

SECTION B : 70 MARKS**BAHAGIAN B : 70 MARKAH****INSTRUCTION:**

This section consists of **THREE (3)** structured questions. Answer **ALL** questions.

ARAHAN:

Bahagian ini mengandungi **TIGA (3)** soalan berstruktur. Jawab semua soalan.

QUESTION 1**SOALAN 1**

CLO1
C2

- (a) Describe **TWO (2)** software engineering diversity.

Huraikan DUA (2) kepelbagaian kejuruteraan perisian.

[4 marks]

[4 markah]

CLO1
C3

- (b) Explain **TWO (2)** advantages using the architecture patterns as shown in Figure B1(b).

Terangkan DUA (2) kelebihan menggunakan corak senibina dalam Rajah B1(b).

[4 marks]

[4 markah]

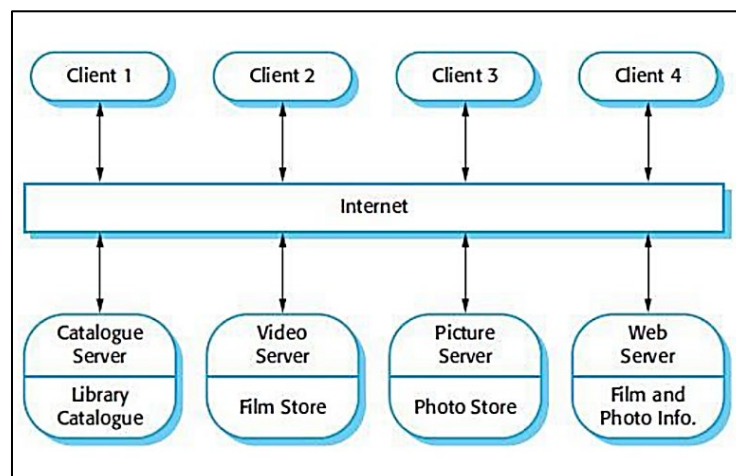


Figure B1(b) / Rajah B1(b)

CLO1
C1

- (c) List **TWO (2)** readers of user requirements and system requirements respectively in requirement engineering.

*Senaraikan **DUA (2)** pembaca keperluan pengguna dan keperluan sistem masing-masing dalam kejuruteraan keperluan.*

[4 marks]

[4 markah]

CLO1
C2

- (d) Describe **THREE (3)** features of structured specification language in writing the Software Requirement Specification document.

*Huraikan **TIGA (3)** ciri bahasa spesifikasi berstruktur dalam penulisan dokumen Spesifikasi Keperluan Perisian.*

[3 marks]

[3 markah]

CLO1
C2

- (e) Explain the processes involved in requirement change management based on Figure B1(e).

Terangkan proses yang terlibat dalam pengurusan perubahan keperluan berdasarkan Rajah B1(e).

[3 marks]

[3 markah]

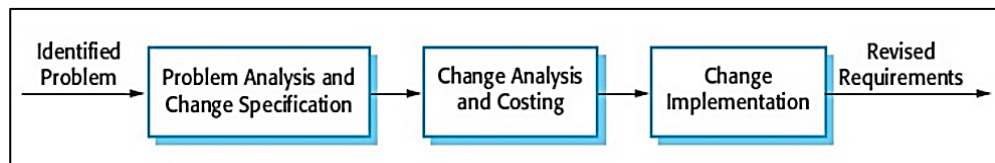


Figure B1(e) / Rajah B1(e)

CLO1
C3

- (f) Construct **THREE (3)** functional requirements statements for course registration function of online student course registration system based on the scenario in Figure B1(f).

Bina TIGA (3) pernyataan keperluan kefungisian untuk fungsi pendaftaran kursus bagi sistem pendaftaran kursus pelajar dalam talian berdasarkan senario di dalam Rajah B1(f).

[3 marks]

[3 markah]

Implementing the Online Student Course Registration System, the registration procedure has been simplified. Students have to log in to system by entering their username and password. Select the Academics tab and under Academic Resources, select Register/Add/Drop Course to register. Follow the online instructions to complete the registration.

Melaksanakan Sistem Pendaftaran Kursus Pelajar Dalam Talian, prosedur pendaftaran telah dipermudahkan. Pelajar perlu log masuk ke dalam sistem dengan memasukkan nama pengguna dan kata laluan anda. Pilih tab Academic dan di bawah Academic Resources, pilih Register/Add/Drop Course untuk mendaftar. Ikuti arahan dalam talian untuk melengkapkan pendaftaran anda.

Figure B1(f) / Rajah B1(f)

CLO1
C3

- (g) Construct the use case diagram of the registration course function based on the description in Table B1(g).

Bina gambarajah use case bagi fungsi pendaftaran kursus berdasarkan penerangan dalam Jadual B1(g).

[4 marks]

[4 markah]

Table B1(g) / Jadual B1(g)

Use case / <i>Use case</i>	Pay fee, Register course, Attend class
Actor / <i>Aktor</i>	Student

QUESTION 2**SOALAN 2**

- CLO1
C2
- (a) Identify **THREE (3)** goals of project management.
*Kenalpasti **TIGA (3)** matlamat pengurusan projek.*
- [3 marks]
[3 markah]
- CLO1
C2
- (b) Explain **TWO (2)** categories of risk.
*Terangkan **DUA (2)** kategori risiko.*
- [4 marks]
[4 markah]
- CLO1
C2
- (c) Describe **FOUR (4)** possible risks for any risk types in risk management.
*Huraikan **EMPAT (4)** kemungkinan risiko bagi mana-mana jenis risiko dalam pengurusan risiko.*
- [4 marks]
[4 markah]
- CLO1
C2
- (d) Identify **THREE (3)** personality types that able to influence motivation in people management.
*Kenalpasti **TIGA (3)** jenis personaliti yang boleh mempengaruhi motivasi dalam pengurusan manusia.*
- [3 marks]
[3 markah]
- CLO1
C2
- (e) State **THREE (3)** different perspectives of system modeling.
*Nyatakan **TIGA (3)** perspektif berbeza bagi pemodelan sistem.*
- [3 marks]
[3 markah]

CLO1
C2

- (f) Identify the purpose of interaction models with **TWO (2)** UML diagrams that may be used for interaction modeling.

*Kenalpasti tujuan model interaksi dengan **DUA (2)** gambar rajah UML yang boleh digunakan untuk pemodelan interaksi.*

[3 marks]

[3 markah]

CLO1
C3

- (g) Construct the sequence diagram to show interaction for a staff attendance management system based on the scenario in Figure B2(g).

Bina gambar rajah jujukan untuk menunjukkan interaksi bagi sistem pengurusan kehadiran staf berdasarkan senario dalam Rajah B2(g).

[5 marks]

[5 markah]

Staff attendance management system :

1. Staff log in the system
2. System verify the staff
3. Staff request to display attendance report
4. System display the attendance report

Figure B2(g) / *Rajah B2(g)*

QUESTION 3**SOALAN 3**CLO1
C2

(a) Identify the processes involved in object-oriented design.

Kenalpasti proses-proses yang terlibat dalam rekabentuk berorientasikan objek.

[5 marks]

[5 markah]

CLO1
C2(b) Identify **FOUR (4)** essential elements of the design pattern by the 'Gang of Four'.*Kenalpasti **EMPAT (4)** element penting bagi corak rekabentuk oleh 'Gang of Four'*

[4 marks]

[4 markah]

CLO1
C2(c) Describe **TWO (2)** implementation issues in software development.*Huraikan **DUA (2)** isu pelaksanaan dalam pembangunan perisian.*

[4 marks]

[4 markah]

CLO1
C2(d) Give **THREE (3)** examples of Integrated Development Environment (IDE) as software development tools.*Berikan **TIGA (3)** contoh Persekitaran Pembangunan Bersepadu (IDE) sebagai alat pembangunan perisian.*

[3 marks]

[3 markah]

CLO1
C3

- (e) Construct **TWO (2)** multiple display using the Observer pattern based on data in Table B3(e).

Bina DUA (2) paparan berganda berbeza menggunakan corak Observer berdasarkan data dalam Jadual B3(e).

[4 marks]

[4 markah]

Table B3(e) / *Jadual B3(e)*

Month	Car Sales (unit)
January	600
February	850
March	350

SOALAN TAMAT