OL/2024(2025)/80/E-I, II

සියලුම හිමිකම් ඇවිරිණි / முழுப் பதிப்புரிமையுடையது /All Rights Reserved]

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

80 E I, II

අධ්‍යයන පොදු සහතික පත්‍ර (සාමාන්‍ය පෙළ) විභාගය, 2024(2025)
கல்விப் பொதுத் தராதரப் பத்திர (சாதாரண தர)ப் பரீட்சை, 2024(2025)
General Certificate of Education (Ord. Level) Examination, 2024(2025)

තොරතුරු හා සන්නිවේදන තාක්ෂණය I, II
தகவல், தொடர்பாடல் தொழில்நுட்பவியல் I, II
Information & Communication Technology I, II

පැය තුනයි
மூன்று மணித்தியாலம்
Three hours

අමතර කියවීම් කාලය - මිනිත්තු 10 යි
மேலதிக வாசிப்பு நேரம் - 10 நிமிடங்கள்
Additional Reading Time - 10 minutes

Use additional reading time to go through the question paper, select the questions and decide on the questions that you give priority in answering.

Information & Communication Technology I

Instructions:

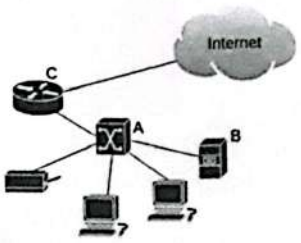
- *Answer **all** questions.*
- *In each of the questions **1** to **40**, pick one of the alternatives (1), (2), (3), (4) which is **correct** or **most appropriate**.*
- ***Mark a cross (×) on the number corresponding to your choice in the answer sheet provided.***
- *Further instructions are given on the back of the answer sheet. Follow them carefully.*

1. The hard drive in a computer is formatted during maintenance. Which of the following should now be first installed in it?
(1) a software firewall (2) an anti-virus software
(3) an application software (4) an operating system

2. Which of the following is an output device?
(1) a joystick (2) a microphone (3) a printer (4) a scanner

3. Which of the following, is a solid state storage device?
(1) a CDROM (2) a floppy disk
(3) a magnetic hard disk (4) a USB flash drive

4. The figure shows a local area network connected to the Internet. Which of the following correctly lists A, B and C in it?
(1) A - file server, B - switch, C - router
(2) A - file server, B - router, C - switch
(3) A - router, B - switch, C - file server
(4) A - switch, B - file server, C - router



5. Which of the following could be used to connect two local area networks?
(1) a file server (2) a firewall (3) a modem (4) a router

6. Which of the following is the octal equivalent of binary $100\ 0110_2$?
(1) 46_8 (2) 70_8 (3) 106_8 (4) 430_8

7. Which of the following is the decimal equivalent of binary $1000\ 0100_2$?
(1) 64_{10} (2) 132_{10} (3) 136_{10} (4) 260_{10}

8. Rani wants to store the following files in a USB Flash drive:
trees.pdf (500 MB), config.txt (534 bytes), nickels.mp4 (2 GB), report.docx (900 KB)
Which of the following is the **lowest** capacity USB drive that is sufficient to store them?
(1) 2 GB (2) 4 GB (3) 8 GB (4) 16 GB

[see page two

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9. Consider the following statements P and Q:

P - When one enters a character (say A) to a digital computer, it is converted to a specific pattern of 0s and 1s.

Q - The ASCII code is used to assign standard numeric values to 128 characters used in computers.

Which of the following is valid regarding the above statements?

(1) Both statements P and Q are correct and the ASCII code described in Statement Q assists the task mentioned in Statement P.

(2) Both statements P and Q are correct but the points presented in the two statements are not related.

(3) Statement P is correct but statement Q is incorrect.

(4) Both statements are incorrect.

10. Which of the following **only** contains examples of operating systems?

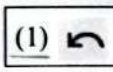
(1) Adobe Photoshop, LibreOffice, Movie Maker, Notepad

(2) Android, LibreOffice, MacOS, McAfee AntiVirus

(3) Movie Maker, Norton AntiVirus, Ubuntu, Windows

(4) Android, MacOS, Ubuntu, Windows

11. While using a word processing software Kamal mistakenly deletes a paragraph of text. Which of the following icons should Kamal next press to get that paragraph back?

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

12. When using a word processing software, which of the following shortcut key combinations can one use to copy a selected piece of text and paste it elsewhere?

(1) Ctrl+A and Ctrl+S (2) Ctrl+C and Ctrl+V

(3) Ctrl+X and Ctrl+H (4) Ctrl+X and Ctrl+V

13. Which of the following are valid column names in a spreadsheet?

I. BZ II. A4 III. A1:B3 IV. B

(1) I only (2) II only (3) I and IV only (4) II and III only

- Questions **14** and **15** are based on the following part of a spreadsheet.

	A	B	C	D	E	F	G
1	Student	Practical	Theory	Final		Practical	40
2	Pasan	56	78			Theory	60
3	Ravi	45	67				
4	Kimi	89	92				
5	Sithu	78	67				

14. Which of the following functions can be used to display the minimum mark of the practical and theory marks of all four students?

I. = MIN (B2, B5, C2 , C5)

II. = MIN (B2:B5,C2:C5)

III. = MIN (B2:C5)

(1) I and II only (2) II and III only (3) I and III only (4) All I, II and III

15. If the formula = (B2 * G$1/100) + (C2 * G$2/100) is entered in cell D2 and then copied to D3, what will be the formula that will appear in D3?

(1) = (B2 * G$1/100) + (C2 * G$2/100) (2) = (B3 * G$1/100) + (C3 * G$2/100)

(3) = (B3 * G$2/100) + (C3 * G$3/100) (4) = (C2 * H$1/100) + (D2 * H$2/100)

16. Which of the following is **not** a suitable advice to follow when making a slide presentation?

(1) First plan your presentation and then make the slides

(2) Have at least 15 text lines per slide

(3) Have a maximum of two images / graphs per slide

(4) Avoid using a dark red colour throughout the presentation

[see page three

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- Questions **17** to **19** are based on the following partly shown database tables that are used to store data about books, purchases and suppliers of a book shop.
  Note: The book shop purchases books from suppliers and sells them to customers. A particular book can be purchased from many suppliers at different prices.

BOOK

Book_ID	Book_name	Selling_price
B001	Python for Beginners	800
B002	Digital Fundamentals	700
B003	Databases: Zero to Hero	900
B004	Headfirst Java	750

PURCHASE

Book_ID	Supplier_ID	Purchasing_price
B001	SUP001	700
B002	SUP002	600
B003	SUP003	800
B003	SUP001	810

SUPPLIER

Supplier_ID	Supplier_name	Address
SUP001	Shane	Colombo
SUP002	Anil	Kandy
SUP003	Kavinkumar	Colombo
SUP004	Sharaf	Galle

17. What is most suitable for the primary key of the **PURCHASE** table?
(1) Book_ID (2) Supplier_ID
(3) Book_ID + Supplier_ID (4) Book_ID + Purchasing_price

18. What is a foreign key in this database?
(1) Book_ID in the BOOK table (2) Selling_price in the BOOK table
(3) Supplier_ID in the PURCHASE table (4) Supplier_ID in the SUPPLIER table

19. The book shop purchases the book '*Databases: Zero to Hero*' from a new supplier (SUP005) located in Colombo. The book is sold at its normal price. Which table(s) is/(are) to be updated for this purpose?
(1) BOOK and PURCHASE (2) PURCHASE only
(3) PURCHASE and SUPPLIER (4) SUPPLIER only

20. Which of the following statements are correct about database keys?
A - A primary key is used to uniquely identify a record in a table.
B - A foreign key is a field in one table that uniquely identifies a record in another table.
C - A composite key is made up of two or more fields to uniquely identify a record.
(1) *A* and *B* only (2) *A* and *C* only (3) *B* and *C* only (4) All *A*, *B* and *C*

21. A long rectangular sheet roll is available in a shop. A number of small squares has to be cut from that sheet. A program is needed to find the **minimum** length of the sheet that is sufficient to cut the required number of squares.
Which of the following are the required inputs for this program?
A - Width of the sheet roll
B - The required number of squares
C - the length of a side in a square
(1) *A* and *B* only (2) *A* and *C* only (3) *B* and *C* only (4) All *A*, *B* and *C*

22. Which of the following tasks requires both 'iteration' and 'selection' control structures?
(1) calculating the average of two given numbers
(2) checking if a number is a prime
(3) displaying a welcome message to the user
(4) printing the first twenty even numbers

23. Consider the following *P*, *Q* and *R* logical expressions:
P : (A >= –3) AND (B < 25) Q : (A <> 10) AND (B = 20) R : NOT (A > 0) OR (B < 15)
If above A and B contain the values –3 and 18 respectively, which of the following represents correct outcomes of *P*, *Q* and *R* respectively?
(1) false, true, false (2) false, true, true (3) true, false, false (4) true, false, true

[see page four

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24. What is the output of the following Pascal expression?

(3 + 5) * 2 – 10 div 2

(1) 8 (2) 10 (3) 11 (4) 16

- Questions **25**, **26** and **27** are based on the codes shown in figures 1, 2 and 3 respectively.

```
x := 1 ;
while x < 10 do
        x := x + 2 ;

writeln(x);
```

Figure 1

```
var
        i : integer;
        x : integer = 5;
begin
        for i := 1 to x do
                if i mod 2 = 0 then
                        write(i);
end.
```

Figure 2

```
if (value >= 30) then
        writeln('Hot')
else
        if (value >= 25) then
                writeln('Warm')
        else
                if (value >= 20) then
                        writeln('Chilly')
                else
                        writeln('Cold');
```

Figure 3

25. What would be the output of the code shown in **Figure 1**?

(1) 9 (2) 10 (3) 11 (4) 13

26. What would be the output of the code shown in **Figure 2**?

(1) 2 (2) 24 (3) 135 (4) 12345

27. What would be the outputs of the code shown in **Figure 3** when 'value' is 26 and 20 respectively?

(1) Hot, Chilly (2) Hot, Cold (3) Warm, Chilly (4) Warm, Cold

28. Which of the following refers to the first element of a Pascal array declared as arrA = array[0..4] of integer; ?

(1) arrA[-1] (2) arrA[0] (3) arrA[1] (4) arrA[first]

29. Which of the following statements are correct?

A - An *assembler* converts an assembly language code into a machine language code.
B - Pascal is considered a 'low level' programming language.
C - A *compiler* converts a high-level language program completely into a machine language program.

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

30. Which of the following contains an **incorrect** matching with respect to a website development project?

(1) Requirements analysis → interviews, prototypes
(2) Solution design → hardware identification, software identification
(3) Coding → HTML, PHP, MySQL
(4) Testing → direct, parallel, phased

31. Which of the following statements about a URL (Uniform Resource Locator) is correct?

(1) A URL cannot contain folder names.
(2) A URL is composed of only the protocol and domain name.
(3) A URL is as same as an IP address.
(4) A URL specifies the address of a resource on the world wide web.

32. Which of the following statements is correct?

(1) A DNS server maps domain names into IP addresses, while a web server delivers website content to its users.
(2) A web server and a DNS server both store website content and serve it to users.
(3) A web server and a DNS server both use the HTTP protocol.
(4) A web server translates domain names into IP addresses, while a DNS server hosts website content.

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33. Which of the following correctly matches the given file types with the example filename extensions?

(1)	spreadsheet: exe, xlsx	audio: mp3, pptx	video: docx, mp4
(2)	spreadsheet: ods, xlsx	audio: mp3, wav	video: avi, mp4
(3)	spreadsheet: mp3, ods	audio: pdf, xlsx	video: jpg, wav
(4)	spreadsheet: mp4, wav	audio: ods, png	video: exe, xlsx

34. A raster image containing N pixels and having a dimension 2" × 2" is enlarged to be of dimension 2" × 3". What will be the number of pixels in the enlarged image?

(1) N (2) 2N (3) 3N (4) 6N

35. Which of the following statements is **incorrect** regarding raster and vector graphics?

(1) The GIMP software can be used to create a raster image.
(2) Vector images are constructed through lines, curves and fills.
(3) When a vector image is enlarged, its quality degrades.
(4) Raster images are not suitable for images like institution logos that frequently need resizing.

36. An audio file of a song contains long silence portions before and after the song which have to be removed using *Audacity*. Some labelled icons from the *Audacity* interface are shown below.

A: 	B: 	C: 	D: 

After the file is opened from *Audacity*, which of the following actions can be used to remove the silence portions?

(1) Click A → Click B
(2) Click A → Click C → Click D
(3) Click A → select the song portion → Click C
(4) Click A → select the song portion → Click D

37. Which of the following gives the approximate size in bytes of a raster image having a 275 × 175 resolution and a maximum of four colours? (Assume the image has not been compressed.)

(1) 275×175 (2) 275×175×4 (3) (275×175×2)/8 (4) (275×175×4)/8

38. Consider the following list that was displayed on a web browser:

1. Java
2. Python
3. Pascal

Which of the following HTML tags would have been used to produce it?

(1) <dl>,<dt> (2) <nl>, <li> (3) , <li> (4) ,

39. Consider the following paragraph with blanks labelled P–S:

A website is a collection of related web pages hosted on the Internet that users can access through a _____ (P). The HTTP protocol is used to transfer data between a web _____ (Q) and a _____ (R), enabling users to request and view web content. To make a website accessible online, it must be hosted by a _____ (S).

Which of the following gives the suitable replacements for the blanks?

(1) *P* - browser, *Q* - server, *R* - client, *S* - service provider
(2) *P* - client, *Q* - service provider, *R* - server, *S* - browser
(3) *P* - server, *Q* - client, *R* - service provider, *S* - browser
(4) *P* - service provider, *Q* - browser, *R* - server, *S* - client

40. Which of the following will help to reduce the e-waste problem?

A - people protecting and maintaining their electronic items
B - finding new ways of recycling unusable electronic items
C - avoiding buying unnecessary electronic items

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

* *

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

80 E I, II

අධ්‍යයන පොදු සහතික පත්‍ර (සාමාන්‍ය පෙළ) විභාගය, 2024(2025)
கல்விப் பொதுத் தராதரப் பத்திர (சாதாரண தர)ப் பரீட்சை, 2024(2025)
General Certificate of Education (Ord. Level) Examination, 2024(2025)

තොරතුරු හා සන්නිවේදන තාක්ෂණය I, II
தகவல், தொடர்பாடல் தொழில்நுட்பவியல் I, II
Information & Communication Technology I, II

Information & Communication Technology II

* *Answer **five (05)** questions only, including the **first** question and **four** others.*
* *First question carries **20** marks and each of the other questions carries **10** marks.*

1. (i) The road connections between three cities A, B and C are shown in Figure 1. The Table 1 shows the distances between the cities and the average speeds of the vehicles travelling along the different road segments.

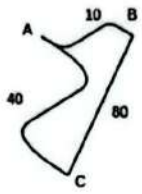


Figure 1

City 1	City 2	Distance (km)	Average speed (km/h)
A	B	10	40
A	C	40	20
B	C	80	80

Table 1

Write down **two** pieces of information that can be obtained through this data after processing.

(ii) Five cable ends labelled A – E are shown in Figure 2. Write down the label of each of the following.

(*a*) RJ45 cable end
(*b*) HDMI cable end
(*c*) USB cable end
(*d*) VGA cable end

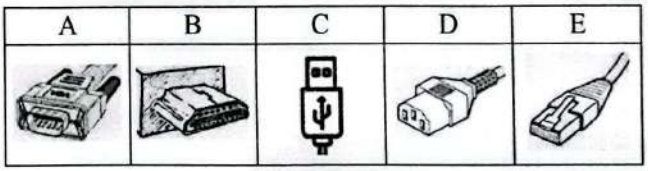


Figure 2

(iii) (*a*) Write down the binary equivalent of 74_{10}.
(*b*) Write down the hexadecimal equivalent of 1046_{8}.

(iv) (*a*) Draw the logic circuit relating to the boolean expression $P = A(B + C)$ including only **AND** and **OR** gates.
(*b*) According to the logic circuit shown in Figure 3, what will be the respective outputs at P and Q when A, B and C inputs are respectively 1,1 and 0?

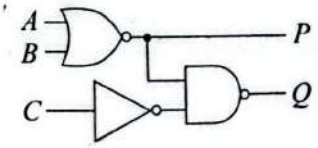


Figure 3

(v) (*a*) Figure 4 shows some computer components and their interactions when Amara is using *LibreOffice Writer*. Write down the numbers of the suitable replacements for the components labelled A, B, C and D choosing from the given numbered list.

Note : Write your answer **only** in the *label* → *number* format.

List : {**1** - Anti-virus software, **2** - Hardware,
3 - LibreOffice Writer, **4** - Ubuntu}

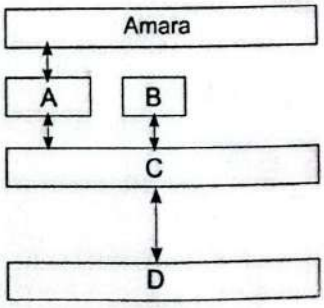


Figure 4

[see page seven

(*b*) Kamala switched on a computer and started using *LibreOffice Writer*. After a while she started *Audacity* as well. The following gives a sequence of different processes that ran on the processor of that computer:

A → B → C → D → E →...

Choosing from the given list, write down the sequence again with the labels A, B, C, D and E above replaced by the numbers. (**Note**: A number may be used more than once if required.)

List: {**1** - Audacity, **2** - BIOS, **3** - LibreOffice Writer, **4** - Ubuntu}

(vi) Suppose that you want to create a presentation about *Sri Lanka* consisting of the following four slides:

1: Title slide
2: Slide with a map of South Asia
3: Slide with a few text facts about Sri Lanka
4: Slide with a list of the nine provinces of Sri Lanka on the left **and** a map of the provinces of Sri Lanka on the right

Given in Figure 5 are some labelled slide layouts available in the presentation software that you plan to use.

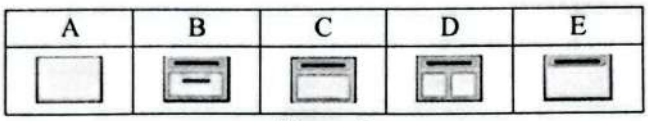


Figure 5

Write down the label of the most suitable slide layout for each of the above slides using **only** the *Slide number* → *Label* format (**Note**: A slide layout may be used more than once if required.)

(vii) Write down the *pseudo-code* for the flow-chart given in Figure 6 below:

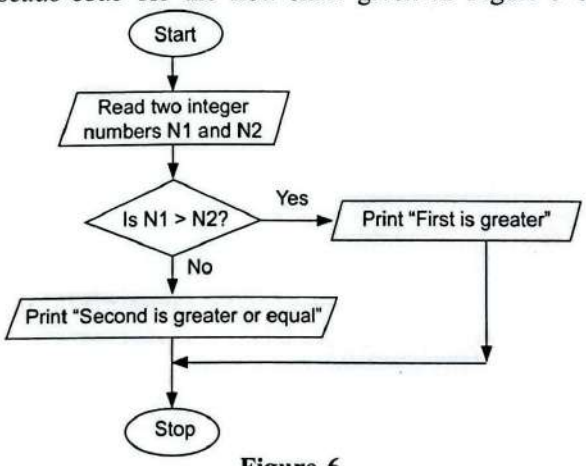


Figure 6

(viii) (*a*) In the 'requirements identification' phase of the System Development Life Cycle, the use of 'prototypes' could be beneficial. What are meant by 'prototypes'?

(*b*) The following gives the sequence of phases in the System Development Life Cycle:

Requirements identification → Design of the solution → **A** → **B** → **C** → Maintenance

Write down the phases represented by the above labels A, B and C.

(ix) (*a*) Give an example of an IP address in dotted decimal notation.

(*b*) Indicate whether the following statements regarding an email labelled **A** to **C** are true or false by drawing ✓ or × symbols respectively against each label.

A - The email addresses of the 'BCC' recipients are hidden from other recipients.
B - The email addresses of the 'CC' recipients are visible to everyone.
C - When one clicks the 'Reply to all' option the original sender and all other recipients on the To and Cc lines receive the reply.

[*see page eight*

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(x) (*a*) Write down **one** very important guideline that each person using a computer must follow so that in the event of a hardware failure of the computer, his/her files will still be available.

(*b*) Assume a computer and its peripherals are properly placed and its user is seated in a good posture. Write down **one** other good guideline that the user can follow to avoid health problems due to continuous computer use.

2. The following spreadsheet shows the income and expenses of a school workshop.

	A	B	C	D	E
1					
2		**Workshop Budget - 2025**			
3					
4	**No of Participants**	**200**		**Date**	**Monday, December 30, 2024**
5					
6	**Category**	**Description**	**Quantity**	**Unit Cost/Price (Rs)**	**Total Amount**
7	**Income**				
8	Registration Fee	Workshop registration	200	2,500.00	500,000.00
9	Sponsorship	Corporate sponsorship	2	100,000.00	200,000.00
10	Sales	T-shirts and mugs	50	2,000.00	100,000.00
11				**Total Income**	**800,000.00**
12	**Expenses**				
13	Lunch	Lunch (Packs)	200	1,500.00	300,000.00
14	Materials	Workshop Kits	200	500.00	100,000.00
15	Refreshments	Morning Tea	200	750.00	150,000.00
16	Transportation	Speaker travel costs	1	1,000.00	1,000.00
17	Decoration	Event banners and flowers	10	8,000.00	80,000.00
18	T-Shirt/Mugs Printing	Cost of T-shirt and Mugs printing	50	1,500.00	75,000.00
19				**Total Expenses**	**706,000.00**
20				Net Income	94,000.00
21				Profit %	11.8%

(i) What formula should be written in Cell E8 to calculate the *Total Amount* for the *Registration Fee*?

(ii) Write down the formula that should be written for each of the following:

(*a*) for Cell E11 to display the total income

(*b*) for Cell E19 to display the total expenses

(iii) Assuming the *Net Income* is defined as the *Total Income* minus the *Total Expenses*, write a formula for Cell E20 to display the *Net Income*.

(iv) The number of participants (200) is repeated in cells C8, C13, C14 and C15. Write down the formula that is more suitable to be entered in each of them instead of 200.

(v) Choosing from the given list, write down the numbers of the formatting categories and options (if any) that have been applied to the following cells:

(*a*) E4 (*b*) E20

List: {**1** - Date, **2** - Decimal Places, **3** - Number, **4** - Percentage, **5** - Thousands separator, **6** - Time}

(vi) From *column* and *pie* charts, what is the most suitable chart type for each of the following?

(*a*) to display the total amounts of the different 'Income' and 'Expenses' components

(*b*) to display the total amounts of the different 'Income' components as percentages

(vii) What will be displayed in the Cell C20 if the following formula is mistakenly entered to it?
= C17 ^ C9/2 – (180 – C10*3)

[*see page nine*

CamScanner

3. Following are the partially shown relational database tables of a vehicle rental company used to store data about vehicles available for rent, customer details and rental records.

VEHICLE

V_id	V_model	V_type
V001	Honda Civic	Car
V002	Toyota Corolla	Car
V003	Nissan X-Trail	SUV
V004	Ford Ranger	Pickup Truck

CUSTOMER

C_id	C_name
4001	Saman
4002	Almeida
4003	Shane
4004	Ahmed

RENTAL

C_id	V_id	Rental_date
4001	V002	12/01/2025
4002	V001	13/01/2025
4003	V002	14/01/2025
4001	V003	15/01/2025

(i) A new customer Tom (C_id: 4005) rents the Ford Ranger (V_id: V004) on 20/02/2025. Write down the new records to be added to the relevant tables for that purpose.

Note: Use **only** the *table name* → *(field1 content, field2 content, ...)* format for each new record.
E.g., CUSTOMER → (4001, Saman)

(ii) It is required to show the names of customers (C_name) who rented the *Toyota Corolla*. Which tables need to be joined for this purpose?

(iii) Each vehicle has a specific rental rate. If the new field 'Rental_rate' is needed to be added, to which one of the above tables should it be added?

(iv) It is decided to add the return date on which a vehicle given on rent is returned. To which one of the above tables should that 'Return_date' field be added?

(v) It is decided to assign one technician to do the maintenance of each vehicle and the name and the phone number of each technician is to be stored avoiding data duplication. (Note that the same technician can maintain multiple vehicles.)
For this purpose:

(*a*) Write down the field names of the new table that has to be added.

(*b*) Write down any changes that have to be done to the existing tables.

4. (i) The labelled flow-chart in Figure 1 has been drawn to get the summation of the even numbers from 1 to 20 (including 20). Write down the most suitable replacements for its labels A, B, C and D.

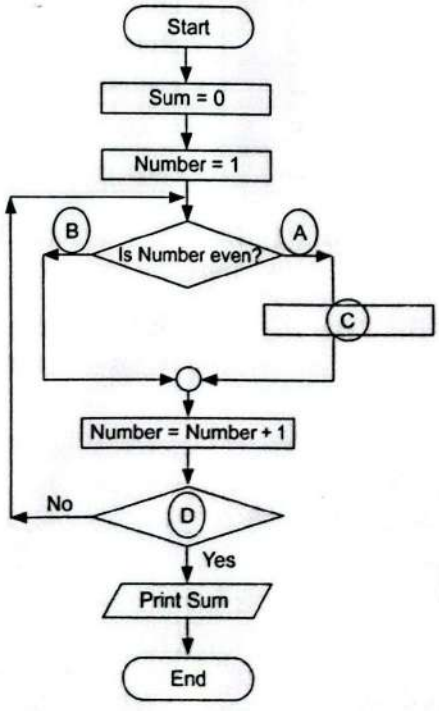


Figure 1

(ii) Consider the pseudo-code in Figure 2 to answer (a) and (b).

```
BEGIN
  Counter = 1
  WHILE Counter <= 5 DO
    DISPLAY Counter
    Counter = Counter + 1
  ENDWHILE
END.
```

Figure 2

(*a*) Write the expected output of the pseudo-code.

(*b*) What would be the output, if the statement 'WHILE Counter <= 5 DO' is replaced with 'WHILE Counter <= 20 DO' **and** the statement 'Counter = Counter + 1' is replaced with 'Counter = Counter + 3'?

(*c*) What would happen if the 'Counter = Counter + 1' line in the Pseudo-code of Figure 2 is removed?

[see page ten

(iii) A chocolate vending machine receives coins from a customer and if it receives enough coins for the price of a chocolate (Rs 50), it will then dispense a chocolate to the customer.

The machine keeps on collecting coins from a customer until the total value of the inserted coins is greater than or equal to the price of a chocolate. If the total value of the inserted coins is greater than the price of a chocolate, then the balance coins should also be dispensed in addition to the chocolate. If the total value of the inserted coins is exactly equal to the price of the chocolate only the chocolate will be given. **Note:** Assume that the customer inserts the coins to completion without cancelling the process midway.

A pseudo-code written for the operation of the above machine is given in Figure 3. Write down the suitable replacements for the blanks labelled from **A** to **F** in it.

```
BEGIN
    Price = A
    Total = B
    WHILE (Total < Price)
        DISPLAY "Insert coin"
        READ Coin_value
        C = Total + D
    ENDWHILE

    OUTPUT chocolate
    IF Total > E
        Balance = Total - F
        OUTPUT Balance
    ENDIF
END
```

Figure 3

5. (i) Match each description labelled **A** to **J** to a correct item from the numbered list and write down the number of the matching item for each label using **only** the **label → number** format.

Label	Description
A	A search engine that helps to find information online
B	A social media platform to connect and share content with others
C	A cloud computing service providing virtualized computing resources
D	A web browser for accessing websites
E	A platform to create and manage websites and blogs
F	A protocol used to send and receive emails over the internet
G	A protocol that maps domain names to IP addresses
H	A platform for hosting and sharing video content
I	A video conferencing tool for virtual meetings
J	A language used to create dynamic web pages

List : {**1** - DNS, **2** - Facebook, **3** - Firefox, **4** - Google, **5** - IaaS, **6** - PHP, **7** - SMTP, **8** - WordPress, **9** - YouTube, **10** - Zoom}

(ii) Draw the table that will be displayed by the HTML code segment shown at right.

```
<table border="1">
  <tr> <th> Student Name </th> <th> Subjects </th> </tr>
  <tr> <td rowspan="2"> Alice </td><td>Math</td> </tr>
  <tr> <td>Science</td> </tr>
  <tr> <td> Bob </td> <td>English</td> </tr>
</table>
```

[see page eleven

(iii) The HTML source of the web page given in Figure 1 is given in Figure 2 with certain missing tags labelled ❶ to ⓰.



Explore Sri Lanka: the tropical paradise

Sri Lanka, a tropical paradise, offers golden beaches, beautiful hills, lush forests, warm hospitality, delicious cuisine and an exotic, vibrant culture with many attractions. Visit Sri Lanka for an unforgettable getaway!

Top tourist destinations in Sri Lanka

Sigiriya
    Iconic Lion Rock Fortress; stunning views
Kandy
    Temple of the Tooth; the cultural hub
Nuwara-eliya
    The Little England
Galle
    Historic fort; vibrant coastal charm

For travel plans: Lanka Budget Travels

Figure 1: Web page

```
<html>
❶ <title>Explore Sri Lanka</title> ❷
❸
❺ Explore Sri Lanka: the tropical paradise ❻
❼ Sri Lanka, a tropical paradise, offers golden beaches, beautiful hills, lush forests, warm hospitality,
delicious cuisine and an exotic, vibrant culture with many attractions. Visit Sri Lanka for an unforgettable
getaway! ❽
<h2>Top tourist destinations in Sri Lanka</h2>
❾
        ⓫Sigiriya ⓬          ⓭Iconic Lion Rock Fortress; stunning views⓮
        ⓫Kandy ⓬             ⓭Temple of the Tooth; the cultural hub⓮
        ⓫Nuwara-eliya⓬       ⓭The Little England⓮
        ⓫Galle⓬              ⓭Historic fort; vibrant coastal charm⓮
❿
<br>
For travel plans: <⓯ href=http://www.travelplan.lk> Lanka Budget Travels ⓰
❹
</html>
```

Figure 2: HTML Source

Select the correct tags for the labels ❶ to ⓰ of **Figure 2** from the list given below and write down each label number and the corresponding HTML tag.

List : {a, , <body> , </body>, <dd>, </dd>, <dl>, </dl>, <dt>, </dt>, <h1>, </h1>, <h3>, </h3>, <head>, </head>, , , <ul>,,
,
}

6. (i) The out-patient clinic in a hospital does not have a proper patient appointment scheduling system. As a result, the patients have to waste a lot of time when visiting the clinic as they do not know the exact time that they would be treated. To solve this problem, the hospital management decides to introduce a computerized appointment scheduling system.

(*a*) In the new system, the days are divided into different time slots that the patients can reserve. Propose **one** good way that the system can use to inform the available time slots for reservation, to a patient expecting to make an appointment.

(*b*) List down **four** main inputs that a patient needs to give the new system in order to get an appointment.

(**Notes** : 1. Doctor details are not required.
2. Patients do not have to login to the system to get an appointment.)

[see page twelve

(*c*) When a patient successfully makes an appointment, write down **one** suitable method that the system can use to send the confirmation of the appointment to the patient.

(*d*) Assume the system is relatively small, its requirements are clear and the likelihood of its requirement changes are very low. Then, from the *waterfall and iterative incremental models*, what would be the most suitable system development life cycle model to develop the above system?

(*e*) Assuming that the system is developed and tested well, from *direct* and *parallel deployment*, what deployment type do you suggest for this system? Justify, your answer.

(ii) The single computer in a house is shared by all occupants using a single user account. Each person does various occupations and have varied interests. The files of each person are saved in the same folder in the hard disk as well. Thus each person undergoes great difficulty in finding his/her files. And there is a danger of files of one person been accidentally changed/ deleted by another person as well.
Write down **two** changes that you suggest to improve this situation.

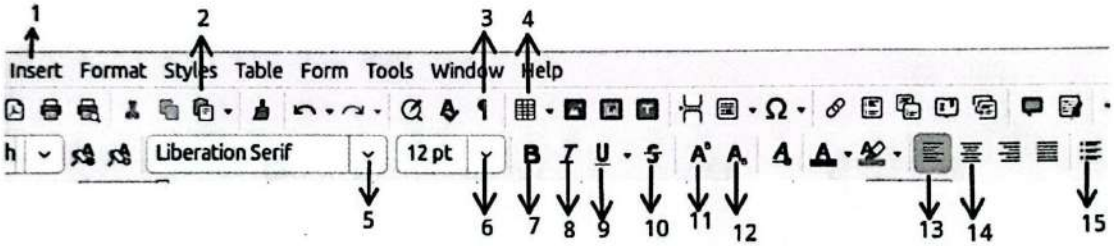
(iii) write **one** reason as to why it is important to indicate the source when reproducing content taken from a published book.

(iv) In 'cloud computing':

(*a*) Write down **one** advantage of using SaaS (Software as a Service).

(*b*) Write down **one** disadvantage of using SaaS.

7. (i) The Figure shows the numbered interface of a word processing software:



By using the relevant numbers in the above interface, write down how the tasks (b) to (j) could be done. The answer to (a) is given as an example.

(*a*) Changing the font type of a piece of text to 'Times'
Select the piece of text → Click 5 → Choose 'Times'

(*b*) Changing the font size of a piece of text to 18

(*c*) Making a sentence bold

(*d*) Underlining a word

(*e*) Changing O2 to O_2

(*f*) Inserting a table with three rows and two columns

(*g*) Starting a bulleted list

(*h*) Center justifying a piece of text

(*i*) Inserting an image to the document

(ii) List **one** feature that is available in a word processing software that helps a user to correct any writing defects in a document.

(iii) For what purpose can 'thesaurus' feature in a word processing software be used?

(iv) From 'portrait' and 'landscape' page orientations, which is suitable for each of the following?

(*a*) for an official letter

(*b*) for a page that is to contain a very wide table

(v) What is the benefit of the 'mail merge' facility available in a word processing software?

(vi) What is the benefit of the 'Print preview' feature in a word processing software?

***