

Sel sebagai Unit Asas Hidupan

Cell as the Basic Unit of Life

BAHAGIAN A

Arahan: Setiap soalan diikuti oleh empat pilihan jawapan, A, B, C dan D. Bagi setiap soalan, pilih satu jawapan sahaja.

Instructions: Each question is followed by four alternative answers, A, B, C and D. For each question, choose one answer only.

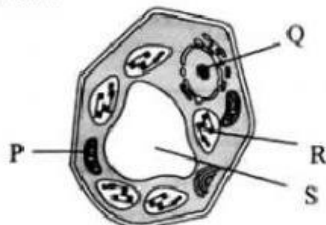
- 1 Semua organisma hidup terdiri daripada unit asas. Apakah unit asas bagi organisma hidup?

All living organisms are made up of basic units. What is the basic units for living organisms?

- A Sel/Cells
- B Organ/Organs
- C Tisu/Tissues
- D Sistem/Systems

- 2 Rajah di bawah menunjukkan struktur sel tumbuhan.

The diagram below shows the structure of a plant cell.



Antara struktur yang berikut, yang manakah terdapat di dalam sel tumbuhan tetapi tidak terdapat di dalam sel haiwan?

Which of the following structures found in plant cell and not in an animal cell?

- | | |
|--------------|--------------|
| I P | II Q |
| III R | IV S |
| A I dan II | B III dan IV |
| C II dan III | D I dan IV |
| II and III | I and IV |

- 3 Maklumat di bawah menunjukkan peringkat organisasi sel.

The information below shows the levels of cellular organization.

Sel → Tisu → Organ → Z → Organisma
Cell → Tissue → Organ → Z → Organism

Apakah contoh bagi Z?

What is the example of Z?

- A Otak
Brain
- B Jantung
Heart
- C Plasma darah
Blood plasma
- D Peredaran darah
Blood circulation

- 4 Antara yang berikut, yang manakah mikroorganisma unisel?

Which of the following is a unicellular microorganism?

- A Yis/Yeast
- B Hidra/Hydra
- C Mimosa/Mimosa
- D Spirogira/Spirogyra

- 5 Antara bahan berikut, yang manakah diperlukan untuk proses fotosintesis?

Which of the following is the substance which is required for photosynthesis?

- A Sap sel/Cell sap
- B Selulosa/Cellulose
- C Klorofil/Chlorophyll
- D Kromosom/Chromosome

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- 1 Antara yang berikut, yang manakah bukan kepentingan homeostasis kepada manusia?
Which of the following is not the importance of the homeostasis mechanism in a human?

- A Untuk mengawal pertukaran gas melalui sistem respirasi
To control the exchange of gases through the respiration system
- B Untuk mengawal kandungan bahan kumuh
To control the waste content
- C Untuk mengawal keseimbangan tekanan osmosis darah
To control the balance of the blood osmotic pressure
- D Untuk mengawal atur suhu badan pada aras normal
To regulate the body temperature at the normal level

Antara yang berikut, yang manakah merupakan faktor fizikal yang terlibat dalam homeostasis?

Which of the following is a physical factor involved in homeostasis?

- A Tekanan osmosis
The osmosis pressure
- B Aras gula dalam darah
The level of sugar in the blood
- C Perubahan suhu badan
The change in the body temperature
- D Perubahan kandungan air dalam badan
The change in the water content of the body

- 3 Rajah di bawah menunjukkan seorang budak perempuan menggigil kesejukan.
The diagram below shows a girl shivering.



Antara yang berikut, yang manakah tidak akan meningkatkan suhu badan budak perempuan itu?

Which of the following will not increase the body temperature of the girl?

- A Memakai baju sejuk
Wearing a sweater
 - B Mematikan suis penghawa dingin
Switching off the air conditioner
 - C Menaikkan suhu penghawa dingin
Increasing the temperature of the air conditioner
 - D Duduk di bawah kipas yang bergerak
Sitting under a moving fan
- 4 Antara yang berikut, yang manakah boleh mengawal atur air dalam tumbuhan?
Which of the following can regulate water in the plant?
- A Resapan/Diffusion
 - B Transpirasi/Transpiration
 - C Respirasi/Respiration
 - D Fotosintesis/Photosynthesis

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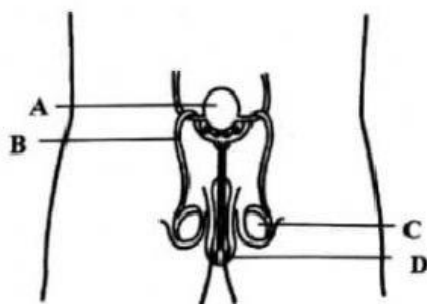
- 1 Antara pernyataan yang berikut, yang manakah menerangkan tentang pembiakan aseks?

Which of the following statement explain the asexual reproduction?

- A Pembahagian sitoplasma yang sama
There is an equal division of cytoplasm
- B Nukleus asal daripada induk membahagi dua
The original nucleus of the parent divides into two
- C Proses tidak melibatkan cantuman antara dua sel seks
The process does not involve the fusion between the two sex cells
- D Dua sel betina dihasilkan di akhir proses
Two daughter cells are produced at the end of the process

Rajah di bawah menunjukkan sistem pembiakan lelaki.

The diagram below shows the male reproductive system.



- Antara bahagian A, B, C dan D, yang manakah menghasilkan sperma?

Which of the parts, A, B, C or D, produces sperms?

- 3 Mengapakah kehamilan tidak berlaku walaupun persenyawaan telah berlaku?

Why pregnancy may not occur even though fertilization occur?

- A Zigot mula membahagi secara berulang kali apabila bergerak ke tiub Falopio
The zygote begins to divide repeatedly as it moves down the Fallopian tube
- B Hanya satu sperma boleh menembusi ovum semasa persenyawaan
Only one sperm can penetrate the ovum during fertilization
- C Embrio perlu melepasi dinding uterus yang menebal
The embryo has to travel past the thickened uterus wall
- D Embrio tidak mampu menempel dengan kuat pada dinding uterus
The embryo may not attach itself properly to the wall of the uterus

- 4 Di manakah proses persenyawaan biasanya berlaku?

Where is the place the process of fertilisation usually occurs?

- | | |
|----------------------------|---|
| A Serviks
<i>Cervix</i> | B Tiub Falopio
<i>Fallopian tube</i> |
| C Faraj
<i>Vagina</i> | D Uterus
<i>Uterus</i> |