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SEPT 2010



JABATAN PELAJARAN MELAKA

INFORMATION AND COMMUNICATIONS TECHNOLOGY
(ICT)

PEPERIKSAAN PERCUBAAN
SIJIL PELAJARAN MALAYSIA 2010

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE ASKED TO DO SO

THIS QUESTION PAPER CONSISTS OF :

- a). Section A : 25 Questions
- b). Section B : 5 Questions
- c). Section C : 3 Questions

(Question 1 is Compulsory and
choose either Question 2 or Question 3)

THIS QUESTION PAPER CONSISTS OF 16 PAGES

SECTION A

In the recent years, many concerns and issues were raised on the integrity and security of information, legal status of online transactions, privacy and confidentiality of information, intellectual property rights and security of government data placed on the Internet. So we need to protect the Internet and other online communication technologies.

Beberapa tahun kebelakangan, banyak pertikaian dan isu dibangkitkan tentang keselamatan dan integriti maklumat, status perundangan bagi transaksi atas talian, kebersendirian dan kerahsiaan maklumat, hak harta intelek dan keselamatan data kerajaan di Internet. Jadi, kita perlu melindungi Internet dan teknologi atas talian yang lain.

1. This statement refer to
Kenyataan ini merujuk kepada
 - A. Cyber Law
Undang-undang Siber
 - B. Code of Ethics
Kod Etika
 - C. Computer Crime
Jenayah Komputer
 - D. Computer Ethics
Etika Komputer

2. This operating system is an example of an open source program.
Sistem pengoperasian ini adalah contoh atur cara sumber terbuka.
 - A. Linux
 - B. Windows XP
 - C. Macintosh
 - D. Mac OS

3. Which of the following are output devices?
Yang manakah di antara berikut adalah peranti output?
 - I. Printer *pencetak*
 - II. Monitor *monitor*
 - III. Joystick *kayu ria*
 - IV. Plotter *pemplot*
 - V. Microphone *mikrofon*

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

4. Which of the following are biometric devices?

Yang manakah di antara berikut merupakan peranti biometrik?

- I. Hand geometry
- II. Callback System
- III. Retinal Scanning
- IV. Signature Verification System

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

5. All of the following devices are pointing devices EXCEPT...

Semua peranti di bawah merupakan peranti penunjuk, KECUALI...

- A. Mouse
Tetikus
- B. Touchpad
Pad sentuh
- C. Keyboard
Papan Kekunci
- D. Joystick
Kayu Ria

State whether the following statement is True or False.

Nyatakan sama ada pernyataan berikut Benar atau Palsu.

6. a) Animation is the creation of the illusion of movement by displaying a series of still images in sequence. TRUE / FALSE

b) ASCII stands for American Standard Code for International Interchange.

TRUE / FALSE

- c) A display device is an output device that visually conveys text TRUE / FALSE
- d) LCD stands for Layout Crystal Display TRUE / FALSE
- e) The primary storage of a computer holds data temporarily. TRUE / FALSE
- f) If any node of star topology failed, the network of the topology will fail also. TRUE / FALSE

7. Which of the following is the example of operating system?

Manakah antara berikut merupakan contoh sistem pengendalian?

- A. Windows XP
- B. Visual Basic
- C. Norton Antivirus
- D. Microsoft Office

8. Suhana spreads a rumor that a Minister is receiving bribes. Suhana's conduct is called *Suhana menyebarkan khabar angin bahawa seorang Menteri menerima rasuah. Perbuatan Suhana dikenali sebagai*

- A Hijacker
Perampas
- B Slander
Fitnah
- C Cracker
Memecah kata laluan
- D Hacker
Penggodam

9. What is data?
Apa itu data?

- A. The facts of the information.
Fakta maklumat
- B. The collection of information
Koleksi maklumat
- C. The collection of raw unprocessed facts, figures and symbols.
Koleksi data-data, rajah-rajah dan symbol-simbol yang belum diproses.
- D. The information which had been processed as something meaningful.
Maklumat yang telah diproses dan menjadi bermakna.

10. Table below shows examples of operator symbols that being used in programming.
Jadual di bawah menunjukkan contoh simbol-simbol operator yang digunakan dalam pengaturcaraan.

S	' OR ' ' AND '
T	' * ' ' + '
U	' < ' ' > '

Based on table above, write S, T or U for the following operator types.

Berdasarkan jadual di atas, tuliskan S, T atau U bagi jenis-jenis operator berikut:

- i. Logical Operator
Operator Logik
 - ii. Mathematical Operator
Operator Matematik
11. Which of the following programming languages are categorized as high-level?
Yang manakah diantara bahasa-bahasa pengaturcaraan berikut merupakan bahasa aras-tinggi?

- I ASSEMBLY
- II PASCAL
- III SQL
- IV MERCURY

- A. I, II and III
 - B. I, II and IV
 - C. I, III and IV
 - D. II, III and IV
12. Table below shows the differences between Structured Programming and Object Oriented Programming.

Jadual di bawah menunjukkan perbezaan antara Pengaturcaraan Berorientasikan Objek dan Pengaturcaraan Berstruktur

P	Q
It often uses a top-down design model. <i>la selalunya menggunakan model rekabentuk atas bawah</i>	It uses combinations of objects. <i>la menggunakan kombinasi 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>

Based on table above, name P and Q.

Berdasarkan jadual di atas, namakan P dan Q.

P : _____

Q : _____

13. Choose the best answer according to the data types.

Pilih jawapan terbaik berdasarkan jenis data.

Integer	Double
Boolean	String

a. _____ data type contains any whole number value that does not have any fractional part.

_____ *jenis data yang mengandungi keseluruhan nilai nombor kecuali nombor pecahan.*

b. Any value that contains a sequence of characters and decimal is refer to _____

Sebarang nilai yang mengandungi jujukan aksara dan perpuluhan adalah merujuk kepada _____

14. Which of the following are network operating systems?
Antara yang berikut manakah system pengendali rangkaian

- I Windows NT
- II Windows XP
- III Novell
- IV UNIX

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

15. Mail merge allows users to create personalized
Cantuman mel membenarkan pengguna menghasilkan

- I Letters
Surat
- II Labels
Label
- III Voices
Suara
- IV Envelopes
Envelop

- A. I, II, III
- B. I, II, IV
- C. II, III, IV
- D. All the above

16. Table below shows several terms of computer crime.
Jadual di bawah menunjukkan beberapa terminologi dalam jenayah computer.

Match the statements with the given answers.
Padankan pernyataan dengan jawapan yang diberi.

i.	Unauthorised use of another person's property. <i>Penggunaan tanpa kebenaran ke atas milikan orang lain</i>
ii.	Any criminal activity that is related to the use of computers. <i>Sebarang aktiviti jenayah yang berkaitan dengan penggunaan komputer.</i>
iii	Any activities taken to disrupt the equipment of computer systems <i>Sebarang aktiviti yang diambil untuk mengganggu peralatan sistem komputer.</i>

A	Computer Crime <i>Jenayah Komputer</i>
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B	Copyright Infringement <i>Pelanggaran Hak Cipta</i>
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C	Computer Attack <i>Pencerobohan Komputer</i>
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D	Computer Theft <i>Pencurian Komputer</i>
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17. Five types of Information System are Decision Support System (DSS), Management Information System (MIS), and Expert System (ES), Executive Information System (EIS) and _____

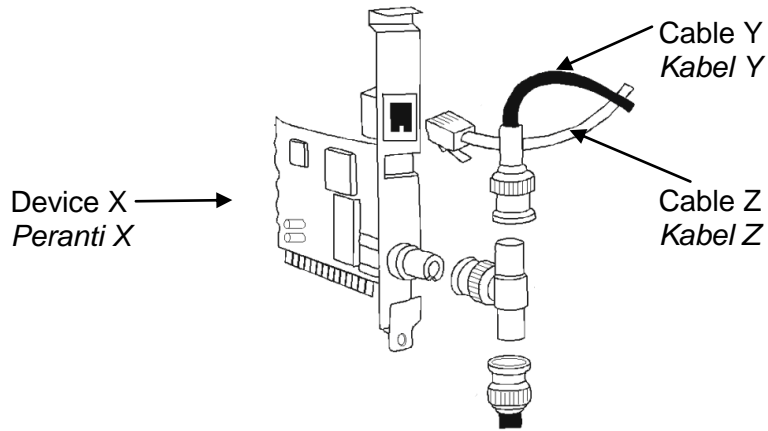
Lima jenis Sistem Maklumat ialah Sistem Sokongan Keputusan (DSS), Sistem Pengurusan Maklumat (MIS), Sistem Pakar (ES), Sistem Maklumat Eksekutif (EIS) and

- A. Transaction Processing System (TPS)
Sistem Pemprosesan Transaksi (TPS)
- B. Executive Assistant System (EAS)
Sistem Bantuan Eksekutif (EAS)
- C. Decision Information System (DIS)
Sistem Maklumat Keputusan
- D. Expert Information System (EIS)
Sistem Maklumat Pakar

18. What is the set of rules used for information exchange between computers in a network?

- A. Router
- B. Protocol
- C. ISDN
- D. Streamyx

19. Figure 2 shows the device and cables used in networking.
Rajah 2 menunjukkan peranti dan kabel yang digunakan dalam rangkaian komputer.



Which of the following statements are TRUE?

Manakah di antara yang berikut adalah pernyataan yang BENAR?

- I. Device X is inserted into the PCI slot of computer.
Peranti X dimasukkan ke dalam slot PCI komputer
 - II. Cable Z is twisted pair cable.
Kabel Z ialah kabel pasangan terpiuh
 - III. Cable Z is fiber optics cable.
Kabel Z ialah kabel gentian optik
 - IV. Both cables use electrical pulse to transmit data.
Kedua-dua kabel menggunakan denyutan elektrik untuk menghantar data
- A. I and II
 - B. I, II, and III
 - C. I, II, and IV
 - D. II, III, and IV

20. Customers benefit from Electronic Banking in terms of :
Pelanggan mendapat faedah dari Perbankan Elektronik dalam konteks:

- i. 24 hours service
Perkhidmatan 24 jam
- ii. Electronic Fund Transfer
Pemindahan Tabung secara elektronik
- iii. Electronic Cash Deposits
Deposit Tunai Elektronik
- iv. Electronic Loan Application
Aplikasi Pinjaman Elektronik

- A. i , ii and iii
- B. i , ii and iv
- C. i , iii and iv
- D. ii , iii and iv

21. Which of the following programs can be used to generate graphic?

- A. Microsoft Power Point
- B. Microsoft Word
- C. Adobe Photoshop
- D. Adobe Audition

22. Which of the following combination of multimedia elements and its standard format file is correct?

Yang mana berikut, gabungan elemen multimedia dan format fail piawai yang betul?

	Multimedia elements	Standard File Format
A	Graphics <i>Grafik</i>	.avi
B	Audio <i>Audio</i>	.midi
C	Video <i>Video</i>	.au
D	Text <i>Teks</i>	.gif

23. The _____ reader is attached to a computer and takes information from the scanner and sends it to the database. The data received is compared to the information stored within the database. The user is usually required to leave his finger on the reader for less than 5 seconds during which time the identification or verification takes place.

24. a) State the name of the first generation computer

Nyatakan nama computer generasi pertama.

b) The multimedia element that makes objects move is called_____.

25. _____ is a set of commands or instructions which directs a computer in doing a task.

- A. Program
- B. Language
- C. Programmer
- D. Programming Language

SECTION B

1. State the second phase and the fifth phase of program development.
Nyatakan fasa kedua dan fasa kelima pembangunan atur cara.

(i) Second phase : _____

(ii) Fifth phase : _____

iii) $100011100101010_2 = \text{_____}_{16}$

iv) $2BAD_{16} = \text{_____}_2$

(4 m)

2. Based on the situation below, answer the following questions.

David always spends his leisure time surfing the Internet. He usually downloads proprietary software and MP3 songs and sells them to his friends. He uses his ICT knowledge to get the unauthorized serial number for the software. One day, he finds that his computer is getting slow and keeps on duplicating files.

David selalu meluangkan masa lapangnya untuk melayari Internet. Dia sering memuat turun perisian hakcipta dan lagu-lagu MP3 untuk dijual kepada rakan-rakannya. David menggunakan kepakarannya dalam bidang ICT untuk mendapatkan nombor siri yang tidak sah untuk mengaktifkan perisian yang telah dimuat turun. Pada suatu hari komputer David menjadi perlahan dan sering membuat salinan fail tertentu secara berulang.

a. Name the type of computer crime that David has committed.

Namakan jenis jenayah komputer yang dilakukan oleh David.

b. What has happened to David's computer?

Apakah yang telah terjadi kepada komputer David?

c. How can David prevent his computer from the problem in (b) in the future?
Bagaimanakah David dapat mengatasi masalah komputer yang dihadapi di (b) pada masa akan datang?

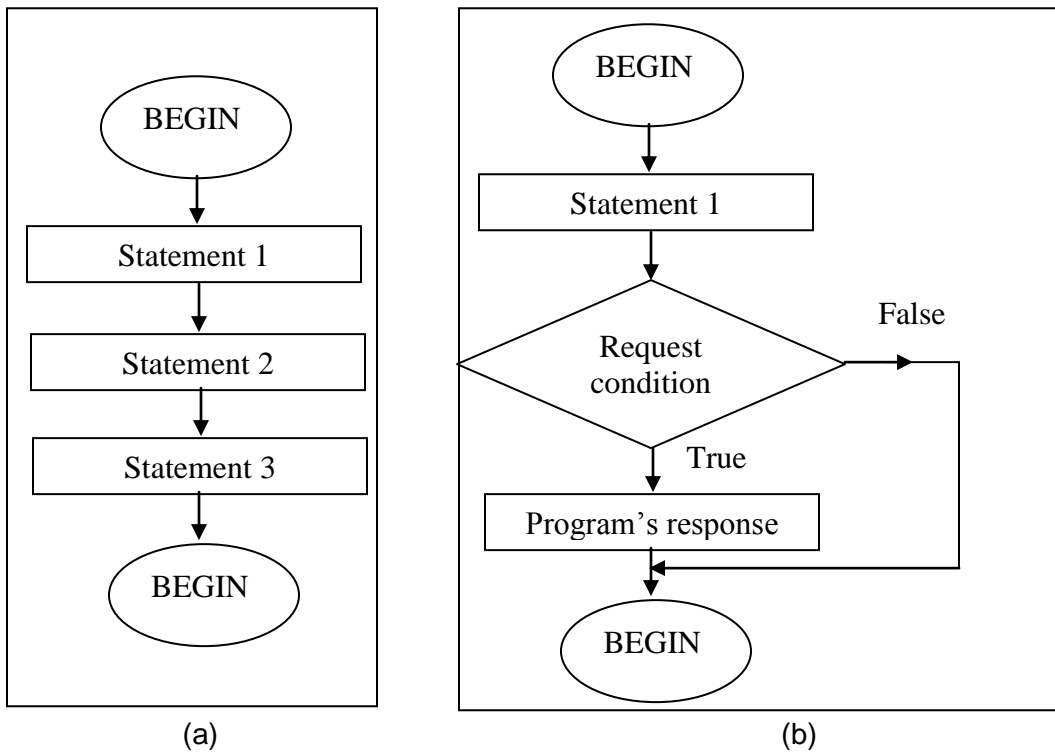
d. Other than the threat you mentioned in (b), give another computer threat that could affect David's computer.

Selain daripada ancaman yang dinyatakan di(b), berikan satu lagi ancaman lain yang mungkin berlaku kepada komputer David.

(4 m)

3. Figure (a) and (b) show two different control structures.

Rajah (a) dan (b) menunjukkan dua struktur kawalan yang berbeza



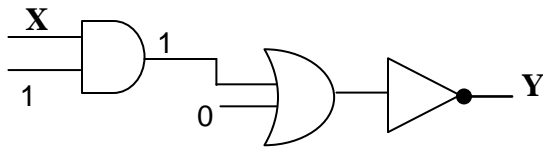
i. Name the control structure in figure (a) and (b)
 Namakan struktur kawalan dalam rajah (a) dan (b)

[2 m]

ii. Differentiate between control structure in figure (a) and (b).
 Bezakan struktur kawalan di antara struktur kawalan dalam rajah (a) dan (b)

[2 m]

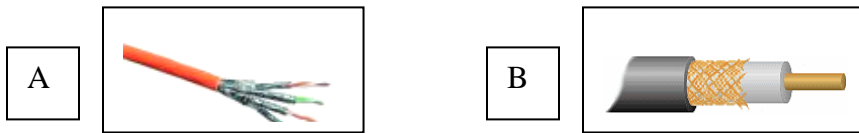
4. a) Based on the figure below,



X =
 Y =

(2m)

b)



Based on figure above, name the physical transmission media of A and B that is used in network communications.

A : _____

B : _____

(2m)

5. Figure below shows variety of data types.

23	3.14	False	Pahang
1.23	Samad	True	909

a) Based on figure above, pick the examples and fill in the boxes below.

Data types	2 Examples
Double	
Boolean	

(2 m)

b) Define PROGRAM.

..... (2 m)

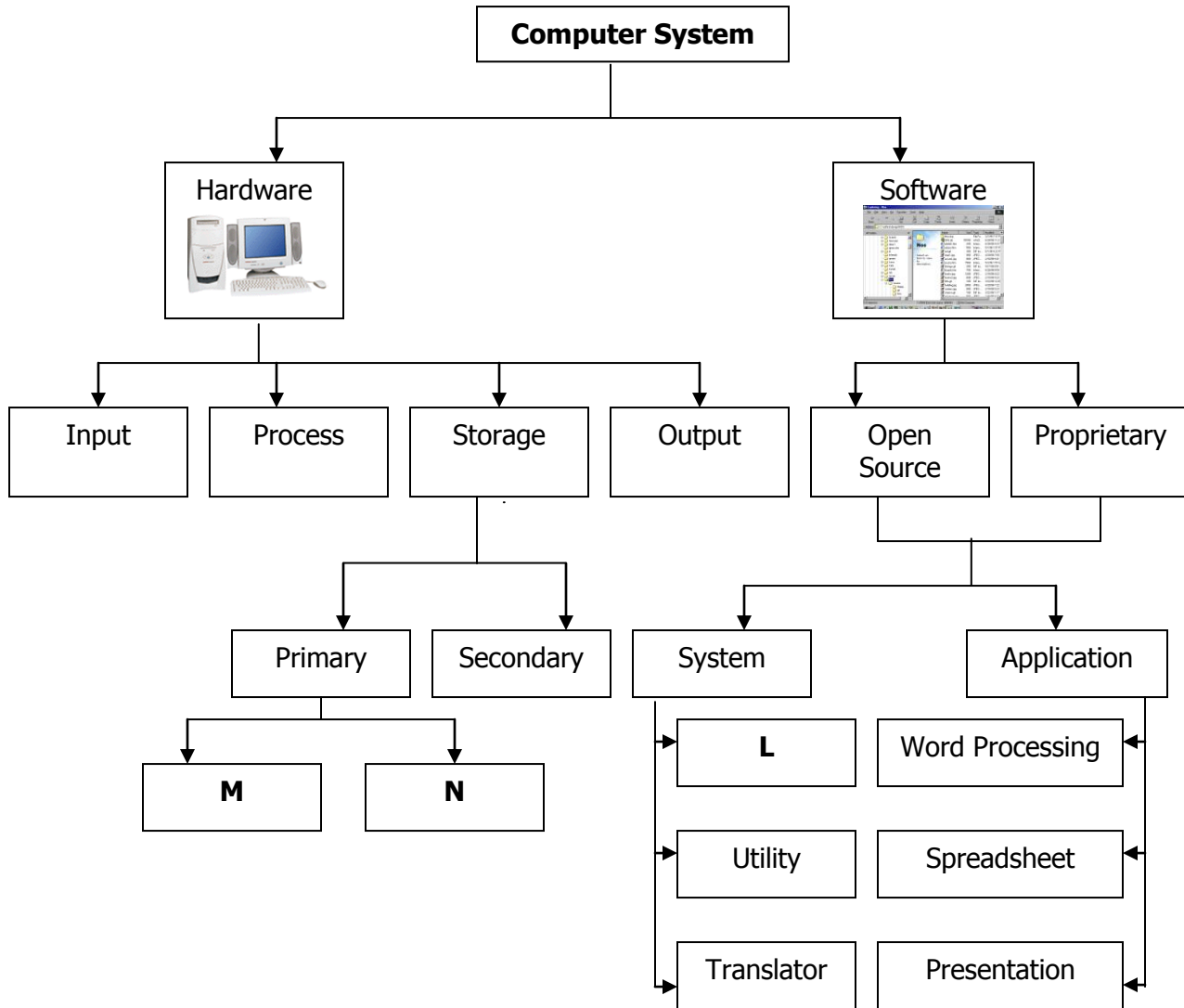
SECTION C

This section consists of 3 questions. You are required to answer 2 questions only. Question 1 is compulsory.

Bahagian ini mengandungi 3 soalan. Anda dikehendaki menjawab 2 soalan sahaja. Soalan 1 adalah wajib.

Question 1

Figure below shows some of the components of a computer system.



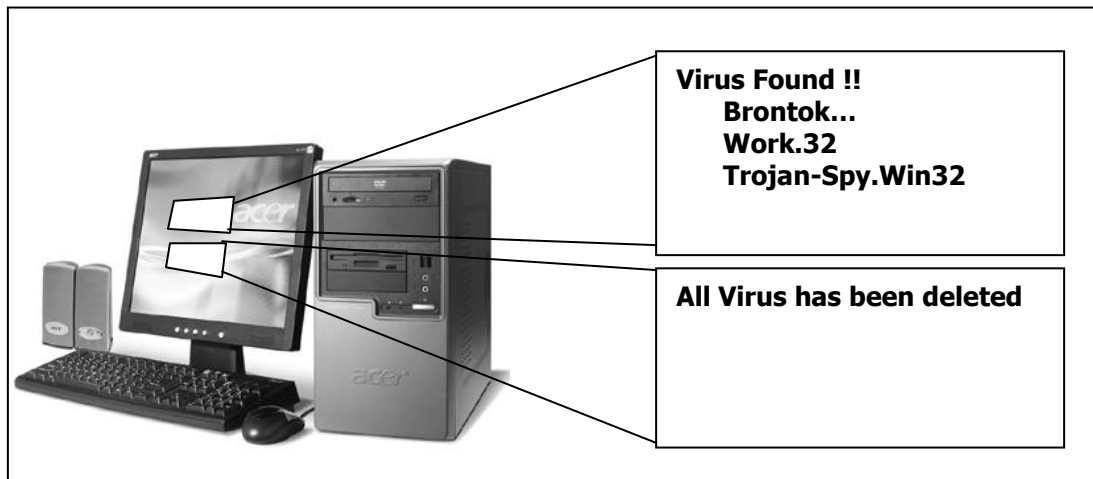
Based on Figure above, answer the following questions.

- a) Draw a block diagram to illustrate the information processing cycle. [2m]
- b) Identify and state the function of L [2m]
- c) Identify and differentiate between M and N [3m]

Question 2

Ahmad's School bought Antivirus software to enhance proficiency in computer security. That software is used for all computer related activities. Ahmad needs to ensure effective usage of that software. Figure below shows several activities by Ahmad.

Sekolah Ahmad membeli perisian Antivirus bagi meningkat tahap keselamatan komputer di sekolahnya. Perisian tersebut telah digunakan untuk sebarang aktiviti yang melibatkan penggunaan komputer. Ahmad telah ditugaskan untuk memastikan penggunaan perisian tersebut secara berkesan. Rajah di bawah menunjukkan sebahagian aktiviti yang dibuat oleh beliau.



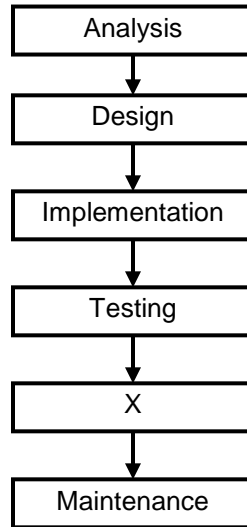
- (a) What are the activities carried out by Ahmad?
Apakah aktiviti-aktiviti telah dilakukan oleh Ahmad ? [3m]
- (b) Explain TWO impacts of the threats in figure above.
Terangkan DUA kesan ancaman yang telah disebut dalam rajah di atas. [4 m]

Question 3

Mr. Tan is the manager of IBC Corporation. He wishes to computerize the management in his company. He employs Mr. Kamal to develop a Management Information System.

- a. State ONE usage of Management Information System that will be used by Mr. Tan. [1m]

b.



Mr. Kamal will go through several phases to develop the system as shown in Figure above. Describe phase X. [2m]

c. When the information system is implemented in IBC Corporation, it will involve five components, namely people, hardware, software, procedure and data. Show the interrelation between information systems components using a diagram. [2m]

d.

StaffID	DateStartWork	JobPosition	BasicSalary	TypeOfAllowance	BonusEntitled
1867800622	01/02/2006	S	800	T	300
1259055797	01/01/2006	M	3600	H	1200
			0		0

Figure above shows X is a field, Y is a record in a table. Define X and Y. [2m]

END