Department of Examinations - Sri Lanka

General Information Technology (GIT) - 2016

Marking Scheme

Amendments to be included.

Common Techniques of Marking

It is compulsory to adhere to the following standard method in marking answer scripts and entering marks into the mark sheets.
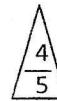
1. Use a red color ball point pen for marking. (Only Chief/Additional Chief Examiner may use a mauve color pen.)

2. Note down Examiner's Code Number and initials on the front page of each answer script.

3. Write off any numerals written wrong with a clear single line and authenticate the alterations with Examiner's initials.

4. Write down marks of each subsection in a $\bigwedge$ and write the final marks of each question as a rational number in a $\square$ with the question number. Use the column assigned for Examiners to write down marks.

Example: **Question No. 03**

(i) .... $\sqrt{}$ $\dfrac{4}{5}$
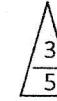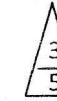
(ii) .... $\sqrt{}$ $\dfrac{3}{5}$

(iii) .... $\sqrt{}$ $\dfrac{3}{5}$

$$\boxed{03} \ \text{(i)} \quad \frac{4}{5} \quad + \quad \text{(ii)} \quad \frac{3}{5} \quad + \quad \text{(iii)} \quad \frac{3}{5} \quad = \quad \boxed{\frac{10}{15}}$$

MCQ answer scripts: (Template)

1. Mark the correct options on the template according to the Marking Scheme. Cut off the marked windows with a blade. Cut off the cages for Index Number and the number of correct options so as to be able to keep the template correctly on the answer script. Cut off a blank space to the right of each options column to mark the answers. Submit the prepared template to the Chief/ Additional Chief Examiner for approval. **For G.C.E. (A/L and GIT examinations templates will be prepared by the Department. It is the responsibility of the marking examiner to use a certified template.)**

2. Then, check the answer scripts carefully. If there are more than one or no answers to a certain question write off the options with a line. Sometimes candidates may have erased an option marked previously and selected another option. In such occasions, if the erasure is not clear write off those options too.

3. Place the template on the answer script correctly. Mark the right answers with a 'v' and the wrong answers with a 'X' against the options column. Write down the number of correct answers under each column. Then, add those numbers and write the number of correct answers in the relevant cage. When marks are to be transformed write the transformed marks inside a circle.

Example:

No. of correct responses $\dfrac{30}{50}$ $\longrightarrow$ Marks $\left(\dfrac{60}{100} \right)$

Structured essay type and essay type answer scripts:

1. Cross off any pages left blank by candidates. Underline wrong or unsuitable answers. Show areas where marks can be offered with check marks.

2. Use the right margin of the overland paper to write down the marks.

3. When a candidate has faced only one paper of a certain subject (one / two papers of subjects which have three papers) and the **Detailed Mark Sheet** indicates that the candidate was absent for the other paper or papers, marks should be finalized as if he has obtained 00 marks for those absent papers.

Examples: (i) Total marks 100

Final Marks 100	Total Marks 100	Paper I	Paper II
44	44	AB	44

(ii) Total marks 200

Final Marks 100	Total Marks 200	Paper I	Paper II
31	62	62	AB

4. Write down the marks given for each question against the question number in the relevant cage on the front page in two digits. Selection of questions should be in accordance with the instructions given in the question paper. Mark all answers and transfer the marks to the front page, and write off answers with lower marks if extra questions have been answered against instructions.

5. Add the total carefully and write in the relevant cage on the front page. Turn pages of answer script and add all the marks given for all answers again. Check whether that total tallies with the total marks written on the front page. When marks are required to be given as a percentage act accordingly. (Final marks and the percentage may be the same in some papers while it may differ in some others)

Occasions where marks cannot be finalized:

1. When a packet of Paper I or II belonging to a certain Examination Center has not been received in your Panel.

    Example: Mathematics Subject has two papers as Paper I and Paper II. Your Panel has received only Paper II answer scripts packet from Examination Center No.10.

2. When one or two answer scripts of a certain candidate's Paper I, II or III is not found in the packet and Supervisor has not marked in the **Detailed Marks Sheet** that the candidate was absent for those papers.

3. When the **Index Number** mentioned in the answer script and **Detailed Mark Sheet** does not match.

4. When a certain problem which affects all candidates has occurred in an Examination Center.

    Example: When a certain part of a question paper has not been given to the candidates.

In such occasions:

1. Write the relevant **Index Number** in the **'Remarks'** column of **Detailed Mark Sheet** and note down that **'Marks cannot be finalized.'** Include the same note in the bottom of the front page of answer script too. Also insert a note about it in the journal.

2. Prepare separate **Incomplete Mark Sheets (9IML)** for each Examination Center regarding such candidates. Insert these **Incomplete Mark Sheets** in **IML cover** and handover to the Evaluation Center Coordinator.

Deciding the final marks:

Once all answer scripts (Paper I, II and/ or III) relevant to a certain day packet are marked, write down the final marks of each candidate on the front page of Paper II.

Examples:

(A)

I පත්‍රය / ஆம் வினாத்தாள்	54/100
II පත්‍රය / ஆம் வினாத்தாள்	67/100
III පත්‍රය / ஆம் வினாத்தாள்	36/100
එකතුව / மொத்தம்	157÷3
ප්‍රතිශතය / சதவீதம்	52.33%

අවසාන ලකුණු / இறுதிப் புள்ளி

ඉලක්කමෙන් / இலக்கத்தில்	52
අකුරෙන් / எழுத்தில்	Fifty - two

(B)

I පත්‍රය / ஆம் வினாத்தாள்	22/40
II පත්‍රය / ஆம் வினாத்தாள்	34/60
III පත්‍රය / ஆம் வினாத்தாள்	-
එකතුව / மொத்தம்	56
ප්‍රතිශතය / சதவீதம்	56%

අවසාන ලකුණු / இறுதிப் புள்ளி

ඉලක්කමෙන් / இலக்கத்தில்	56
අකුරෙන් / எழுத்தில்	Fifty six

(C)

I පත්‍රය / ஆம் வினாத்தாள்	60.5/100
II පත්‍රය / ஆம் வினாத்தாள்	81/100
III පත්‍රය / ஆம் வினாத்தாள்	-
එකතුව / மொத்தம்	141.5÷2
ප්‍රතිශතය / சதவீதம்	70.75%

අවසාන ලකුණු / இறுதிப் புள்ளி

ඉලක්කමෙන් / இலக்கத்தில்	71
අකුරෙන් / எழுத்தில்	Seventy one

When decimal numbers are received, round off the final marks to the nearest whole number as shown in the above examples. When doing so, 0.5 and above should be rounded to the next higher number and marks less than 0.5 should be ignored. Final Marks are the percentage of marks earned by a candidate for all papers of a certain subject. Write down the final marks on Paper II in words too.

**

General Information Technology - 2016   (Marking Scheme) Amendments to be included.

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ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව
இலங்கைப் பரீட்சை, திணைக்களம் இலங்கைப் பரீட்சை, திணைக்களம் இலங்கைப் பரீட்சை, திணைக்களம்
Department of Examinations, Sri Lanka Department of Examinations, Sri Lanka Department of Examinations, Sri Lanka

GIT 01 E I, II

සාමාන්‍ය තොරතුරු තාක්ෂණ පොරీක්ෂණ, 2016
பொதுத் தகவல் தொழிநுட்பவியல், 2016
General Information Technology Examination, 2016

| සාමාන්‍ය තොරතුරු තාක්ෂණය	I, II
பொதுத் தகவல் தொழிநுட்பவியல்	I, II
General Information Technology	I, II
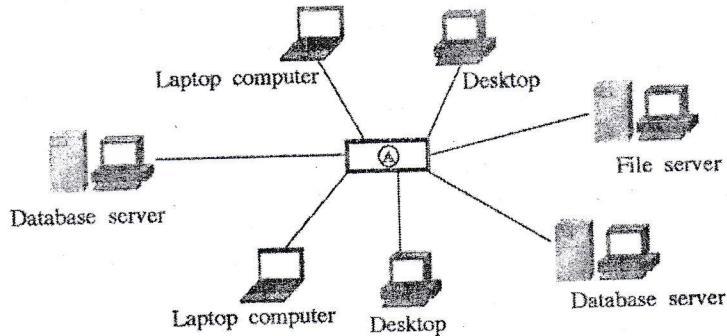
පැය තුනයි
மூன்று மணித்தியாலம்
Three hours

General Information Technology I

Important :
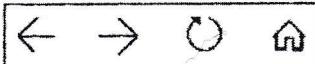
* *Answer all questions on the Answer Sheet provided.*
* *Write your Index Number in the space provided on the answer sheet.*
* *Instructions are given on the back of the answer sheet. Follow them carefully.*
* *In each of the questions 1 to 40, pick one of the alternatives (1), (2), (3), (4) which is **correct or most appropriate** and mark your response on the answer sheet in accordance with the instructions given therein.*

1. Which of the following binary numbers is equivalent to the decimal number 35?
   (1) 100001　　　(2) 100011　　　(3) 101011　　　(4) 101010

2. Which of the following symbols should always be included in an email address?
   (1) :　　　(2) @　　　(3) _　　　(4) /

3. Consider the following diagram:

   Which of the following devices represents Ⓐ in the local area network (LAN) as shown in the above diagram?
   (1) Gateway　　　　　　　　　　　(2) Network Interface Card
   (3) Switch　　　　　　　　　　　　(4) Modem

4. Consider the following application packages.
   A - Database packages
   B - Presentation packages
   C - Spreadsheet packages

   Which of the above can be used to store and process data?
   (1) A and B only　　(2) A and C only　　(3) B and C only　　(4) All A, B and C

5. Which of the following is the correct form of a URL?
   (1) http:/www.docnets.lk/exam/　　　　　(2) http://www.doenets.lk/exam/
   (3) html://www.doenets.lk/exam/　　　　　(4) http:\\www.doenets.lk\exam\

6. Following figure shows a part of a tool bar of a typical web browser.

$$\boxed{\leftarrow \quad \rightarrow \quad \circlearrowleft \quad \text{⌂}}$$

Select the most appropriate outcome if you click on the active $\boxed{\leftarrow}$ button.

(1) Move to the previous web page or website (2) Always move to the homepage of the website
(3) Move to the next website   (4) Close the web browser

7. Which of the following is recommended to avoid health issues experienced in working with a computer for a long time?
(1) Taking a break in every 30 minutes
(2) Using a computer with a smaller screen
(3) Using the keyboard more frequently than the mouse
(4) Playing more enjoyable computer games

8. What is the utility tool in an operating system that can be used to optimize the performance of a disk by changing non-contiguous files to contiguous files?
(1) Character Map   (2) Resource Monitor   (3) Disk Cleanup   (4) Disk Defragmenter

9. Which of the following features are available in word processing software?
    A - Spell Checker and Thesaurus
    B - Page Orientation
    C - Mail merge
(1) A and B only   (2) A and C only   (3) B and C only   (4) All A, B and C

10. Which of the following decimal numbers is equivalent to the binary number 10001011?
(1) 113   (2) 139   (3) 213   (4) 231

11. Consider the following statement with two blank spaces:

The Internet is a(n) _____ whereas the Web is a(n) _____.

Which of the following are the most appropriate terms respectively to fill in the blanks of the above statement?
(1) network of computer networks, Uniform Resource Locator (URL)
(2) network of computer networks, collection of information
(3) information resource, physical connection
(4) collection of servers, network connection

12. Consider the following statements:
    A - Twisted pair cables use copper as the medium to transmit data
    B - Optical fibre cables use light waves to transmit data
    C - Data transmission speed of twisted pair cables is higher than optical fibre cables
Which of the following is correct?
(1) A and B only   (2) A and C only   (3) B and C only   (4) All A, B and C

13. Which of the following combinations show the services of the Internet only?
(1) email and HTTP   (2) email and Web browsers
(3) email and File transfer   (4) HTTP and File transfer

14. Consider the following statement with a blank space:

In a database a _____ uses rows and columns to store a data set.

Which of the following is the most appropriate term to fill in the blank of the above statement?
(1) query   (2) table   (3) record   (4) field

15. Which of the following are examples for database management systems (DBMS) only?
(1) MS Access, MySQL, OpenOffice.org Base
(2) MS Access, Excel, MySQL
(3) DB2, Excel, MySQL
(4) MS Access, MySQL, Excel

16. Consider the following statement with a blank space:

A _____ contains the information for a single entity in the database.

Which of the following is the most appropriate term to fill in the blank of the above statement?
(1) table   (2) cell   (3) field   (4) column

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17. Three observations and possible causes are given in column 1 and column 2 respectively, but not in the correct order.

Observation	Cause
① Files in a folder are automatically replicated	℗ A backup was not taken
② Unable to recover an accidentally deleted file	ⓠ Possible virus infection
③ The message 'No disk space' appears when attempting to save a file	® Hard disk is filled with files

Which of the following gives the correct order for the observations in column 1 to causes in column 2?

(1) ① → ℗, ② → ®, ③ → ⓠ

(2) ① → ℗, ② → ⓠ, ③ → ®

(3) ① → ⓠ, ② → ℗, ③ → ®

(4) ① → ®, ② → ⓠ, ③ → ℗

18. Consider the following statements:

A - In a distance learning environment students can access learning materials from their home any time and attend to the lessons conveniently especially when they are unable to participate in traditional classroom teaching.

B - Using modern technology such as mobile devices, the government can provide up to date information to farmers such as the possible crops to be cultivated, current prices of crops etc.

C - The modern technology facilitates the general public to reserve tickets in long distance trains and buses using mobile devices.

Which of the above statements are examples for e-services?

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

19. In which of the following ways a virus may transmit to your computer?

A - by email or by an attachment of an email

B - by downloading material from the Internet

C - by sharing removable storage devices such as a flash memory stick.

(1) A and B only   (2) A and C only   (3) B and C only   (4) All A, B and C
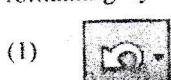
20. Consider the following statements.

A - MS-DOS is an operating system which uses a command line interface (CLI).

B - Isuru Linux and Hantana Linux are two open source operating systems localized by Sri Lankans.

C - Microsoft Windows is an operating system without a graphical user interface (GUI).

Which of the above statements are correct?

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

21. Which of the following tool in word processing software is used to view paragraph marks and other hidden formatting symbols in a document?

(1)   (2)   (3) ¶   (4)

22. Assume that you have just finished typing a two page document using a word processing software and your printer is in ready mode. What is the most suitable way to print this document?

(1) Using Print Screen key

(2) Using CTRL + P key combination

(3) Using ALT + P key combination

(4) Using CTRL + Enter key combination

23. Bhanu is editing a document he created yesterday. Which of the following statements related to saving his file is correct?

(1) 'save' option saves the file with a different name.

(2) 'save as' option saves the file with the same name or different name.

(3) 'CTRL + V' key combination saves the file with the same name.

(4) 'CTRL + C' key combination saves the file with the same name.

24. Which of the following statements related to spreadsheet software are correct?

A - In spreadsheets, data are displayed as rows and columns.

B - The intersection of a row and a column is called as a cell.

C - The cell address of the 'Home' position of a worksheet is 1A.

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

General Information Technology - 2016   (Marking Scheme) Amendments to be included.

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25. Cell values in a worksheet are given as follows:

        A1 = 2   B1 = 3   C1 = 4   D1 = 5

The formula =(A1+B1)/C1*D1 has been entered in cell B4. What is the value displayed in cell B4?

(1) 3.25   (2) 4   (3) 4.25   (4) 6.25

26. Consider the following statements related to presentation software:

A - Pressing the key P within a slide show will display the previous slide.
B - Using CTRL + N key combination will insert a new slide.
C - Slide sorter view can be used to view more than one slide in the screen.
Which of the above statement(s) is/are correct?

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

27. A school decides to obtain the services of a Computer Applications Assistant to help in the day to day work in its office. Experience in which of the following areas will be a relevant qualification for a suitable candidate?

(1) computer programming and debugging
(2) network administration
(3) use of the office automation software such as word processing and spreadsheet
(4) information technology management

28. Which of the following components of a computer performs the operations on data?

(1) Central Processing Unit   (2) Main Memory Unit
(3) Input Unit   (4) Secondary Storage Unit

29. Which of the following is **not** essential to connect to the Internet?

(1) IP address   (2) Network Interface Card
(3) Web browser   (4) Services of an ISP

30. Consider the following scenario:

"A password protected document file stored in a computer in a common computer laboratory by one user (X) has been accessed and modified by another user (Y)".
Which of the following is the most likely reason for the above scenario?

(1) The length of the name given to the file was too short
(2) The password used by the user X was simple which could be guessed easily
(3) The user X has forgotten to keep a copy of the original file
(4) The user X has saved the file in a folder which does not belong to him

31. The descending order of the three binary numbers 1101101, 1101001, 1110010 is

(1) 1110010, 1101101, 1101001   (2) 1101101, 1101001, 1110010
(3) 1110010, 1101001, 1101101   (4) 1101001, 1101101, 1110010

32. Aparna finds out that, since 1960's, the cost of computer hardware is considerably decreasing while the cost of software is comparatively increasing. She explains the reasons as:
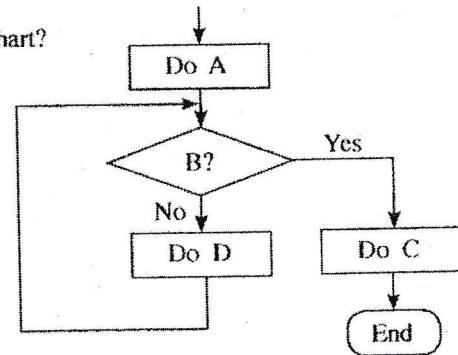
A - Advances in technology reduce the hardware cost.
B - Increasing complexity of software increases the software cost.
Which of the following is acceptable regarding the above reasons?

(1) Both A and B are valid   (2) A is valid and B is invalid
(3) A is invalid and B is valid   (4) Both A and B are invalid

33. Which of the following represents the logic of the given flowchart?

(1)   Do A
       If B Then
         Do C
       Else
         Do D
       Endif

(2)   Do A
       While Not(B)
         Do D
       Endwhile
       Do C

(3)   Do A
       While B
         Do D
       Endwhile
       Do C

(4)   Do A
       If Not(B) Then
         Do C
       Endif
       Do D

34. What are the values of X, Y and Z when the following statements are executed in the given order?

    X = 7;

    Y = 14;

    Z = 0;

    Z = Y–X;

    Y = X;

    (1) X = 0, Y = 7, Z = 0
    (2) X = 7, Y = 14, Z = 7
    (3) X = 7, Y = 7, Z = 7
    (4) X = 7, Y = 7, Z = 0

35. Kamal tells Arun that he is going to meet a friend called Rajan whom he met in a social media site. Arun asks Kamal to do the following before he meets Rajan.
    A - Verify Rajan's personal information given in the social media site.
    B - Inform Kamal's parents that he is going to meet a new friend whom he met in a social media site.
    C - Invite another friend of Kamal for the meeting.
    Which of the above are reasonable to follow for Kamal's own safety?
    (1) A and B only   (2) A and C only   (3) B and C only   (4) All A, B and C

36.

A	B
0	0
0	1
1	0
1	1

    What are the respective outputs of the above logic circuit when the inputs given in the table are applied?
    (1) 0, 0, 0, 0   (2) 0, 0, 0, 1   (3) 0, 1, 0, 1   (4) 1, 0, 0, 0

● Consider the following program segment to answer Questions 37 and 38.

```
Count = 0;
Num = 0;
While Count < 4
    Num = Num + Count;
    Count = Count + 1;
Endwhile
Output Count;
Output Num;
```

37. What are the values of 'Num' and 'Count' when the execution of the above program segment is completed?
    (1) Num = 3, Count = 4
    (2) Num = 4, Count = 3
    (3) Num = 6, Count = 3
    (4) Num = 6, Count = 4

38. How many times the While loop in the given program segment is executed?
    (1) 2   (2) 3   (3) 4   (4) 5

39. In a certain coding system the alphabetic characters A to Z are coded in consecutive binary numbers. A is coded as 1000000. What is the equivalent binary number for character C?
    (1) 1000001   (2) 1000010   (3) 1000011   (4) 1000101

40. Which of the following statements related to user accounts in an operating system are correct?
    A - Each person can access his or her user account with a user name and password.
    B - User account is a collection of information that tells which files and folders you can access, and what settings in the computer can be customized.
    C - User account does not allow you to share a computer with several people.

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

* *

General Information Technology - 2016   (Marking Scheme) Amendments to be included.

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Department of Examinations, Sri Lanka
General Information Technology Examination - 2016
Paper I - Answers

Question No.	Answer No.	Question No.	Answer No.	Question No.	Answer No.	Question No.	Answer No.
01.	2	11.	2	21.	3	31.	1
02.	2	12.	1	22.	2	32.	1
03.	3	13.	3	23.	2	33.	2
04.	2	14.	2	24.	1	34.	3
05.	2	15.	1	25.	4	35.	4
06.	1	16.	All	26.	2	36.	3
07.	1	17.	3	27.	3	37.	4
08.	4	18.	4	28.	1	38.	3
09.	4	19.	4	29.	3	39.	2
10.	2	20.	1	30.	2	40.	1

Special Instructions: Marks per answer 01 each.

Total Marks   01 X 40 = 40

-Enter marks in the last column of MCQ Answer Sheet as shown in the following example:

No. of correct responses: 25 / 40   **Total marks of Paper I:** 25 / 40

Part II

Special Notes:

1. (.../.../...) indicates only one of the options included in parenthesis are considered as one answer.

2. {...} indicates that words inside are optional. Even without any of the options inside brackets full marks will be awarded.

3. [..] indicates marking guidelines.

4. Underlined key words are mandatory. Correct synonyms are accepted.

5. No partial marks awarded unless otherwise explicitly stated in the marks breakdown.

General Information Technology (GIT) - 2016
Marks Breakdown

Paper I $= 40 \times 01 =$ **40 Marks**

Paper II $= 04 \times 25 =$ **100 Marks**

Paper II

1. (a) In order to provide security for the computer laboratory in a school, students who have permission to use the laboratory are required to enter their school admission number (X) and a password (Y) to a device installed at the door. If both the admission number and the password are correct, the door (Z) will be opened. If either one of them or both are incorrect, the door will not be opened.

Consider the following states:

Scenario	State
Admission Number (X) and Password (Y) are correct	'1'
Admission Number (X) or Password (Y) or both are incorrect	'0'
Door (Z) will be opened	'1'
Door (Z) will not be opened	'0'

(i) Copy the following table to your answer book and fill in the column for state of Z.

State of X	State of Y	State of Z
0	0	
0	1	
1	0	
1	1	
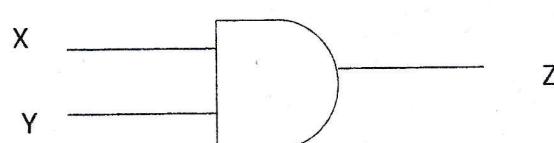
Q1 (a)

(i)

State of X	State of Y	State of Z
0	0	0
0	1	0
1	0	0
1	1	1

1 x 4 = 4 marks

(ii) Draw the logic gate represented by the above table. Indicate the inputs and the output clearly.
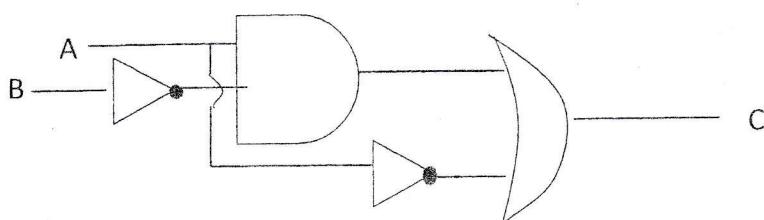
AND symbol – 2 mark
Correct both inputs, output 0.5 x 2 = 1 mark
Total - 3 marks

(b) Draw the equivalent logic circuit diagram for the following expression:

Constructing

(A AND (NOT)B) –> 3 marks (no partial marks)

OR NOT (A) = C –> 3 marks (no partial marks)

(A AND (NOT) B) OR NOT (A) = C –>   3 + 3 = 6 marks

No other partial marks

(c) **During the same period**, three students groups of a class have been assigned the following activities to be completed using a suitable and available computer.

(i) Enter data about growth of plants, in the field.

(ii) Record sounds of birds at a level above the ground, take photographs in the environment and enter relevant data.

(iii) Enter a set of data written in a CR book, to the computer.

The class has a desktop computer, a laptop computer and a palmtop computer.

Identify the most suitable type of computer to carry out each of the above activities and write down the type of the computer against the activity number in your answer book.

(i) Laptop computer

(ii) Palmtop computer

(iii) Desktop computer

2 x 3 = 6 marks

(d) Consider the following scenario:

A student needs to prepare a report using a word-processing software package ⓟ. Before start typing the report, she scans the hard disk of the computer using an antivirus software ⓠ. After completing her report, she used a backup software ⓡ provided by the operating system ⓢ to back up all the files in a specific folder in the hard disk to a flash memory stick.

Identify and write down the correct software type of ⓟ, ⓠ, ⓡ and ⓢ in the above paragraph from the list of terms given below.

List of Terms: {Application software, Systems software, Utility software}

P – Application software

Q – Utility software

R – Utility software

S – Systems software

1.5 x 4 = 6 marks

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2. (a) Consider the following paragraph with blank spaces numbered from (1) to (6).
Amali visited the website of the Department of Examinations by typing the _____(1)_____ of the website in the _____(2)_____ of the _____(3)_____. From the home page of the website, she accessed the relevant web page by clicking on the correct _____(4)_____. The website of the Department of Examinations is part of the _____(5)_____ and we cannot access websites without the services of the _____(6)_____.

Identify the most suitable term to fill the blank spaces of the above paragraph using the list of terms given below.
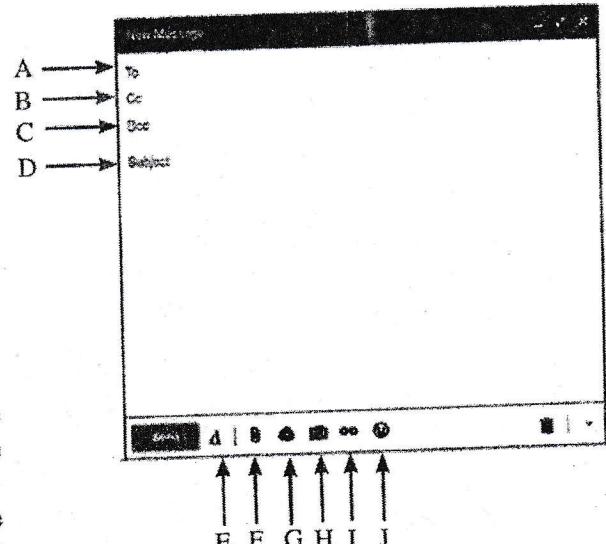
List of terms: {address bar, email, hyperlink, Internet, URL, web browser, WWW}

Note: Write down the relevant term against the number assigned to the blank space.

(1) URL
(2) Address bar
(3) Web browser
(4) Hyperlink
(5) www
(6) Internet

1.5 x 6 = 9 marks

(b) Azma has taken a photograph of a heard of elephants during her recent visit to Yala National Park. She wants to share her experience and the photograph with her friends through email. She opened a new email window similar to the figure shown right. Fields and icons displayed in the email window are labelled as A - J.

(i) The title of the email Azma wants to send is 'My visit to Yala'. Write down the corresponding letter of the field she should use to include the title of the email.

(ii) Write down the corresponding letter of the tool Azma needs to select in order to attach her photograph to the email.

(iii) Azma wants to send her email to Amila. Write down the corresponding letter of the field she should add the email address of Amila.

(iv) Azma also wants to send a copy of her email to Varuni. However, she does not want Amila to know that a copy of the email sent to Varuni. Write down the letter of the corresponding field she should add the email address of Varuni.

(v) The following day Amila replied to Azma thanking for the information about the visit and the photograph. In which folder of her email account will Azma usually find the email received from Amila?

(vi) After two days, Azma wants to access her email sent to Amila and Varuni again. Write down the name of the folder of her email account where she could usually find this email.

(i) - D
(ii) - F
(iii) - A
(iv) - C
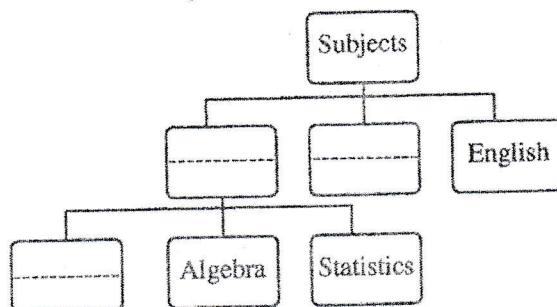
1.5 x 4 = 6 marks

(v) - Inbox
(vi) - Sent
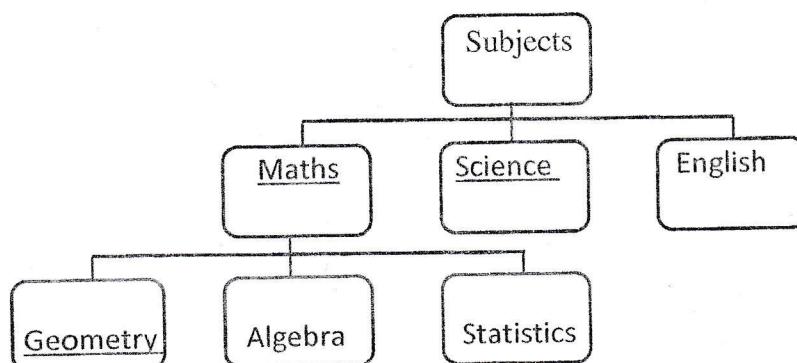
2 x 2 = 4 marks

(c) The diagram shown below is a directory tree structure with blank spaces.

Copy this diagram to your answer book and fill in the blank boxes with correct labels by considering the following:
  (i) 'Science' is a sub directory of the parent directory 'Subjects'.
  (ii) The parent directory of 'Geometry' is 'Maths'.

2 x 3 = 6 marks

3. (a) Consider the following sentences with blank spaces related to presentation software.
    (i) A .... can be commenced by pressing the function key F5 on the keyboard.
    (ii) The orientation of a slide can be changed through the .... window.
    (iii) .... are the animation-like effects that occur in slide show view when move from one slide to the next.
    (iv) View of your slides in thumbnail form is called .... view.
    Identify the suitable terms to fill the blank spaces from the list of terms given below.
    List of terms: {slide show/ animations/ help window/ design templates/ page setup/ slide transitions/ slide sorter/ new slide}
    Note: Write down the relevant term against the question number.

(a)   (i)   slide show

      (ii)   page setup

1.5 x 2 = 3 marks

      (iii) slide transitions

      (iv)   slide sorter

2 x 2 = 4 marks
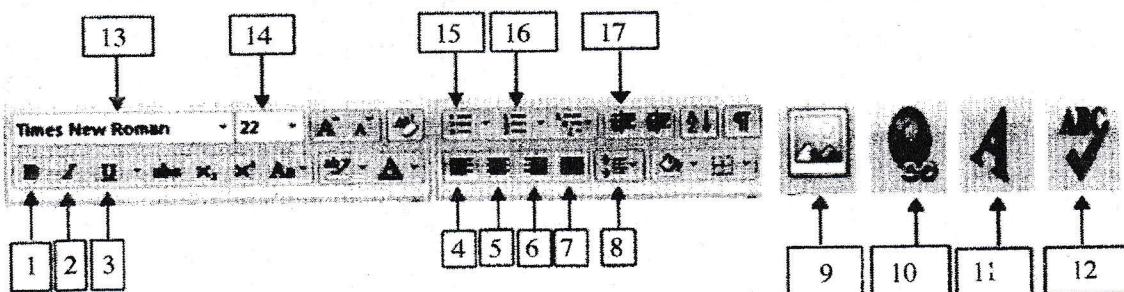
(b) **Figure 1** shows a text document partially formatted using a word processing software. Elements to be formatted further in this document are labelled as A-F.

A ——How polluted is YOUR country?

B — A staggering 90 per cent globally are breathing poor quality air.
Pollution is blamed for more than six million deaths a year, new stats show.
The problem is worst in cities, but rural air is worse than many think.
Data 'is enough to make all of us extremely concerned,' experts have said.

C — Nine out of ten people globally are breathing poor quality air, the World Health Organization (WHO) said yesterday.
In a staggering report, calling for dramatic action against pollution that is blamed for killing more than 16,000 Brits and six million people worldwide, every year.
New data in a report from the UN's global health body 'is enough to make all of us extremely concerned,' Maria Neira, the head of the WHO's department of public health and environment, told reporters.   E

D — WHO released an interactive map showing the exposure to pollutants known as PM2.5 for all countries.
It also shows values for pollutants in various cities and towns.
The problem is most acute in cities, the report found, but air in rural areas is worse than many think, WHO experts said.
Poorer countries have much dirtier air than the developed world, according to the report, but pollution 'affects practically all countries in the world and all parts of society', Mrs Neira said in a statement.

Read more:
F — http://www.dailymail.co.uk/sciencetech/article-3809171/Over-90-world-breathing-bad-air-WHO.html#ixzz4LeaZK38e

Figure 1

Figure 2 shows the formatting tools available in a typical word processing software. Using labels 1-17, write down the tool(s) required to complete the following tasks.
Note: No marks will be awarded if you write more than the required number of labels.

Figure 2

(i) Change the appearance of the title of the document shown as **A** to bold face

(ii) Centre the title of the document

(iii) Increase the font size of the title to 20

(iv) Change the appearance of sentences labelled as **B** to a bulleted list

(v) Left justify the paragraphs labelled as **C** and **D**

(vi) Convert the text labelled as **E** and **F** to hyperlinks

(vii) Check the spellings of the document

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(i) – 1

(ii) – 5

(iii) - 14

(iv) - 15

1.5 x 4 = 6 marks

(v) - 4

(vi) - 10

(vii) - 12

2 x 3 = 6 marks

(c) The past students society of a school purchases an office automation software for its office work, which is licensed for a single user. The secretary of the society decides to provide a copy of this software to each member since it was purchased from the society fund.

(i) Explain why the decision of the secretary is unacceptable.

(ii) Give one possible solution to obtain multiple copies of office automation software at a lower cost or free of charge.

(i)   Unacceptable because this software is <u>licensed</u> for a <u>single/one user</u>.

Underlined key words 2 + 2 = 4 marks

Total – 4 marks

(ii)   using <u>free</u> or <u>open source</u> office automation software

OR

Obtaining software with license for <u>multiple user standard version/Group License</u>

2 marks

4. (a) The number of farmers who cultivated big onions in 2010 - 2015 is shown in the spreadsheet segment given below:

	A	B	C	D	E	F	G	H
1	Number of farmers Cultivated Big Onion 2010 - 2015							
2	District	2010	2011	2012	2013	2014	2015	Average
3	Anuradhapura	4,798	3,239	4,076	4,432	5,557	4,590	
4	Mahaweli H	2,418	1,391	2,831	1,444	3,636	2,249	
5	Matale	3,653	3,426	5,612	4,155	5,452	4,634	
6	Polonnaruwa	223	153	322	305	633	707	
7	Total							
8								
9	Source:	http://www.statistics.gov.lk						
10								

(i) A formula of the form =function1(cell1:cell2) is to be used to calculate and display the total number of farmers cultivated big onion in 2010 in cell B7.

Write down the correct terms for function1, cell1 and cell2 in the above formula.

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(a) (i)   function1 – sum
            cell1 – B3   (B6)
            cell2 – B6   (B3)

<div align="right">1 x 3 = 3 marks</div>

(ii) It is necessary to copy the formula entered in cell B7 to the range of cells from C7 to G7. The following steps 1-3 show the required steps to achieve this. However, these steps are not in the correct order.
1. Click on the fill handle
2. Drag the fill handle to G7
3. Click on the cell B7
Re-arrange and write down the steps 1-3 in the correct order.

    3 - Click on the cell B7
    1 - Click on the fill handle
    2 - Drag the fill handle to G7

<div align="right">Correct answer 2 marks</div>
<div align="right">Only step 1 correct – 1 mark</div>
<div align="right">Only steps 1 and 2 correct/written – 1.5 marks</div>
<div align="right">Total - 2 marks</div>

                 3
                 1
                 2
or 3, 1, 2 as answer   1 mark

(iii) What formula would be displayed in cell C7 after copying the formula in cell B7 to cell C7?

    =sum(C3:C6)

<div align="right">Complete formula - 2 marks (else 0 mark)</div>

In copying the formula the range given in the answer for the above (i) should be consistent in the answer for (iii)

(iv) It is necessary to write a formula in the form of *=function2(cell3:cell4)* in cell H3, to get the average number of farmers in the Anuradhapura district.
Write down the correct terms for *function2*, *cell3* and *cell4* in the above formula.

    function2 - average
    cell3 – B3
    cell4 – G3

<div align="right">1 x 3 = 3 marks</div>

(v) What is the most suitable graph type to show the variation of the number of big onion farmers from 2010 to 2015, in each district seperately?

    column chart/graph, bar chart/graph, Line graph, 4 Pie Graphs – one for each district

<div align="right">2 marks</div>

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(b) A book shop wants to keep records about the books and suppliers of the books. The manager wants your help to create a database system for this purpose.

Part of the Book table you have created is shown below.

ISBN	Title	Author	Edition	Publisher	Price	SupID
9780134378183	Essentials of MIS	Laudon	19th	Pearson	Rs. 10900	Sup01
9780132146050	Electronic Commerce	Turban	7th	Pearson	Rs. 17000	Sup02
9781305867819	Electronic Commerce	Schneider	9th	Cengage	Rs. 1500	Sup02
9781111529116	New Perspectives on the Internet	Schneider	9th	Cengage	Rs.17000	Sup03

(i) Write down the appropriate field types for ISBN, Title, Edition and Price.

ISBN – text,
Title – text
Edition – text
Price – currency

1.5 x 4 = 6 marks

(ii) Write down an appropriate field for the primary key.

Primary key – ISBN

2   marks

(iii) Write down which database component (object) has to be used for the following tasks:
(1)   Enter data or edit data of Book table
(2)   Show formatted output about total sales of books by publishers
(3)   Show titles available for the 'Laudon' as the author

(1) Form

1 mark

(2) Report

(3) Query
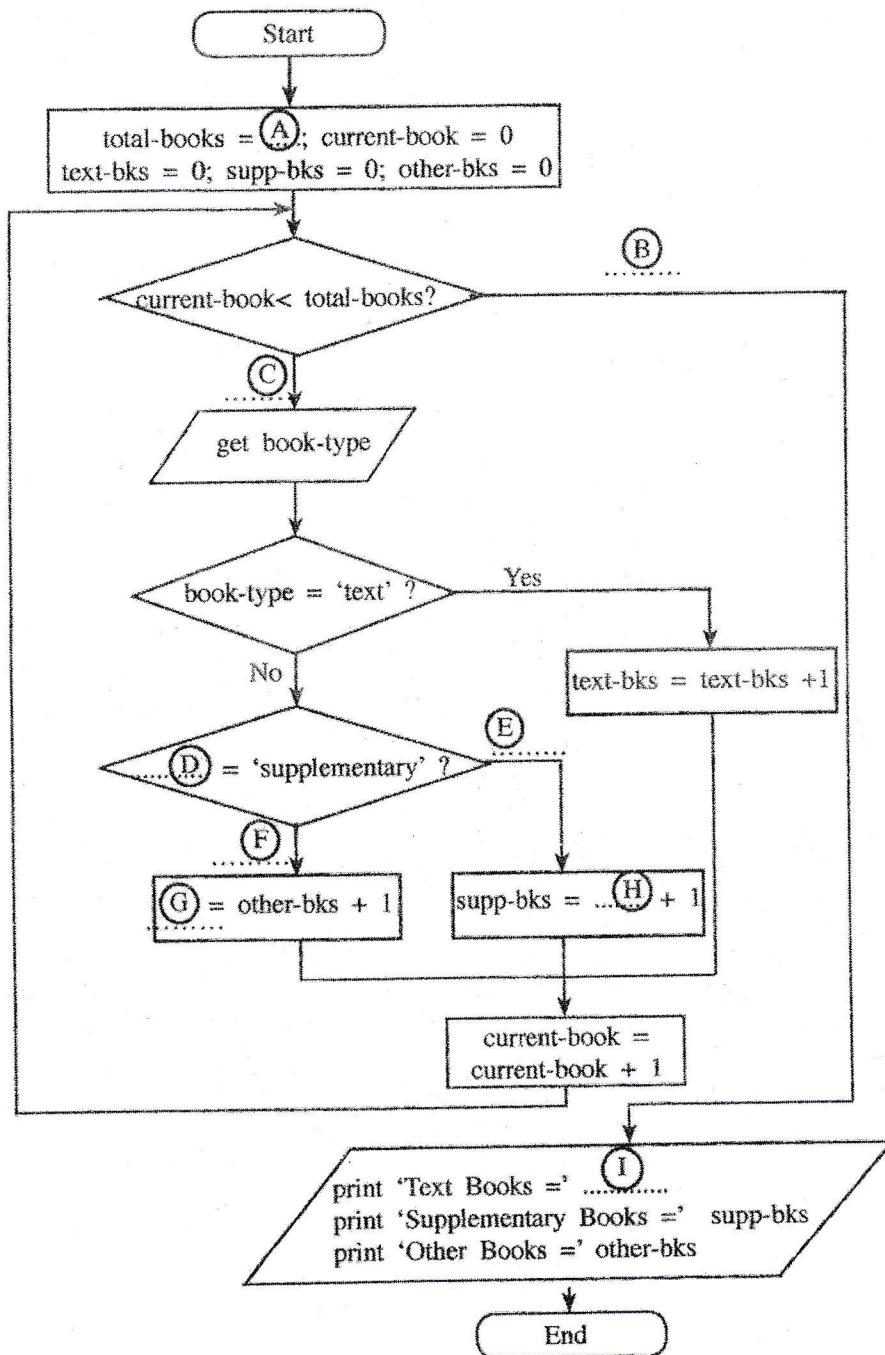
2 x 2 = 4 marks

Note: only 0.5 marks for Table (instead of Form) as the answer for (iii) (1) above

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5. (a) All the books in a library of a school are categorized into three types as 'text' books, 'supplementary' reading books and 'other' books. Total number of books in the library is 1000. A computer program is used to count and print the number of books in each category. The flowchart for this activity with some missing labels Ⓐ to Ⓘ is given below.

Match the lables Ⓐ to Ⓘ in the flowchart with the phrases from the following list.

List: {text-bks, other-bks, supp-bks, 1000, yes, no, book-type}

```
                        ┌──────────┐
                        │  Start   │
                        └──────────┘
                             │
                             ▼
          ┌────────────────────────────────────────┐
          │ total-books = Ⓐ; current-book = 0      │
          │ text-bks = 0; supp-bks = 0; other-bks = 0│
          └────────────────────────────────────────┘
                             │
                             ▼
                                              Ⓑ
                    ╱◇ current-book< total-books? ◇╲
                             │
                            Ⓒ
                             ▼
                      ╱ get book-type ╱
                             │
                             ▼
               ◇ book-type = 'text' ? ◇ ──Yes──►  ┌──────────────────────┐
                             │                      │ text-bks = text-bks +1│
                            No                      └──────────────────────┘
                             ▼
                                              Ⓔ
               ◇ ....Ⓓ... = 'supplementary' ? ◇
                             │
                            Ⓕ
                             ▼
          ┌──────────────────┐        ┌──────────────────────┐
          │ Ⓖ = other-bks + 1│        │ supp-bks = ...Ⓗ... + 1│
          └──────────────────┘        └──────────────────────┘
                             │
                             ▼
                    ┌──────────────────┐
                    │ current-book =   │
                    │ current-book + 1 │
                    └──────────────────┘
                             │
                             ▼ Ⓘ
          ╱ print 'Text Books =' ...........
          ╱ print 'Supplementary Books =' supp-bks
          ╱ print 'Other Books =' other-bks
                             │
                             ▼
                        ┌──────────┐
                        │   End    │
                        └──────────┘
```

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(a)   A – 1000

       B – no

       C – yes

                            1x3 marks

       D – book-type

                            2 marks

       E - yes

       F - no

                            1x2 = 2 marks

       G – other-bks

       H – supp-bks

       I – text-bks

                            2x 3 = 6 marks

(b) In a raffle draw tokens in three colours 'red', 'black', and 'white' are placed in a box. Each participant takes a token and wins a gift depending on the colour of the token. This process is presented in the following pseudo code.

```
start
        get token
        if token = "red" then
                    gift = "flash memory stick"
        else if token ="black" then
                    gift ="wallet"
            else
                    gift ="ball point pen"
            endif
        endif
end
```
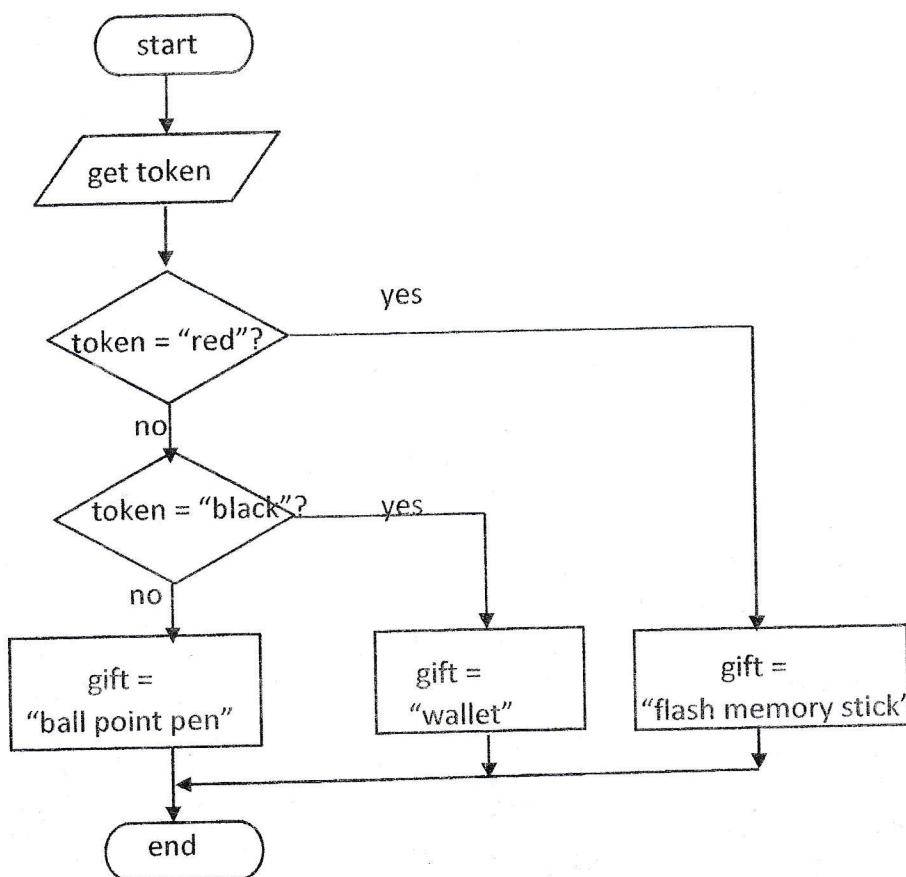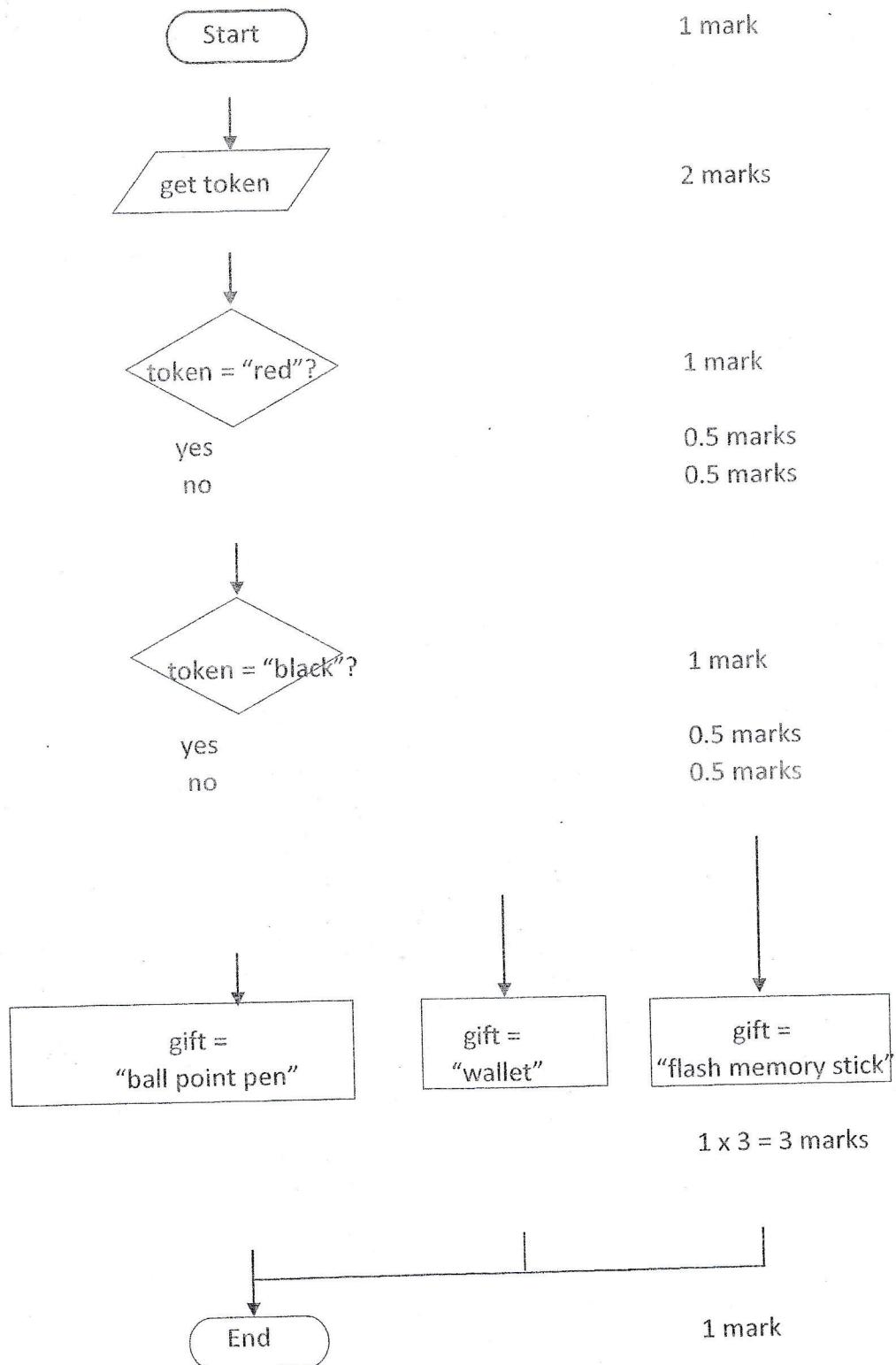
Draw a flowchart to represent the above pseudo code.

Note: terms in the pseudo code must be used in the flow chart exactly as given.

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(b)

```
                        ┌──────────────┐
                        │    start     │
                        └──────┬───────┘
                               │
                               ▼
                        ╱──────────────╲
                       ╱   get token    ╱
                      └──────┬──────────┘
                             │
                             ▼
                      ◇─────────────◇              yes
                      ◇ token = "red"? ◇──────────────────────┐
                      ◇─────────────◇                         │
                             │ no                             │
                             ▼                                │
                      ◇──────────────◇      yes               │
                      ◇ token = "black"? ◇──────┐             │
                      ◇──────────────◇          │             │
                             │ no               │             │
                             ▼                  ▼             ▼
                  ┌──────────────────┐  ┌──────────┐  ┌──────────────────┐
                  │      gift =       │  │  gift =  │  │      gift =        │
                  │ "ball point pen"  │  │ "wallet" │  │"flash memory stick"│
                  └─────────┬─────────┘  └────┬─────┘  └─────────┬─────────┘
                            │                 │                  │
                            ◄─────────────────┴──────────────────┘
                            ▼
                     ┌──────────────┐
                     │     end      │
                     └──────────────┘
```

Start — 1 mark

get token — 2 marks

token = "red"? — 1 mark

yes — 0.5 marks
no — 0.5 marks

token = "black"? — 1 mark

yes — 0.5 marks
no — 0.5 marks

gift = "ball point pen"

gift = "wallet"

gift = "flash memory stick"

1 x 3 = 3 marks

End — 1 mark

Completeness – 1 mark
Total – 12 marks

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6. (a) A company uses video conferencing to conduct monthly progress review meetings with its representatives in the branches located in different countries.

(i) List **three** items essential for video conferencing.

(ii) Give **two** advantages of video conferencing over traditional face to face meetings.

(i) Any computer, relevant software, Microphone, Speaker, Internet connection (high/moderate speed), display screen, web camera

Three correct - 4 marks

Two correct - 3 marks

One correct - 2 marks

Total - 4 marks

(ii) No travelling cost, saves travelling time/No need to travel

2 x 2 = 4 marks

(b) Online shopping is becoming increasingly popular. Explain **two** advantages and **two** disadvantage of online shopping compared to regular shopping.

(i) Advantages: can place the order any time, can place the order from anywhere/convenience/open for global market, convenient delivery,

2 x 2 = 4 marks

(ii) Disadvantages: cannot exactly see/ cannot fit-on the items, security risk in making payment, difficulty in exchanging/returning damaged items,

2 x 2 = 4 marks

(c) Owner of a retail shop decides to buy a computer to be used for his day to day activities. He asks you about the important features and requirements need to be considered in buying a suitable computer to meet his needs.

List **three** technical features and **three** non-technical features/requirements that may be useful to consider in buying a computer.

(i) Technical features: computer type (laptop/palmtop/desktop), display type (LCD/CRT/LED or flat screen/tube), display resolution, display size, hard disk capacity, RAM capacity, processor type, processor speed, ports (USB/HDMI/VGA), keyboard,

1.5 x 3 = 4.5 marks

(ii) Non-technical features: price, make/model/brand, country of origin, warranty conditions, supplier details/reliability, after sales services

1.5 x 3 = 4.5 marks

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