

SULIT



**BAHAGIAN PEPERIKSAAN DAN PENILAIAN
JABATAN PENGAJIAN POLITEKNIK
KEMENTERIAN PENDIDIKAN MALAYSIA**

JABATAN KEJURUTERAAN ELEKTRIK

PEPERIKSAAN AKHIR

SESI 1 2015/2016

BEU3073: ANATOMY & PHYSIOLOGY

TARIKH : 31 DISEMBER 2015

MASA : 8.30 AM – 11.30 AM (3 JAM)

Kertas ini mengandungi **ENAM (6)** halaman bercetak.

Bahagian A: Struktur (10 soalan)

Bahagian B: Esei (3 soalan)

Dokumen sokongan yang disertakan : Kertas Graf, Formula dsb / Tiada

JANGAN BUKA KERTAS SOALAN INI SEHINGGA DIARAHKAN

(CLO yang tertera hanya sebagai rujukan)

SULIT

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SECTION A : 40 MARKS**BAHAGIAN A : 40 MARKAH****INSTRUCTION:**

This section consists of **TEN (10)** structured questions. Answer **ALL** questions.

ARAHAN:

Bahagian ini mengandungi SEPULUH (10) soalan berstruktur. Jawab semua soalan.

QUESTION 1CLO1
C2

Define the following terms

- i. mitochondrion
- ii. ribosome

SOALAN 1

Definisikan terminologi berikut:.

- i. *miochondrion*
- ii. *ribosome*

[4 marks]

[4 markah]

QUESTION 2CLO1
C4

Compare the functions of the heart chambers.

SOALAN 2

Bandingkan fungsi antara ruangan jantung.

[4 marks]

[4 markah]

QUESTION 3CLO2
C2

A patient's arterial blood pressure is 135/95 mmHg. Calculate the Mean Arterial Pressure (MAP).

SOALAN 3

Tekanan darah seseorang pesakit ialah 135/95 mmhg. Kirakan tekanan Arterial Purata (MAP).

[4 marks]

[4 markah]

CLO1
C2**QUESTION 4**

Differentiate between the somatic and autonomic nervous system.

SOALAN 4*Bandingkan perbezaan antara somatik dan sistem saraf autonomik.*

[4 marks]

[4 markah]

CLO2
C5**QUESTION 5**Compare **TWO (2)** differences between endocrine system and nervous system.**SOALAN 5***Bandingkan DUA (2) perbezaan antara sistem endokrin dan sistem saraf.*

[4 marks]

[4 markah]

CLO1
C3**QUESTION 6**List **THREE (3)** food types in the end of digestion.**SOALAN 6***Senaraikan TIGA (3) jenis hasil pencernaan terakhir.*

[4 marks]

[4 markah]

CLO1
C4**QUESTION 7**

Explain briefly the mechanism of inhalation and exhalation in humans.

SOALAN 7*Terangkan secara ringkas mekanik bagi penarikan nafas dan penghembusan nafas manusia.*

[4 marks]

[4 markah]

QUESTION 8CLO1
C4State **TWO (2)** functions of placenta.**SOALAN 8**Nyatakan **DUA (2)** fungsi bagi plasenta.

[4 marks]

[4 markah]

QUESTION 9CLO1
C4

Draw the urinary system.

SOALAN 9

Lukis sistem urinaria

[4 marks]

[4 markah]

QUESTION 10CLO1
C4

Relate the relationship between hormone insulin and hormone glucagon.

SOALAN 10

Hubungkait antara hormon insulin dan hormon glukagon.

[4 marks]

[4 markah]

SECTION B : 60 MARKS**BAHAGIAN B : 60 MARKAH****INSTRUCTION:**

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

ARAHAN:

Bahagian ini mengandungi TIGA (3) soalan esei. Jawab semua soalan.

QUESTION 1**SOALAN 1**

- CLO1
C2 (a) Differentiate the function of sensory neuron, motor neuron and interneuron in the nervous system.
Bezakan fungsi antara neuron sensori, neuron motor dan interneuron di dalam system saraf.
[3 marks]
[3 markah]
- CLO1
C3 (b) Illustrate synaptic transmission between neurons.
Gambarkan penghantaran sinaptik antara sel saraf.
[5 marks]
[5 markah]
- CLO1
C4 (c) Explain the resting membrane potential and how an action potential is generated.
Terangkan potensi membran semasa rehat dan bagaimana aksi potensi dihasilkan.
[12 marks]
[12 markah]

QUESTION 2**SOALAN 2**

- CLO1
C3 (a) List **FIVE (5)** enzymes produced by pancreas.
Senaraikan **LIMA (5)** enzim yang dihasilkan oleh pankreas.
[5 marks]
[5 markah]

- CLO1
C4 (b) Identify the organs parts of the body which involved in human digestive system.
Kenalpasti bahagian organ yang terdapat dalam sistem pencernaan.
[7 marks]
[7 markah]

- CLO1
C5 (c) Describe what happens to the fat/lipid in food as they pass through the following regions of the alimentary canal:
i) The mouth
ii) The stomach
iii) The duodenum
Huraikan apa yang terjadi kepada lemak makanan apabila ia melalui Bahagian pencernaan berikut:
i) *mulut*
ii) *perut*
iii) *duodenum*
[8 marks]
[8 markah]

QUESTION 3
SOALAN 3

- CLO1
C4 (a) Illustrate the organs part of the female reproductive system.
Ilustrasi bahagian organ sistem pembiakan perempuan.
[5marks]
[5 markah]

- CLO1
C5 (b) The menstrual cycle can be divided into two main phases: the FOLLICULAR PHASE (when a follicle is developing in an ovary) and the LUTEAL PHASE (when a follicle releases its egg and is called the corpus luteum)
Distinguish the role of LH and FSH in the Follicular Phase and Luteal Phase
Kitaran haid boleh dibahagikan kepada dua fasa utama: FOLLICULAR PHASE(apabila follicle membesar di dalam ovari) dan LUTEAL PHASE (apabila follicle membebaskan telur yang dikenali sebagai corpus luteum).
Bandingkan peranan bagi hormone LH dan hormone FSH dalam fasa follicular dan fasa luteal.
[15 marks]
[15 markah]

SOALAN TAMAT

