

සාමාන්‍ය තොරතුරු තාක්ෂණ විභාගය, 2015
 பொதுத் தகவல் தொழினுட்பவியல், 2015
 General Information Technology Examination, 2015

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 பொதுத் தகவல் தொழினுட்பவியல் I, II
 General Information Technology I, II

පැය තුනයි
 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.

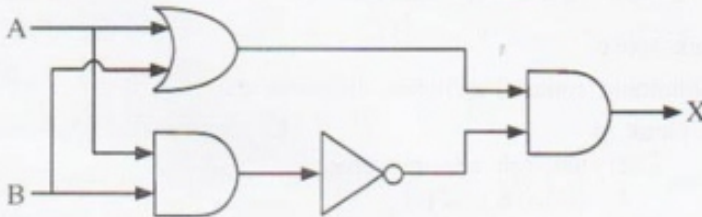
* In each of the questions 1 to 40, pick one of the alternatives (1), (2), (3), (4) which is **correct or most appropriate** and mark your response on the answer sheet in accordance with the instructions given therein.

1. In which of the following situation/s will a tablet computer be suitable?

- A - for a sales representative to use while he is travelling
 B - to be used in a school office to enter daily attendance data of students
 C - to enter data during a field visit

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

2. Consider the following logic circuit diagram.



A	B	X
0	0	
0	1	
1	0	
1	1	

The outputs X for the inputs given in the truth table for the above logic circuit are, respectively,

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

3. Which of the following sentence(s) is/are correct?

- A - The hard disk has a larger capacity than main memory.
 B - The data in main memory are lost when the power is turned off while the data in hard disk are not.
 C - The data in main memory are stored in electronic circuits while the data in the hard disk are stored on magnetic media.

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

4. Figures 1 and 2 below illustrate two circuits that use a battery and two switches (A and B) to operate a bulb.

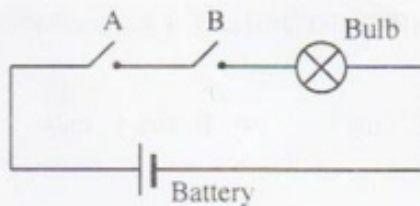


Figure 1

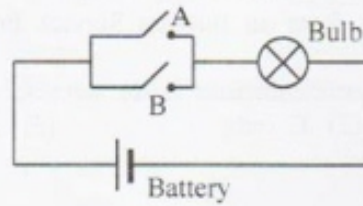


Figure 2

Which of the following logic gate combinations represent the operation of the above two circuits in figures 1 and 2 respectively?

(1) D, D (2) D, D (3) D, D (4) D, D

Table 1

File	Size (MB)
A	224
B	770
C	815
D	1025

5. Table 1 lists four files and their sizes.

Which of the files in the table could be stored in a flash memory drive having a total capacity of 4 GB, if 3GB of the flash memory is already used?

- (1) A and B only (2) A and C only
(3) B and C only (4) C and D only
6. Which of the following decimal numbers is equivalent to the binary number 100110?
(1) 27 (2) 30 (3) 38 (4) 43
7. Which of the following binary numbers is equivalent to the decimal number 73?
(1) 1000101 (2) 1001001 (3) 1010001 (4) 1100001
8. Consider the following statements.
A - Infrared transmission is an example for the use of unguided media.
B - Microwave transmission generally used for long distance data communication is an example for the use of radiated media.
C - Fibre optic cables are examples for unguided media.
Which of the above statement/s is/are correct?
(1) A only (2) B only (3) A and B only (4) B and C only
9. What is the most likely name of the folder that stores deleted messages in an email software?
(1) Drafts (2) Inbox (3) Sent (4) Trash
10. Which of the following statement/s is/are correct?
A - IP addresses are used to identify computers on the Internet.
B - Internet and the World Wide Web (WWW) are two separate but related things: WWW is a service on the Internet while the Internet is the network infrastructure providing such services.
C - Large files such as videos which cannot be sent by e-mail as attachments can be sent to another computer via FTP (File Transfer Protocol).
(1) B only (2) C only (3) A and B only (4) All A, B and C
11. Which of the following fields is most suitable as a primary key for a database table used for storing data about books in a school library?
(1) author name (2) book title (3) ISBN (4) price
- Consider the following database table to answer questions 12, 13 and 14. The table shows data about items available for sale at a school canteen.

Product_ID	Product_Description	Quantity	Unit_Price	Supplier_ID
P001	Yoghurt	25	30.00	S02
P002	Milk (Vanilla)	35	20.00	S02
P003	Milk (Chocolate)	25	20.00	S02
P004	Peanut Packs	55	10.00	S05

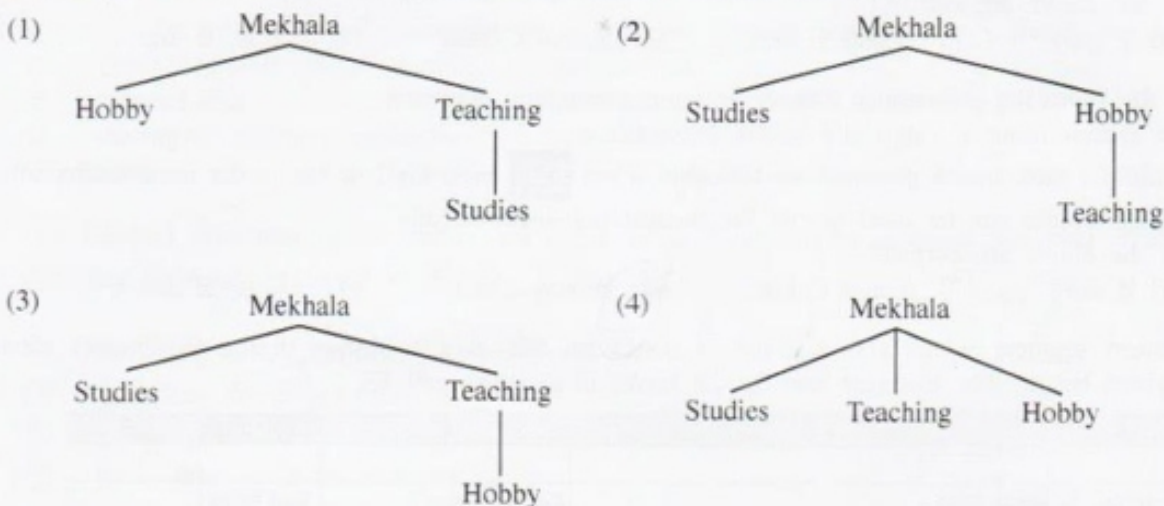
12. What is the most suitable data type for 'Unit_Price'?
(1) Boolean (2) Currency (3) Number (4) Text
13. How many records are there in the table?
(1) 4 (2) 5 (3) 20 (4) 25
14. Which of the following fields is most suitable as the primary key?
(1) Product_ID (2) Quantity (3) Supplier_ID (4) Unit_Price
15. Which of the following is/are appropriate to be used as a password in an email software that you use?
A - your full name without spaces
B - a term which is more than eight characters long and has at least one capital letter, one simple letter, one digit and one special character such as %
C - your date of birth
(1) A only (2) B only (3) A and B only (4) All A, B and C

16. Which of the following is an operating system?

- (1) Microsoft Powerpoint (2) Microsoft Word
(3) OpenOffice Impress (4) Ubuntu

17. Mekhala is a student studying English Literature, Western Music and Geography for her A/Level examination. She also helps some O/Level students in her village by teaching them English and Mathematics. Music is her hobby. She has a lot of files on the above areas that she wants to store in her computer using a suitable directory structure.

Which of the following directory structures would be the most suitable?



18. Which of the following statements are correct?

- A - A computer can be conveniently used without an operating system.
B - The disk defragmentation utility changes non-contiguous files on a disk to contiguous files to optimize performance.
C - The operating system interface could be used to control the basic settings in a computer.
- (1) A and B only (2) A and C only (3) B and C only (4) All A, B and C

19. Consider the following statements.

- A - checking the spellings and grammar of a document
B - controlling and operating the logic gates in the hardware
C - managing resources and input output devices in a computer system

Which of the above are functions of an operating system?

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

20. Some menu headings and some sub-menus in a word processing package are listed in columns A and B respectively.

A

- A1. Insert
A2. Page Layout
A3. View




B

- B1. Margins, Orientation, Size
B2. Print Layout, Outline, Zoom
B3. Table, Picture, Header, Footer

The correct matching between columns A and B is:


- (1) A1:B1, A2:B2, A3:B3 (2) A1:B2, A2:B3, A3:B1
(3) A1:B3, A2:B1, A3:B2 (4) A1:B3, A2:B2, A3:B1

21. Which of the following icons available in a word processing package can be used to create a bulleted list?

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

22. Consider the equation $x = n_1 + n_2$ in a word processed document. Which of the following features in the word processing package will help to display the numbers 1 and 2 as shown in the equation?

- (1) Font face change (2) Font size change
(3) Subscript (4) Superscript

23. A teacher uses a presentation software in slide show mode and during the presentation she wants to draw the attention of the class towards her for a few seconds by hiding the content of the current slide. Which key should she press?
 (1) A (2) B (3) F1 (4) F5
24. Consider the following statements with respect to slide design in electronic presentations.
 A - Slides should be kept simple to ease the reader's understanding of the content.
 B - It is good to make each slide independent if possible.
 C - One should use colour and text effectively.
 Which of the above are correct?
 (1) A and B only (2) A and C only (3) B and C only (4) All A, B and C
25. Consider the following statements with respect to presentation software.
 A - One cannot insert a video clip into a presentation.
 B - To insert a table into a presentation one could select  from the tool bar in the presentation software.
 C - Timing feature can be used to run the presentation automatically.
 Which of the above are correct?
 (1) A and B only (2) A and C only (3) B and C only (4) All A, B and C
26. A spreadsheet segment which shows a list of books on sale at a bookshop during the literary month of 2015 is given below. The discount rate for all books is given in cell B9.

	A	B	C	D	E
1					
2	BookNo	Book Title	Regular Price	Sale Price	
3	0001	Baddegama(Village in the Jungle)	325		
4	0002	Madolduwa	200		
5	0003	Space Odessy	400		
6	0004	Clever Poet and Rice Grains	225		
7					
8					
9	Discount	20%			
10					
11					

A formula is written in cell D3 to display the sale price of the book '0001'. This formula is to be copied to the range D4:D6 to display the sale prices of other books. Which of the following is a valid formula to be written in cell D3?

- (1) =C2-C2*SB9 (2) =C2-C2*SB\$9 (3) =C2-C2*B9 (4) =C2-C2*B9\$
27. Which of the following SUM function(s) is/are valid?
 (A) SUM(A2,A3:A5) (B) SUM(A3:A7) (C) SUM(A3,A4,A7)
 (1) (A) only (2) (B) only (3) (A) and (B) only (4) All (A), (B) and (C)
28. Which of the following formula/formulae is/are valid?
 (A) =A3+A5
 (B) =A3+A5+SUM(K1:K6)
 (C) SUM(K1:K6)
 (1) (A) only (2) (B) only (3) (C) only (4) (A) and (B) only
29. Consider the following spreadsheet segment.

If the formula in cell C2 is copied to the range C3:C6, what will be the values in cells C2 and C5 respectively?

	A	B	C	D	E
1	name	marks			
2	saman		=RANK(B2,\$B\$2:\$B\$6)		
3	anwar	67	RANK(number, ref, [order])		
4	thabotharn	90			
5	nazeer	68			
6	Kamala	80			
7					

- (1) 3, 5 (2) 5, 3
 (3) 34, 68 (4) 34, 80

30. Which of the following media uses light waves for communication?

- (1) co-axial cable (2) optical fiber (3) twisted pair (4) USB cable

31. Consider the following media.

- A - twisted pair cable
B - USB cable
C - optical fiber

Which of the above media are suitable to be used to connect a laptop computer directly to a standalone printer?

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

32. Which of the following are advantages of a computer network compared to a standalone desktop?

- A - sharing of data among machines on the network
B - reduced risk of malware attacks on the machines connected to the network
C - sharing of software applications on the central server

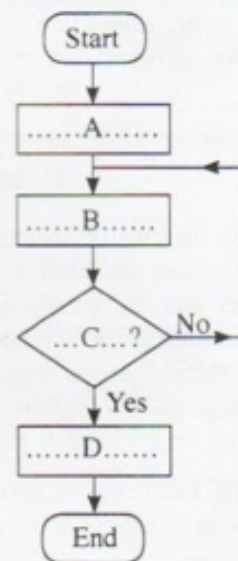
- (1) A only (2) B only (3) A and B only (4) A and C only

33. The labelled flowchart below shows the steps to be followed for crossing the road safely. The relevant activities involved are listed as (P), (Q), (R) and (S).

- (P) - Cross the road carefully
(Q) - Stop near the Zebra crossing
(R) - Look right, left and right again
(S) - Is the road clear on both ways

Which of the following gives the correct matching?

- (1) A: (Q), B: (P), C: (R), D: (S)
(2) A: (Q), B: (R), C: (S), D: (P)
(3) A: (R), B: (S), C: (Q), D: (P)
(4) A: (S), B: (R), C: (Q), D: (P)

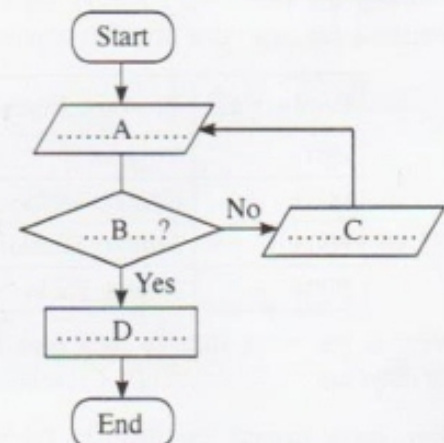


34. The labelled flowchart below shows the user login process in an online email system. The relevant activities involved are listed as (P), (Q), (R) and (S).

- (P) - Display error message
(Q) - Are the user name and password valid
(R) - Enter user name and password
(S) - Permit user into the system

Which of the following gives the correct matching?

- (1) A: (P), B: (Q), C: (R), D: (S)
(2) A: (Q), B: (R), C: (P), D: (S)
(3) A: (R), B: (Q), C: (P), D: (S)
(4) A: (S), B: (Q), C: (R), D: (P)



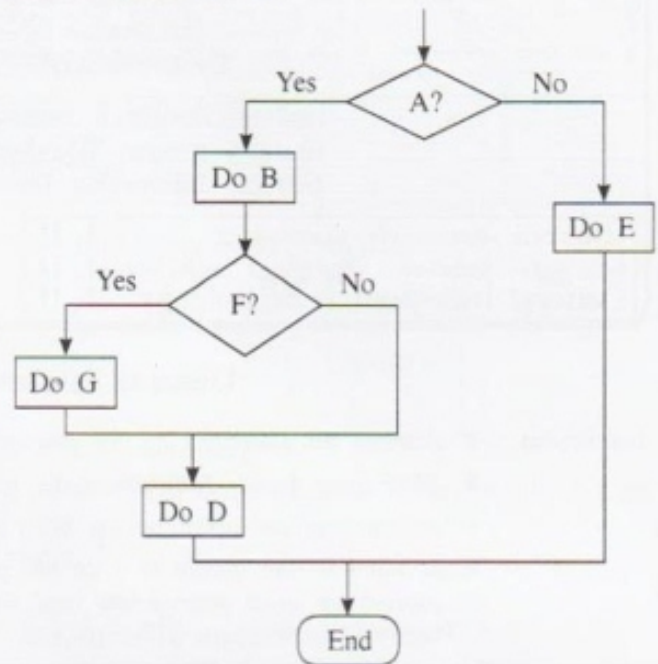
35. Which of the following represents the logic in the given flowchart segment?

(1) If A Then
Do B
If F Then
Do D
Endif
Do G
Else
Do E
Endif

(2) If A Then
Do B
If F Then
Do G
Endif
Do D
Else
Do E
Endif

(3) If A Then
Do B
If F Then
Do G
Endif
Do D
Endif
Do E

(4) If A Then
Do E
Else
Do B
If F Then
Do G
Endif
Do D
Endif



36. Consider the following statement with blank spaces.

..... software has source code that cannot be modified by anyone but the person, team or organization who created it and maintains exclusive control over it while software is licensed to be free to use, modify and distribute.

Which of the following phrases are appropriate to fill the above blank spaces respectively?

- (1) Closed source, commercial (2) Commercial, closed source
(3) Free and open source, proprietary (4) Proprietary, free and open source

37. Consider the following statement with a blank space.

The job of a could involve maintaining routers, switches, firewalls etc.

The most suitable job title to fill the above blank is

- (1) desktop publisher. (2) network administrator.
(3) software engineer. (4) systems analyst.

38. Consider the following related to the use of web.

A - Deleting e-mails that are more than two months old

B - Avoiding meeting face-to-face, people whom you have only met in a social media site

C - Sending confidential information such as credit card numbers in e-mails

Which of the above are appropriate measures in using web in a safe manner?

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

39. Saman says that downloading files from the Internet to his home computer is slow. One of his friends suggests the following to improve the speed.

A - Fix an external hard disk to the computer.

B - Install a better graphics card on the computer.

C - Obtain the services from an Internet Service Provider (ISP) who provides a higher bandwidth in the area.

Which of the above recommendations is/are suitable?

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

40. Consider the following.

A - Hardware specification of the computer

B - Reputation of the seller

C - Warranty period and quality of after sales service

Which of the above aspects are important in purchasing a computer?

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