SAMPEL PERCUMA

Modul STPM Biologi Semester 1 Pahang 2024

Set penuh: Kertas Percubaan STPM

Sem 1 · Biologi

Sampel ini: 4 muka surat. Set penuh ada:

- 2 fail PDF
- Semester 1: kertas percubaan (trial) negeri, subjek yang dipilih + skema
- Blueprint 30 hari Semester 1 (setiap subjek)
- Semester 3: percubaan 2024, 10 subjek, banyak negeri, soalan + skema dalam satu fail

RM12.90

BELI SET PENUH RM12.90 >

nightmew.com/p/stpm · FPX semua bank · download sejurus lepas bayar

Sampel bermula di muka surat sebelah

NAME: _____ **CLASS:** _____

964/1 **STPM 2024**

BIOLOGY (BIOLOGI)

PAPER 1 (KERTAS 1)

One and a half hours (Satu jam setengah)

MODUL PENTAKSIRAN PDPC SEMESTER 1 MODUL PENTAKSIRAN PDPC SEMESTER 1

MODUL PENTAKSIRAN PDPC

SEMESTER 1

NEGERI PAHANG

Instructions to candidates:

DO NOT OPEN THIS QUESTION PAPER UNTIL YOU ARE TOLD TO DO SO.

Section A – Objective questions (15 marks). Darken your answers in the OMR section below.

1	A	B	C	D
2	A	B	C	D
3	A	B	C	D
4	A	B	C	D
5	A	B	C	D

6	A	B	C	D
7	A	B	C	D
8	A	B	C	D
9	A	B	C	D
10	A	B	C	D

11	A	B	C	D
12	A	B	C	D
13	A	B	C	D
14	A	B	C	D
15	A	B	C	D

Answer **all** *questions in Section A.*

Answer **all** *questions in Section B.*

Answer **two** *questions only in Section C. All working should be shown. For numerical answers, units should be quoted wherever appropriate.*

Answers may be written either in English or Malay.

Section A (Bahagian A)	
1 - 15	
Section B (Bahagian B)	
16	
17	
Section C (Bahagian C)	
Total (Jumlah)	

Section A [15 *marks*]

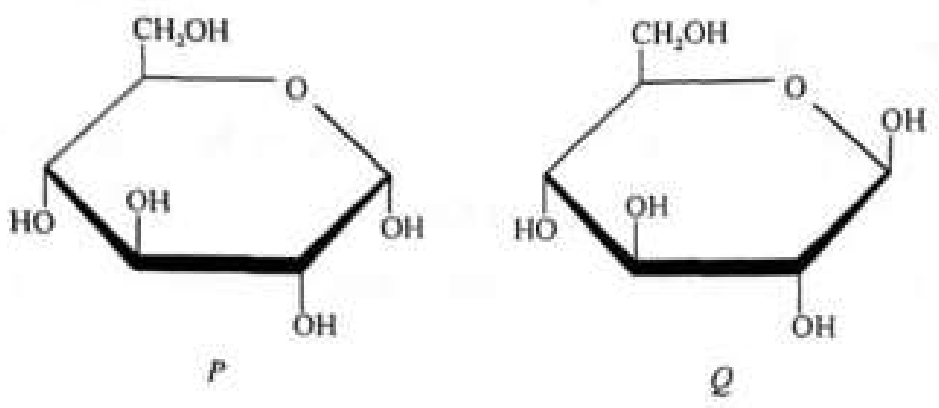
Answer **all** *questions.*

1. Which of the following statements are correct about water?

   I. When surrounded by water, non-polar molecules tend to be pushed apart from one another.
   II. Mammals rely on water having a relatively low latent heat of vaporisation to keep them cool.
   III. Water has a high specific heat capacity which maintains the temperature of water within cells.
   IV. When a negatively charged ion is added to water, the δ+ charge on the hydrogen atom is attracted to the ion.

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

2. Two structures of monosaccharides, P and Q, are shown in the diagram below.



   Identify the polymer that could be formed by the repeating monomers of P and Q.

	P	***Q***
A.	Starch	Cellulose
B.	Cellulose	Starch
C.	Cellulose	Glycogen
D.	Starch	Glycogen

3. The diagram shows two amino acids. Some of the hydrogen atoms are numbered 1 to 6.



Which two numbered hydrogen atoms could contribute to the production of a molecule of water when a peptide bond forms between these two amino acids?

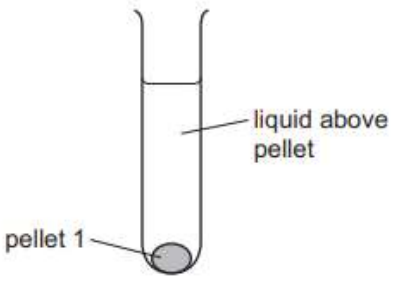
A. 1 and 4 B. 1 and 6 C. 3 and 5 D. 2 and 4

4. What is found in chloroplasts and mitochondria?

I. Circular DNA
II. 70S ribosomes
III. 80S ribosomes

A. I only B. II only C. I and II D. I and III

5. An experiment was carried out to separate the cell structures in an animal cell. The cells were broken open. The extract was filtered and put into a centrifuge tube. This tube was then spun so that the heaviest cell structure sank to the bottom first, forming pellet 1, as shown.



The liquid above pellet 1 was poured into a clean centrifuge tube and spun again at a higher speed to separate the next heaviest cell structure. This cell structure sank to the bottom, forming pellet 2. This procedure was repeated twice to obtain pellet 3 and pellet 4, each containing a single cell structure. What is a function of the cell structure extracted in pellet 1?

A. production of ATP
B. synthesis of protein
C. production of mRNA
D. digestion of old organelles

6. The structure of phospholipids includes:

I. polar phosphate heads
II. saturated fatty acid chains.
III. hydrophobic fatty acid chains

What are essential for the formation of a phospholipid bilayer in a cell surface membrane?

A. I and II B. I and III C. II and III D. III only

7. Some processes occurring in cells are listed.

I. endocytosis of water into cells
II. exocytosis of enzymes from cells
III. phagocytosis of dead cells by macrophages
IV. facilitated diffusion of glucose into red blood cells

Which processes use ATP?

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

8. Which statements are correct for the lock and key hypothesis and the induced fit hypothesis of enzyme action?

I. The substrate is the same shape as the active site.
II. The substrate is held in place in the active site by temporary bonds.
III. The enzyme and sometimes the substrate change shape slightly as the substrate molecule enters the enzyme.

A. I and II B. I and III C. II only D. III only

9. Which statement about the Michaelis–Menten constant (Km) is correct for an enzyme with a low affinity for its substrate?

A. It has a high Km and reaches Vmax at a high substrate concentration.
B. It has a high Km and reaches Vmax at a low substrate concentration.
C. It has a low Km and reaches Vmax at a high substrate concentration.
D. It has a low Km and reaches Vmax at a low substrate concentration.

TAMAT SAMPEL

Suka sampel ini?

Set penuh: Kertas Percubaan STPM

Sem 1 · Biologi

Sampel ini: 4 muka surat. Set penuh ada:

- 2 fail PDF
- Semester 1: kertas percubaan (trial) negeri, subjek yang dipilih + skema
- Blueprint 30 hari Semester 1 (setiap subjek)
- Semester 3: percubaan 2024, 10 subjek, banyak negeri, soalan + skema dalam satu fail

RM12.90

BELI SET PENUH RM12.90 >

nightmew.com/p/stpm · FPX semua bank · download sejurus lepas bayar