

Section A
Bahagian A
[36 marks]

Answer all questions. Write your answers in the space provided in **Answer Sheet**.

Jawab semua soalan. Tulis jawapan anda dalam ruangan **Helaian Jawapan** yang disediakan.

1. ICT has brought many positive impacts on society.
ICT membawa banyak kesan positif terhadap masyarakat.



Figure 1
Rajah 1

Based on Figure 1, state one positive impact of ICT on society
Berdasarkan Rajah 1, nyatakan kesan positif ICT kepada masyarakat

- I. Lower communication cost because people can save time and resources
Kos komunikasi yang rendah kerana manusia boleh menjimatkan masa dan sumber
 - II. Inappropriate online communication with unknown person through the Internet
Berkomunikasi dalam talian dengan orang yang tidak dikenali melalui Internet
 - III. Effective sharing of information and opinions
Perkongsian maklumat dan pendapat yang efektif
 - IV. Effective sharing slander and false content
Perkongsian fitnah dan penipuan kandungan yang efektif
- A. I and II
B. I and III
C. II and IV
D. III and IV

2. Table 1 shows terms of computer ethics and legal issues.
 Choose the correct term for each given statement.

*Jadual 1 menunjukkan istilah bagi etika komputer dan isu-isu perundangan.
 Pilih istilah yang betul bagi setiap pernyataan berikut.*

Intellectual Property	Privacy	Computer Crime
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Table 1
Jadual 1

- i. The right of individuals and companies to deny or restrict the collection and use of data and information about them.
Hak individu dan syarikat dalam menafikan atau membataskan penggunaan data dan maklumat tentang mereka.
- ii. Protect ideas, inventions, unique names, business models, industrial processes, computer program codes and more.
Melindungi idea, ciptaan, nama-nama unik, model perniagaan, proses perindustrian, kod program komputer dan lain-lain.
3. Choose the false statement about ethics and law
Pilih pernyataan yang salah tentang etika dan undang-undang.

	Ethics	Law
A.	Universal	Depend on country
B.	Crime	Immoral
C.	Free to follow	Must follow
D.	Guide the users	Control the users

4. Figure 2 shows Intellectual Property types.
Rajah 2 menunjukkan jenis-jenis Harta Intelek.

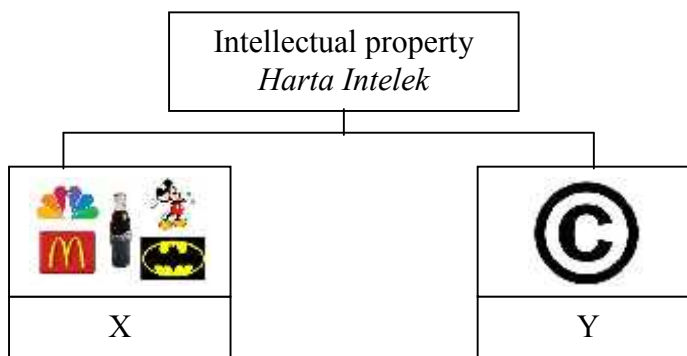


Figure 2
Rajah 2

Based on Figure 2, state X and Y.
Berdasarkan Rajah 2, nyatakan X dan Y.

5. Table 2 shows the effects of controversial content on society.
Jadual 2 menunjukkan kesan-kesan isu kontroversial dalam masyarakat.

<ul style="list-style-type: none">• Lead to sexual addiction. <i>Mendorong ketagihan seks.</i>• Lead to perversion <i>Mendorong sifat penyumbalewengan</i>• Increase in rape cases <i>Peningkatan kadar kes rogol</i>

Table 2
Jadual 2

State the type of controversial content on society.
Nyatakan jenis bagi isu kontroversial dalam masyarakat.

6. Table 3 shows the step in machine cycle.
Jadual 3 menunjukkan langkah dalam kitaran mesin.
- I. The process that change the instructions to signals that computer can understand
Proses menukar arahan kepada signal yang difahami oleh komputer
 - II. The process of obtaining a program instructions or data item for memory.
Proses yang mengandungi arahan program atau item data untuk memori.
 - III. The process that return the result of instructions to memory
Proses menghantar keputusan arahan kepada ingatan
 - IV. The process of executing instructions
Proses melaksanakan arahan

Table 3
Jadual 3

Based on Table 3, rearrange the correct steps in machine cycle.
Berdasarkan Jadual 3, susun langkah yang betul dalam kitaran mesin.

- A. I → II → III → IV
- B. II → III → IV → I
- C. II → I → IV → III
- D. III → IV → II → I

7. Alex invites his family and friend to celebrate his birthday by watching a movie and singing karaoke using his new home theater.
Alex menjemput keluarga dan rakan-rakannya untuk meraikan ulangtahun kelahirannya dengan menonton filem dan menyanyi karaoke menggunakan set teater rumah yang baru dibelinya.



Figure 3
Rajah 3

Figure 3 shows a set of home theatre. Based on figure above:
Rajah 3 menunjukkan set teater rumah. Berdasarkan rajah di atas:

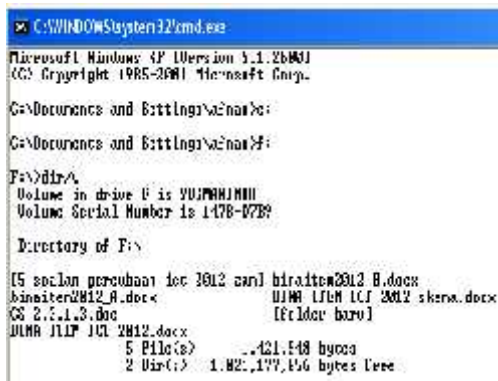
- i. Name an input device.
Namakan satu peranti input.
 - ii. Name an output device.
Namakan satu peranti output.
8. Figure 4 shows a new DVD player that is bought by Encik Maher. He downloads several movies in his computer.
Rajah 4 menunjukkan pemain DVD yang baru dibeli oleh Encik Maher. Beliau memuat turun pelbagai filem ke dalam komputernya.



Figure 4
Rajah 4

Based on Figure 3 above, state a type of secondary storage that can be used by Encik Maher.
Berdasarkan Rajah 3 di atas, nyatakan jenis storan sekunder yang boleh digunakan oleh Encik Maher.

9. Figure 5 shows the operating system interface.
 Rajah 5 menunjukkan antaramuka sistem pengoperasian



X



Y

Figure 5
 Rajah 5

Based on Figure 5, match the operating system interfaces below.
 Berdasarkan Rajah 5, padankan jenis antaramuka sistem pengoperasian di bawah.

	<u>X</u>	<u>Y</u>
A.	Command- Line Interfaces	Graphical User Interface
B.	Graphical User Interface	Menu- Driven Interfaces
C.	Command- Line Interfaces	Menu- Driven Interfaces
D.	Menu- Driven Interfaces	Command- Line Interfaces

10. State whether the following statement is **True** or **False**.
 Nyatakan sama ada pernyataan berikut **Benar** atau **Palsu**.

Computer networks are also important in schools with lots of computer rooms as it means the children can log on to any computer and have their own protected folder.

Komputer rangkaian adalah penting di sekolah-sekolah yang mempunyai banyak komputer kerana ia membolehkan murid-murid mengakses ke mana-mana komputer dan memiliki folder sendiri yang dilindungi.

11. Figure 6 shows the types of network communication technology.
Rajah 6 menunjukkan jenis teknologi komunikasi rangkaian.



Figure 6
Rajah 6

Based on the Figure 6, choose the correct statement :
Berdasarkan Rajah 6, pilih pernyataan yang betul :

- I. Ability to create applications that associates and customers can access.
Kemampuan untuk mencipta aplikasi yang bersekutu dan boleh diakses oleh pelanggan.
 - II. World's largest computer network which connects millions of computer all over the world.
Rangkaian komputer yang terbesar yang menghubungkan berjuta-juta komputer di seluruh dunia.
 - III. Can use encryption and password protection to secure access to the site.
Boleh menggunakan enkrip dan perlindungan kata laluan untuk mendapatkan akses kepada tapak.
 - IV. The purpose is to increase efficiency and reduce costs.
Tujuannya adalah untuk meningkatkan kecekapan dan mengurangkan kos.
- A. I, II and III
 - B. I, II and IV
 - C. I, III and IV
 - D. II, III and IV

12. Figure 7 shows the wireless transmission medium
Rajah 7 menunjukkan media transmisi tanpa wayar

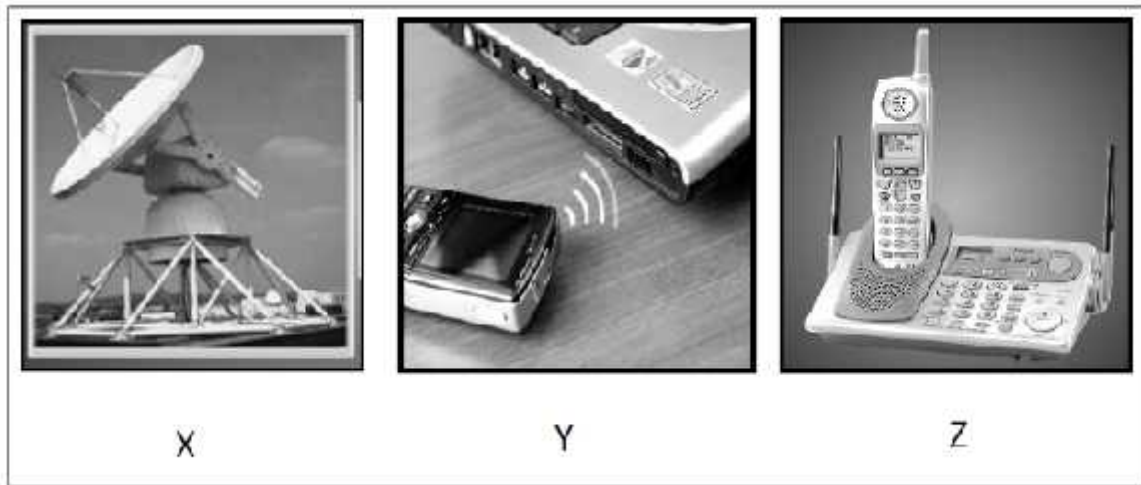


Figure 7
Rajah 7

Based on Figure 7,
Berdasarkan Rajah 7,

- i. State the type of wireless transmission media in Y
Nyatakan jenis media transmisi tanpa wayar di Y
 - ii. Which wireless data transmission used for long range
Yang manakah tranmisi data tanpa wayar yang digunakan untuk jarak jauh
13. Figure 8 shows a star computer network.
Rajah 8 menunjukkan rangkaian komputer bintang.

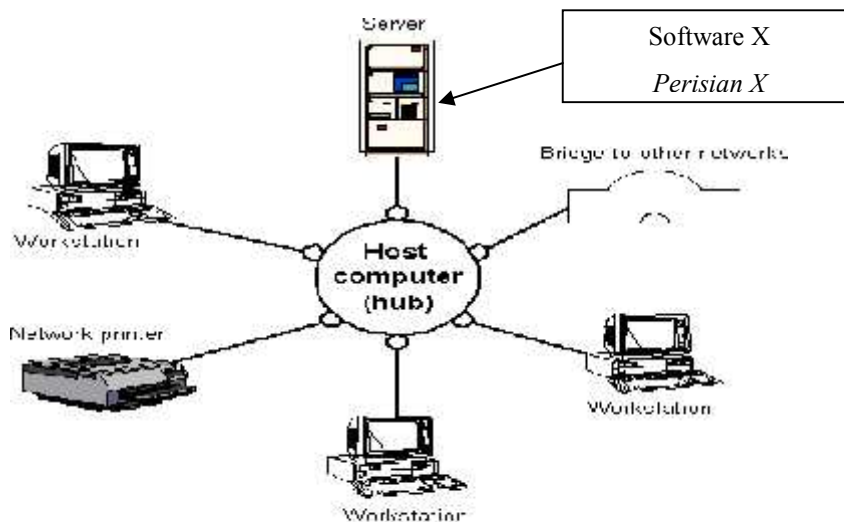


Figure 8
Rajah 8

Based on the Figure 8, name type of software X.
Berdasarkan Rajah 8, namakan jenis perisian X.

14. Figure 9 shows the configurations of network.
Rajah 9 menunjukkan konfigurasi rangkaian.

Subnet Mask	Default Gateway	IP address
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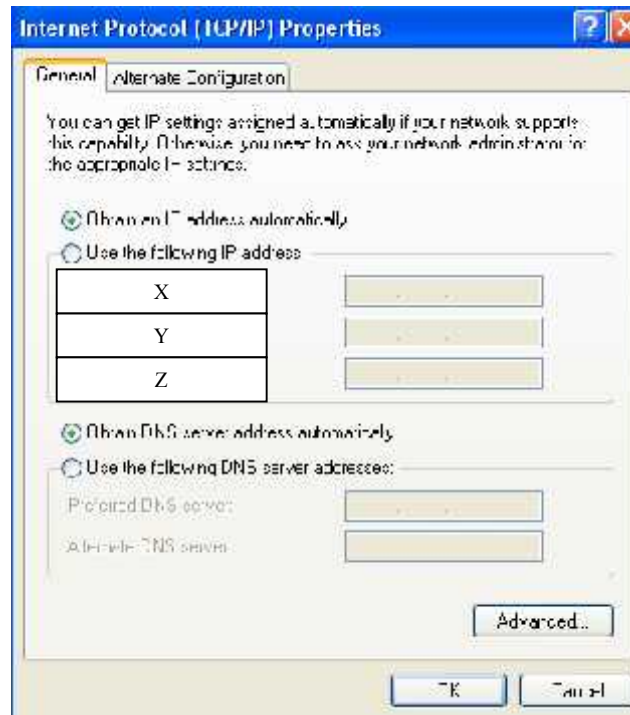


Figure 9
Rajah 9

Based on the Figure 9 identify X and Y with given answers.
Berdasarkan Rajah 9, kenalpasti X dan Y dengan jawapan yang diberi.

15. Below shows types of video capture devices except
Berikut menunjukkan jenis-jenis peralatan rakaman video kecuali

A.



C.



B.



D.



16. Figure 10 shows an example of authoring software.
Rajah 10 menunjukkan contoh perisian pengarangan.

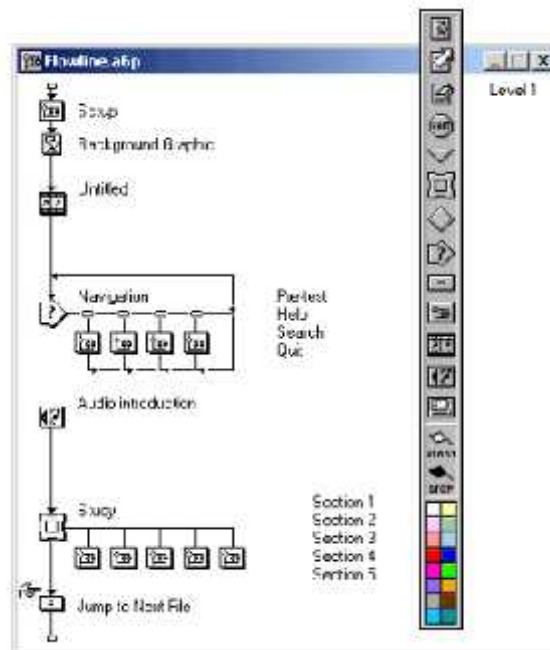


Figure 10
Rajah 10

Based on Figure 10, name the type of authoring tool concept used.
Berdasarkan Rajah 10, namakan jenis konsep alat pengarangan yang digunakan.

17.

“Every part of a lesson should be relevant to a particular title and ideas”

The statement above is about the user interface principles for _____.
Penyataan di atas menerangkan prinsip asas antaramuka bagi _____.

- A. Context
- B. Learnability
- C. Personalization
- D. Clarity

18. Figure 11 shows one of the phases in a multimedia development.
Rajah 11 menunjukkan salah satu fasa pembangunan multimedia.



Figure 11
Rajah 11

Based on Figure 11:
Berdasarkan Rajah 11:

- i. Identify one multimedia element which is not included in this presentation.
Kenalpasti satu elemen multimedia yang tidak terdapat pada persembahan di atas.
- ii. State the phase of multimedia development shown in the graphic above.
Nyatakan fasa pembangunan multimedia yang ditunjukkan dalam grafik di atas.

19. Fill in the blanks with the correct answer.
Isikan tempat kosong dengan jawapan yang sesuai.
- A programming language is a set of words, _____ and codes that enables human communicate with computers.
Bahasa pengaturcaraan adalah satu set perkataan _____ dan kod yang membolehkan pengguna berkomunikasi dengan komputer.
 - A series of organized _____ that directs the computer to perform tasks is called programming.
Satu siri _____ yang tersusun yang mengarahkan komputer untuk melaksanakan tugas dikenali sebagai pengaturcaraan.
20. State whether the following statements is **True** or **False**
*Nyatakan sama ada pernyataan berikut **Benar** atau **Palsu***

Figure 12 shows codes written using a particular programming language.

Rajah 12 menunjukkan kod yang ditulis menggunakan satu bahasa pengaturcaraan.

```
Private Sub cmdKeputusan_Click()  
  
    Dim jwp as String  
    jwp = lbl1.Caption  
  
    If jwp = "Tidak" Then  
        lbl1.Caption = "GAGAL"  
    End If  
End Sub
```

Figure 12
Rajah 12

- The code uses a high-level programming language.
Kod di atas ditulis menggunakan bahasa pengaturcaraan aras tinggi.
- Output of the program is "Tidak"
Output program ialah "Tidak"

21. Table 13 shows the differences between programming approaches.

Jadual 13 menunjukkan perbezaan antara pendekatan pengaturcaraan.

P	Q
It often uses a top-down design model. <i>Ia selalunya menggunakan model rekabentuk atas bawah</i>	It uses combinations of objects. <i>Ia menggunakan kombinasi objek-objek.</i>
Examples: ADA, Pascal and Fortran. <i>Contoh: ADA, Pascal and Fortran.</i>	Examples: Smalltalk, Java, Visual Basic and C++. <i>Contoh: Smalltalk, Java, Visual Basic and C++.</i>

Table 13
Jadual 13

Based on Table 13, name **Q**.

Berdasarkan Jadual 13, namakan Q.

22. Figure 14 shows part of programming code Total Parking Charges.

Rajah 14 menunjukkan sebahagian daripada kod atur cara Total Parking Charges.

```
Private Sub calculate_Click()  
Dim Hour, Minute As Integer  
Dim Total As Single  
msg = "Total Parking Charges is "  
  
TimeEntry = ((Total1 * 60) + Total2) / 60  
lblCharges.Caption = TimeEntry  
If TimeEntry <= 0.5 Then  
lblCharges.Caption = msg & "RM0.20"  
ElseIf TimeEntry > 0.5 AND TimeEntry <= 1 Then  
lblCharges.Caption = msg & "RM0.50"  
ElseIf TimeEntry > 1 AND TimeEntry <= 1.5 Then  
lblCharges.Caption = msg & "RM1.50"  
ElseIf TimeEntry > 1.5 Then  
jb = 0.7 + (TimeEntry * 0.8)  
lblCharges.Caption = msg & "RM" & jb  
  
End If  
End Sub
```

Figure 14
Rajah 14

Based on Figure 14, state:

Berdasarkan Rajah 14, nyatakan:

- i. One variable :
Satu Pembolehubah:
- ii. Control structure used.
Struktur kawalan yang digunakan.

23. Figure 15 shows the information system components.
Rajah 15 menunjukkan komponen bagi system maklumat

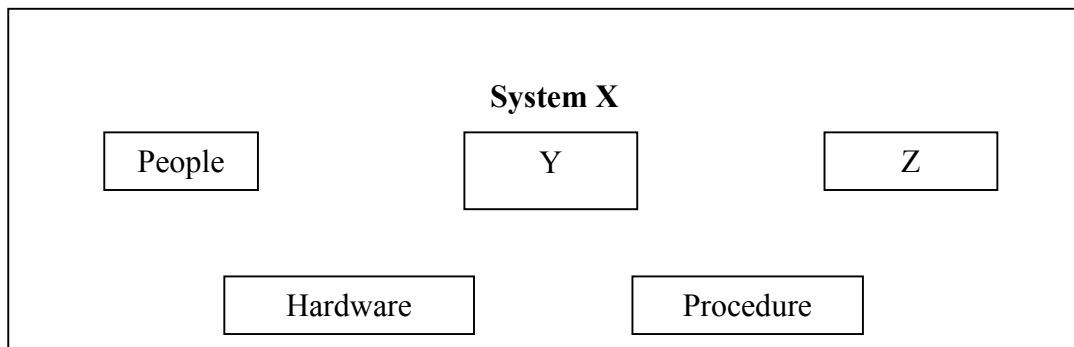


Figure 15
Rajah 15

Based on Figure 15, state Y and Z for **System X**.
*Berdasarkan Rajah 15, nyatakan Y dan Z bagi **Sistem X**.*

24. Which of the following are types of Information Systems?
Yang manakah di antara berikut merupakan jenis-jenis Sistem Maklumat?

- I. Transaction Processing System
Sistem Pemprosesan Transaksi
- II. Management Information System
Sistem Pengurusan Maklumat
- III. Expert Information System
Sistem Maklumat Pakar
- IV. Executive Information System
Sistem Maklumat Eksekutif

- A. I, II, III
- B. I, II, IV
- C. I, III, IV
- D. II, III, IV

25. State whether the following statements is **True** or **False**
*Nyatakan sama ada pernyataan berikut **Benar** atau **Palsu***

- i. A Data base management student DBMS can minimizes data redundancy.
Sistem Pengurusan Pengkalan Data (DBMS) boleh mengurangkan pertindihan data
- ii. The information using DBMS is difficult to access by user.
Maklumat yang digunakan di dalam suatu Sistem Pengurusan Pengkalan Data (DBMS) sukar untuk dicapai oleh pengguna.

Section B
Bahagian B
[20 marks]

This section consists of five questions. **Answer all questions.**
Bahagian ini mengandungi lima soalan. Jawab semua soalan.

26. Figure 16 below is an example of Internet filtering used by Puan Asiah to control access of certain website.
Rajah 16 merupakan contoh Internet filtering yang digunakan oleh Puan Asiah untuk mengawal capaian kepada laman web tertentu.

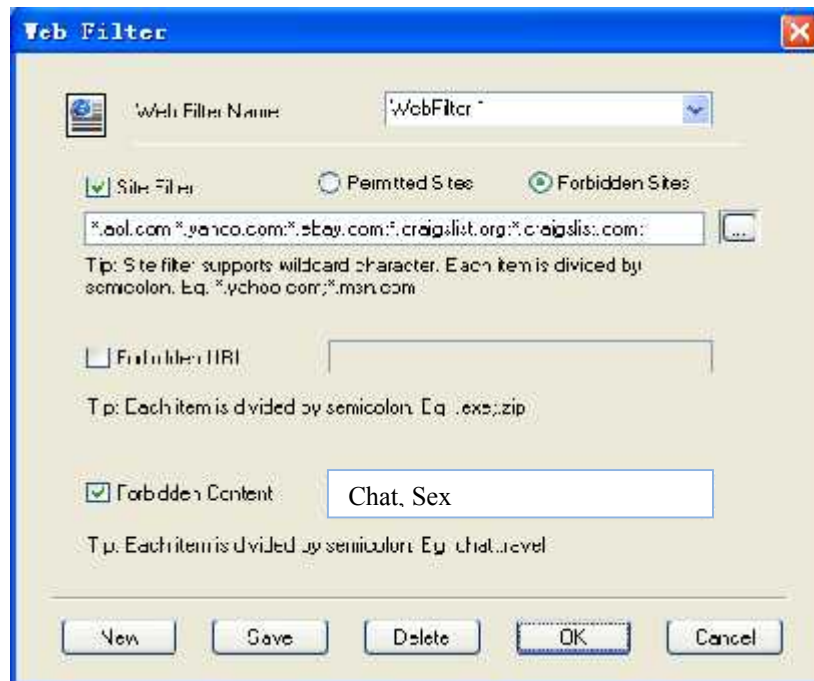


Figure 16
Rajah 16

Based on Figure 16 :
Berdasarkan Rajah 16:

- a. State two other methods beside mention above that can be used to control access of controversial content
Namakan dua kaedah lain selain yang dinyatakan di atas yang boleh digunakan untuk mengawal kandungan kontroversi

[2 marks]
[2 markah]

- b. Explain why does Puan Asiah need to prevent her son from accessing the content.
Terangkan kenapa Puan Asiah perlu menghalang anaknya daripada memasuki kandungan tersebut.

[2 marks]
[2 markah]

27. Table 17 below shows two quotations proposed by Companies X and Y to set up a network in your new office. As an ICT Manager, decide which quotation to choose based on the type of software.

Jadual 17 menunjukkan dua sebut harga rangkaian yang dicadangkan oleh syarikat X dan syarikat Y. Sebagai Pengurus ICT, anda dikehendaki memilih sebut harga berdasarkan jenis perisian.

	X	Y
Network Operating System	Windows Server 2000	Linux
Application Software	Microsoft Office	OpenOffice.org
Anti Virus Software	Kapersky	Avira

Table 17
Jadual 17

a. Name the types of software you choose.
Namakan jenis perisian yang anda pilih.

[1 marks]
 [1 markah]

b. Explain the reasons why you choose that quotation.
Terangkan kenapa anda memilih sebut harga tersebut.

[3 marks]
 [3 markah]

28. Figure 18 shows three type of network topologies.
Rajah 18 menunjukkan tiga jenis topologi rangkaian

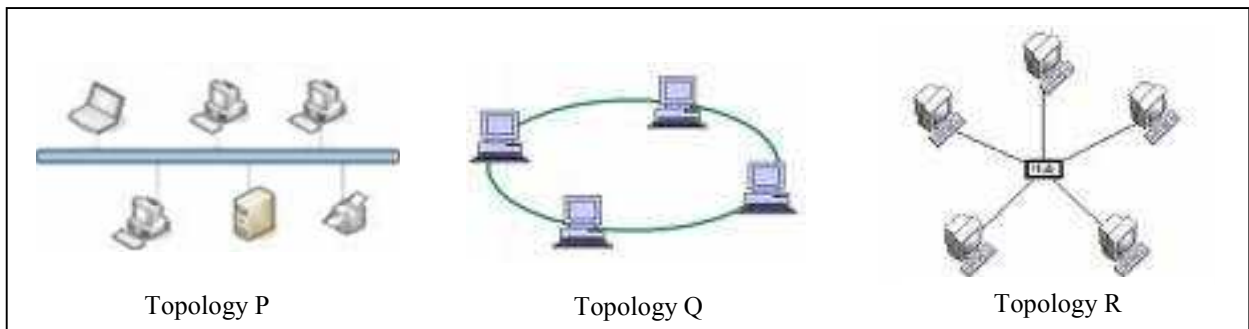


Figure 18
Rajah 18

Based on Figure 18
Berdasarkan Rajah 18

a. State type of topology Q.
Nyatakan jenis topologi Q

[1 mark]
 [1 markah]

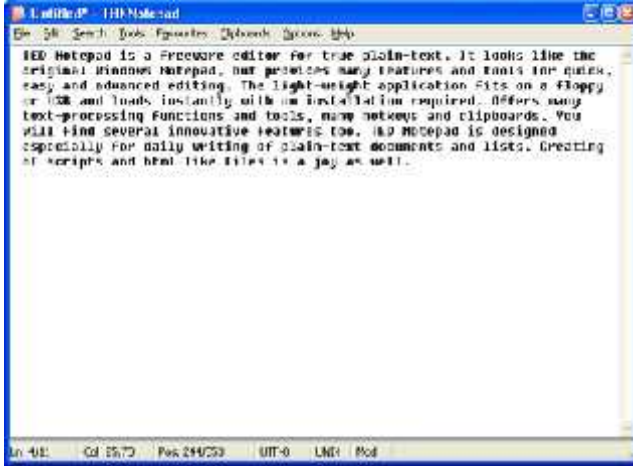
b. Give a difference between topology Q and R.
Berikan perbezaan antara topologi Q dan R.

[1 mark]
 [1 markah]

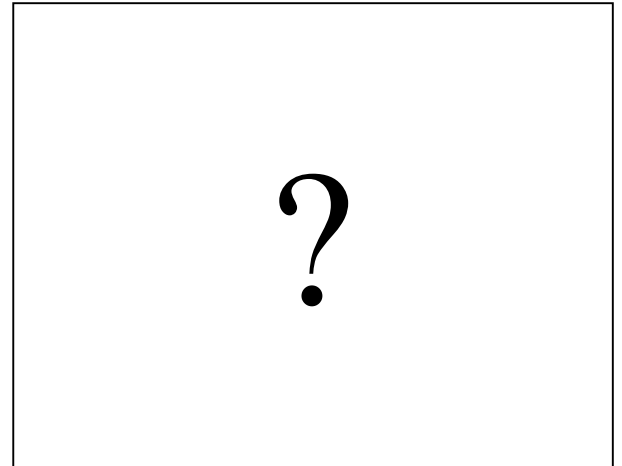
- c. State two advantages of topologies P and R.
Nyatakan dua kelebihan topologi P dan R.

[2 marks]
[2 markah]

29. Figure 19 below shows two types of web editor.
Rajah 19 menunjukkan dua jenis editor web.



X



Y

Figure 19
Rajah 19

Based on Figure 19 :
Berdasarkan Rajah 19:

- a. Identify web editor Y.
Kenalpasti editor web Y.
- b. State two differences between web editor X and Y.
Nyatakan dua perbezaan di antara editor web X dan Y.
- c. Give one examples of web editor Y.
Berikan satu contoh editor web Y.

[1 marks]
[1 markah]

[2 marks]
[2 markah]

[1 marks]
[1 markah]

30. Figure 20, shows solid formed for cone.
Rajah 20, menunjukkan sebuah kon.

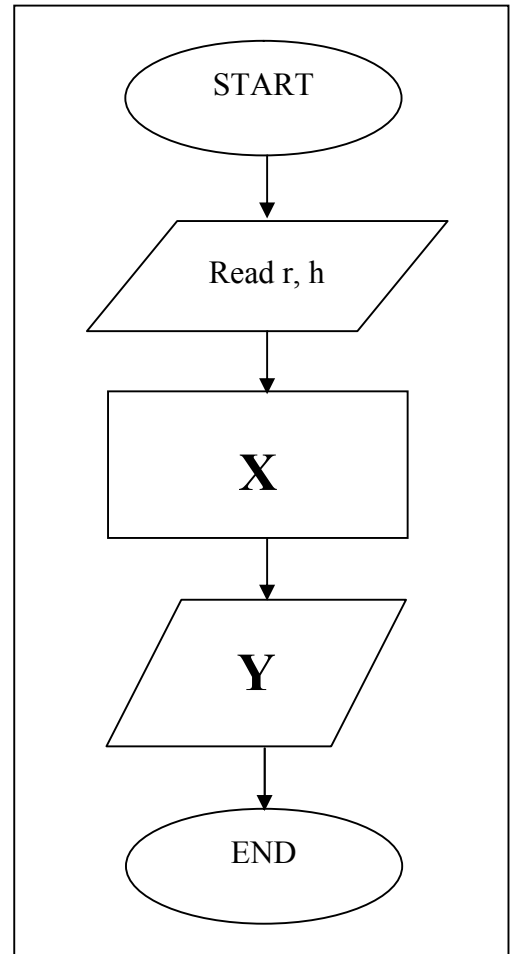
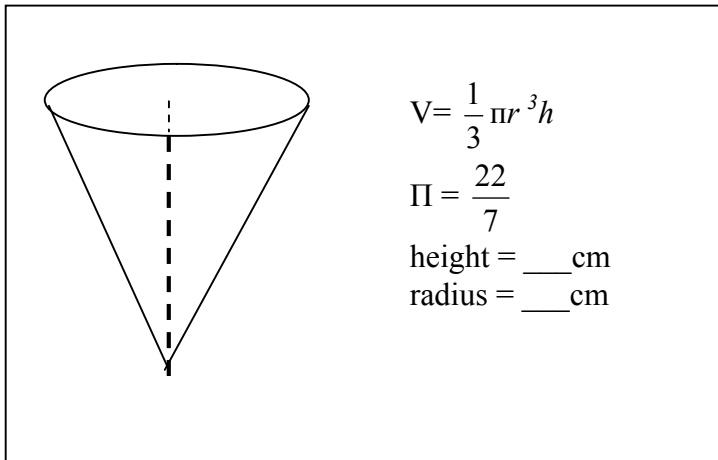


Figure 20
Rajah 20

Based on Figure 20, you are asked to develop a program to calculate the volume of cone.
Berdasarkan Rajah 20 di atas, anda dikehendaki untuk membangunkan satu program untuk mengira isipadu kon.

- Identify **one** constant. Justify your answer.
Kenalpasti **satu** pemalar. Terangkan jawapan anda.
- Complete the flow chart for process X and output Y.
Lengkapkan carta alir untuk proses X dan output Y.

[2 marks]
[2 markah]

[2 marks]
[2 markah]

Section C
Bahagian C
[14 marks]

This section consists of three questions. Answer two questions only.

- i) **Question 31** is compulsory, and
- ii) Choose either **Question 32** or **Question 33**.

Bahagian ini mengandungi tiga soalan. Jawab dua soalan sahaja.

- i) **Soalan 31** adalah wajib, dan
- ii) Pilih sama ada **soalan 32** atau **soalan 33**.

31. Sinar Jaya is a direct selling company that provides healthy supplement and domestic products. Ahmad is asked to develop a program to calculate monthly bonus for the staff who obtain high performance in their direct selling.

Diagram 1 shown is the phases that Ahmad goes through during program development.

Sinar Jaya adalah sebuah syarikat jualan langsung yang menyediakan makanan kesihatan dan produk dalam negeri. Ahmad diminta untuk membangunkan satu program untuk mengira bonus bulanan bagi kakitangan yang mendapat prestasi yang tinggi dalam jualan langsung mereka. Rajah 1 dimenunjukkan fasa yang Ahmad lalui sepanjang program pembangunan.

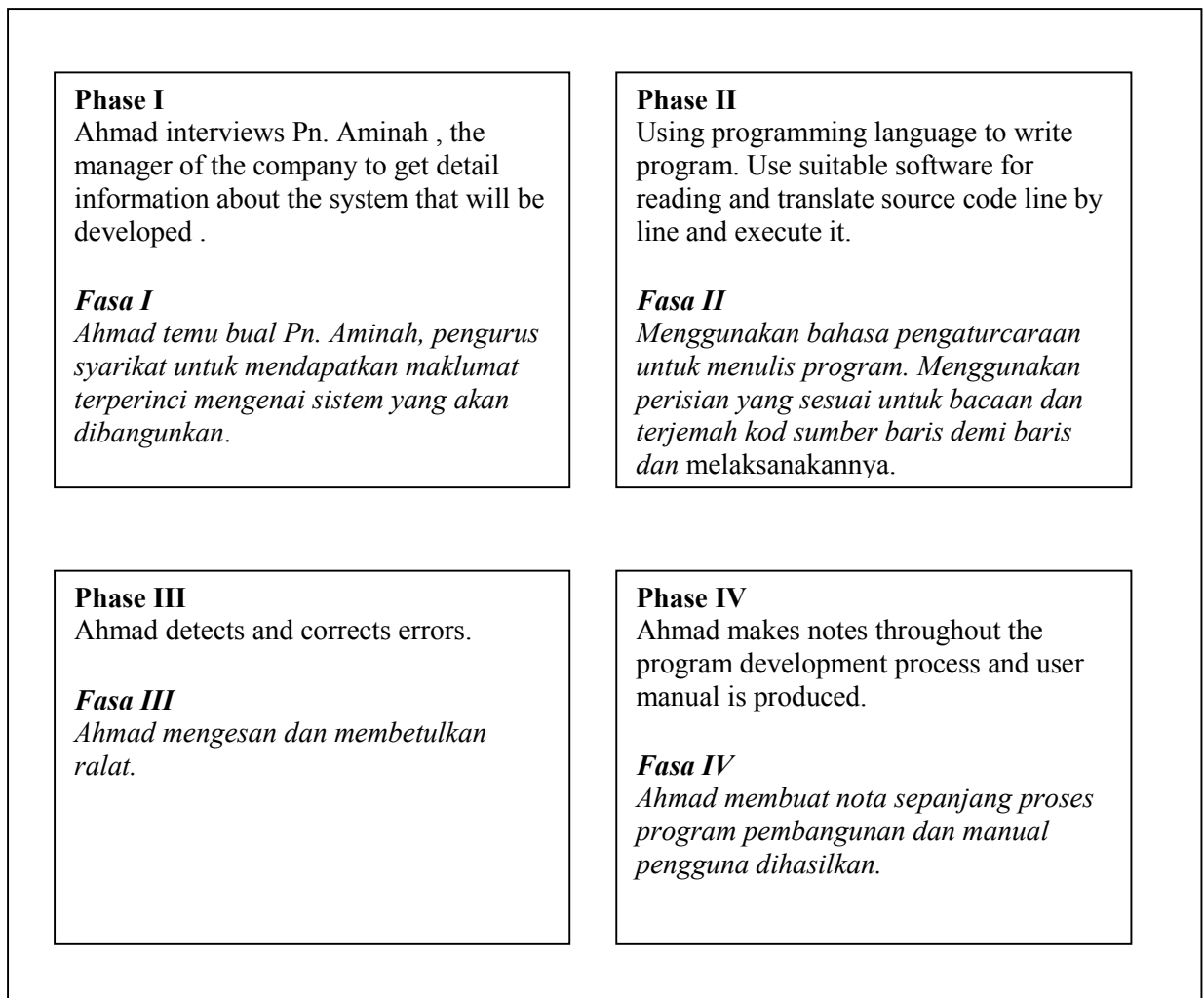


Diagram 1
Diagram 1

Based on the **Diagram 1**,
Berdasarkan Diagram 1,

- a. State the omitted phase that is not done by Ahmad. Briefly describe the omitted phase.
Nyatakan fasa yang tidak dilakukan oleh Ahmad. Terangkan secara ringkas fasa yang ditinggalkan.

[3 marks]
[3 markah]

- b. Name another translation method that can be used to translate programming language to machine language in **Phase II**. Explain the method briefly.
*Namakan satu lagi kaedah penterjemahan yang boleh digunakan untuk menterjemah bahasa pengaturcaraan kepada bahasa mesin dalam **Fasa II**. Terangkan kaedah tersebut secara ringkas.*

[2 marks]
[2 markah]

- c. Describe two importance of **Phase IV** in program development.
*Jelaskan dua kepentingan **Fasa IV** dalam program pembangunan.*

[2 marks]
[2 marks]

32. Figure 21 shows a computer network at SMK Seri Limau which is connected to the Internet. Apart from Internet, the school also has own intranet to facilitate their internal communications

Rajah 21 menunjukkan rangkaian komputer di SMK Seri Limau yang dirangkaikan dengan rangkaian internet. Selain daripada Internet, sekolah itu juga mempunyai intranetnya sendiri untuk memudahkan komunikasi dalaman mereka.

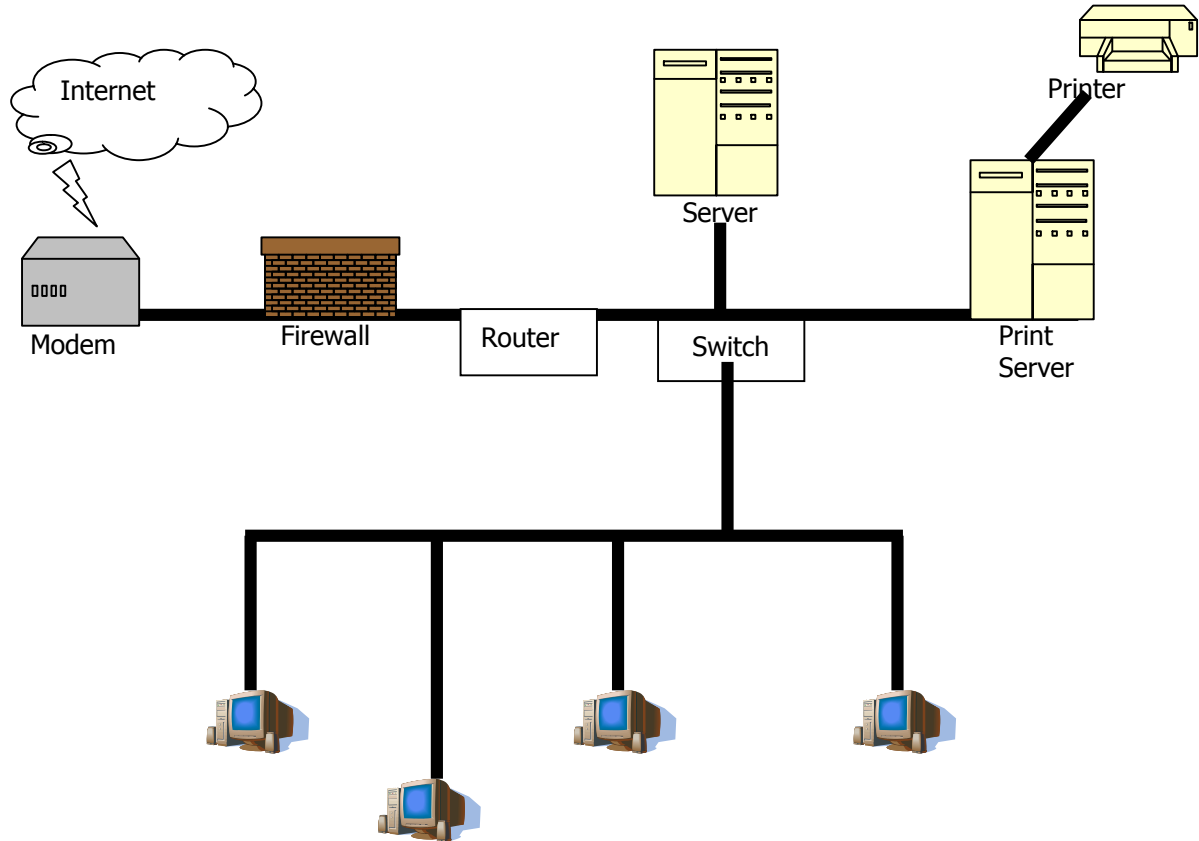


Figure 2
Rajah 2

- a. State two advantages of using computer network.
Nyatakan dua kelebihan menggunakan internet.

[2 marks]
[2 markah]

- b. State two services provide by using Internet.
Nyatakan dua perkhidmatan melalui Internet.

[2 marks]
[2 markah]

- c. Describe the network architecture use in SMK Seri Limau
Terangkan senibina rangkaian yang digunakan di SMK Seri Limau.

[3 marks]
[3 markah]

33. Figure 22 shows two interface of an automated system of Bestari Mobile Services.
Rajah 22 menunjukkan antaramuka bagi sistem automasi Servis Mobil Bestari.

Bestari Mobile Services Client Information			
Client ID	<input type="text"/>	Address	<input type="text"/>
Name	<input type="text"/>	Telephone	<input type="text"/>
IC Number	<input type="text"/>		
Update		Add	Delete

Form A

Bestari Mobile Services Services Record			
Services ID	<input type="text"/>	Plate No.	<input type="text"/>
X	<input type="text"/>	Type of Services	<input type="text"/>
Date	<input type="text"/>		
Update		Add	Delete

Form B

Figure 22
Rajah 22

Form A is related to form B with relationship 1: m. Based on Figure 22:
Borang A berkaitan dengan Borang B dengan hubungan 1:m. Berdasarkan Rajah 22:

- a. Identify X and explain your answer.
Kenalpasti X dan terangkan jawapan anda.

[3 marks]
[3 markah]

- b. Draw the relationship tables between those two forms.
Lukis jadual hubungan antara dua borang tersebut.

[4 marks]
[4 markah]

Kertas Soalan Tamat