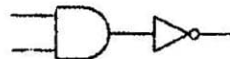


If the value of the output X of the above logic circuit is 1, determine the values for inputs A and B.

- (1) A=0 and B=0 (2) A=1 and B=0 (3) A=0 and B=1 (4) A=1 and B=1

5. A truth table and its corresponding logic circuit are given below.

Input	Output
0 0	(X)
0 1	1
1 0	1
1 1	(Y)



What are the values of (X) and (Y) in the truth table respectively?

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

6. Which of the following is an/are example(s) for Utility software in a computer system?

- A - Compiler B - Word processing software
 C - Web browser D - Disk defragmenter

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

7. Consider the following images A, B and C, showing different types of network cables:



A



B



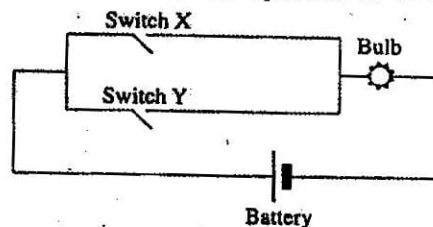
C

Which of the following correctly represents A, B and C?

- (1) A = coaxial, B = fiber optic, C = twisted pair (2) A = fiber optic, B = coaxial, C = twisted pair
 (3) A = coaxial, B = twisted pair, C = fiber optic (4) A = fiber optic, B = twisted pair, C = coaxial
8. Which of the following can be considered as examples for data communication?
 A - Communication between two computers over a local area network (LAN)
 B - Communication over the Internet
 C - Sending a text message (SMS) using a mobile phone
 (1) A and B only (2) B and C only (3) A and C only (4) All A, B and C
9. Microwave, infrared wave and radio wave are examples of
 Which of the following terms is suitable to fill the blank in the above statement?
 (1) guided media (2) bounded media (3) unguided media (4) unprotected media
10. The main parts of a Web address (Uniform Resource Locator) are marked as A, B and C in the following example:
http://www.schoolnet.lk/aboutus.html
 [A] [B] [C]

What do A, B and C stand for?

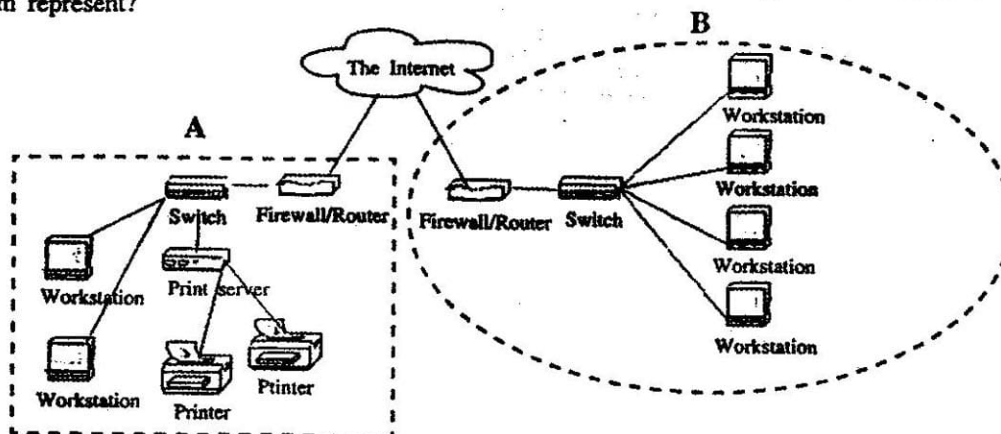
- (1) A = Protocol, B = Domain name, C = Page (2) A = Domain name, B = Page, C = Protocol
 (3) A = Page, B = Protocol, C = Domain name (4) A = Protocol, B = Page, C = Domain name
11. Consider the following circuit, which is similar to the operation of a certain logic gate:



Which of the following statement(s) is/are correct regarding the above circuit?

- A - The bulb illuminates when switch X is turned ON.
 B - The bulb illuminates when both switches X and Y are turned ON.
 C - The bulb illuminates when the switch X is turned OFF and the switch Y is turned ON.
 (1) A and B only (2) B and C only (3) A and C only (4) All A, B and C
12. Which of the following statement(s) is/are true about a digital signal?
 A - Human voice in face to face communication is an example for a digital signal.
 B - Digital signals are represented by square waves.
 C - A sea wave is an example for a digital signal.
 (1) A only (2) B only (3) C only (4) B and C only
13. Which of the following are the factors to be considered in selecting a data transmission media for a network?
 A - Data transmission rate
 B - Distance
 C - Cost and ease of installation
 (1) A and B only (2) B and C only (3) A and C only (4) All A, B and C

14. A and B in the following diagram shows networks in two countries. What type of network does the following diagram represent?



- (1) Local Area Network
(2) Metropolitan Area Network
(3) Wide Area Network
(4) Mobile Network
15. Which of the following only represents the services which are provided by the Internet?
(1) Electronic Mail, World Wide Web, File Transfer Protocol
(2) Electronic Mail, Search Engines, World Wide Web
(3) Search Engines, Electronic Mail, File Transfer Protocol
(4) World Wide Web, Social Networking, Electronic Mail
16. Which of the following is not an essential requirement for sending an e-mail?
(1) A device such as a computer
(2) recipient's e-mail address
(3) A connection to Internet
(4) Sender's signature
17. The mail server of an e-mail service performs the same functions that a performs in a traditional postal mail service.
Which of the following terms is suitable to fill the blank in the above statement?
(1) postbox
(2) post office
(3) postman
(4) stamp
18. Which of the following icons is used to justify the text in a word processing software?
(1) (2) (3) (4)
19. The shortcut key combination *Ctrl+F* is used in word processing software to
Which of the following phrases is suitable to fill the blank in the above statement?
(1) replace specific text.
(2) activate formatting tool bar.
(3) find specific text.
(4) save the document.
20. Which of the following tasks could be performed by pressing the icon in a word processor?
(1) Increase the indent level of a paragraph.
(2) Clear all the formatting applied to a document.
(3) View the paragraph marks and other hidden formatting symbols (non printing characters) in the document
(4) View the page setup menu.
21. Assume that you pressed the key N in the middle of a slide show to move the presentation forward by one slide. Which of the following keys can be used to return to the earlier slide?
(1) P
(2) B
(3) W
(4) N
22. Consider the following statements A, B and C:
A - Checking for computer viruses
B - Managing directories and files
C - Controlling input/output devices
Which of the above statements represent some functions of an operating system?
(1) A and B only
(2) B and C only
(3) A and C only
(4) All A, B and C
23. What is the root directory of C:\users\grade12\git?
(1) users
(2) grade12
(3) git
(4) C:\

24. Assume that the free space in the hard disk of your computer is very low. You want to make some free space without deleting any of the files that you have saved. Which of the following system tools could be used for this purpose?

A - Disk clean up B - Disk defragmenter C - Character map
(1) A only (2) B only (3) C only (4) A and B only

25. Which of the following are correct forms of cell addresses used in a spreadsheet application?

A - C\$5 B - \$C5 C - C5\$
(1) A and B only (2) B and C only (3) A and C only (4) All A, B and C

26. What is the value displayed in cell A8, if it contains the following formula?

=RANK(A5, A1:B7)

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

	A	B
1	1	
2		2
3	3	
4		4
5	5	
6		
7	7	6
8		

27. Assume that the cell B3 contains the following formula:
=A\$1*B2

If this formula is copied to cell C3, what value would be displayed in cell C3?

(1) 2 (2) 3
(3) 4 (4) 5

	A	B	C
1	1	2	3
2	2	3	4
3	2		
4			

28. Minimum and maximum temperatures (in Celsius) in 4 cities on a certain day are given in the following spreadsheet.

	A	B	C	D	E
1					
2		Colombo	Galle	Kandy	Jaffna
3	Min	26	25	22	26
4	Max	29	28	28	31
5					

Consider the following chart types:

A - Bar B - Pie C - Line

Which of the following chart type(s) is/are most suitable to graphically represent the above data?

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

29. A database includes a table that contains data about students in a school. A in the table holds the data related to one student.

Which of the following terms is suitable to fill the blank in the above statement?

(1) field (2) record (3) form (4) query

30. Which of the following objects in a database management system is most suitable for presenting information in a predefined format?

(1) form (2) query (3) report (4) table

31. A key is a field or a combination of fields in a relational database table that can be used to identify its records uniquely.

Which of the following terms is suitable to fill the blank in the above statement?

(1) foreign (2) primary (3) redundant (4) relationship

32. Following figure shows a section of a database table used in a library information system.

How many fields and records are respectively contained in this table?

(1) 2 and 3 (2) 3 and 4
(3) 4 and 3 (4) 4 and 4

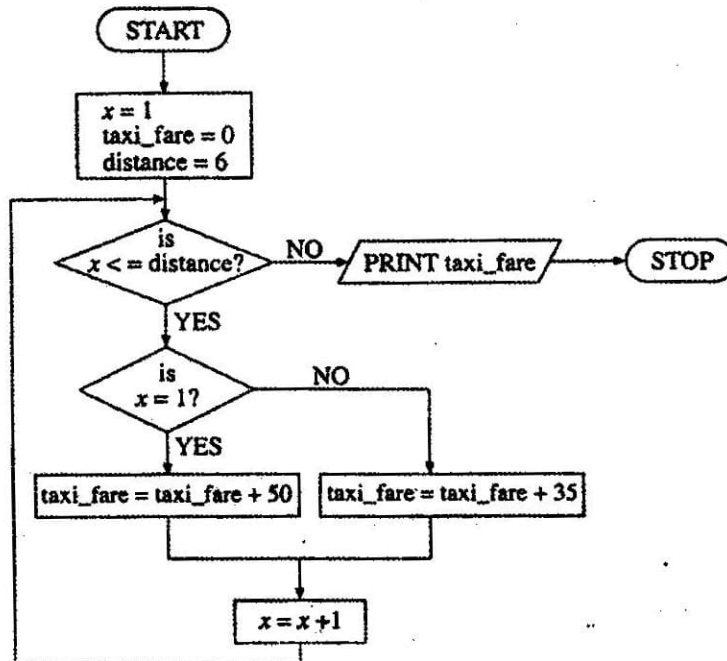
	BookID	AuthorID	ISBNNumber	Publisher
	11111	4367	1118540573	XYZ
	11123	3346	1449343503	PKR
	11134	4432	1449320104	XYZ

33. view displays the structure of fields in a database table.

Which of the following terms is suitable to fill the blank in the above statement?

- (1) Design (2) Datasheet (3) Data type (4) Field properties

- The following flowchart illustrates how the fare for a 3-wheeler taxi ride is calculated for a certain distance:



- Use the above flowchart to answer questions 34 to 37.

34. Which of the following control structures have been used in the above flowchart?

- (1) repetition, selection and sequence (2) repetition and sequence
(3) repetition and selection (4) selection and sequence

35. What is the value of x , when the above *taxi_fare* calculation process terminates?

- (1) $x = 4$ (2) $x = 5$ (3) $x = 6$ (4) $x = 7$

36. What is the final value of *taxi_fare*?

- (1) 120 (2) 155 (3) 190 (4) 225

37. What is the output of the flow chart, if the condition "is $x = 1$?" is changed to "is $x = 2$?"

- (1) 120 (2) 155 (3) 190 (4) 225

38. A Data Entry Operator has been diagnosed with a condition called Repetitive Stress Injury (RSI). Which of the following questions will you ask him to find out whether his work environment could be a reason for his health condition?

A - Are your keyboard and mouse correctly positioned to avoid strain on your hands and fingers?

B - Do you work with a good posture?

C - Do you get breaks in regular intervals to avoid eye-strain?

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

39. An Uninterrupted Power Supply (UPS) unit can be used to provide hardware level protection to computer systems. Which of the following is/are correct regarding the function of an UPS unit?

A - Protects computer systems from the risk of sudden power failures and power changes

B - Protects computer systems from computer viruses

C - Protects computer systems from unauthorized access by external parties

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

40. The librarian in the lending counter of a school library uses a certain type of information system. Which of the following best describes the type of information system used in the lending counter?

- (1) Strategic Information System (SIS) (2) Transaction Processing System (TPS)
(3) Decision Support System (DSS) (4) Executive Information System (EIS)