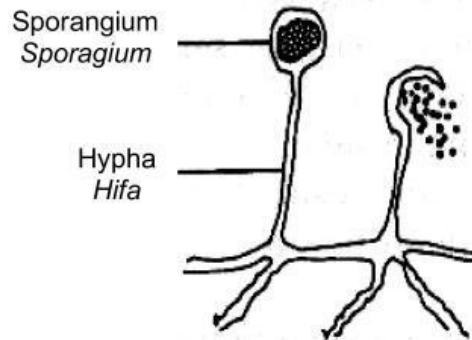


CHAPTER 1 : MICROORGANISMS AND THEIR EFFECTS ON LIVING THINGS
BAB 1 : MIKROORGANISMA DAN KESANNYA KE ATAS HIDUPAN

1.1 Classification Of Microorganisms
 1.1 Pengelasan Mikroorganisma

- 1 The diagram shows a type of microorganism.
Gambar rajah menunjukkan sejenis mikroorganisma.

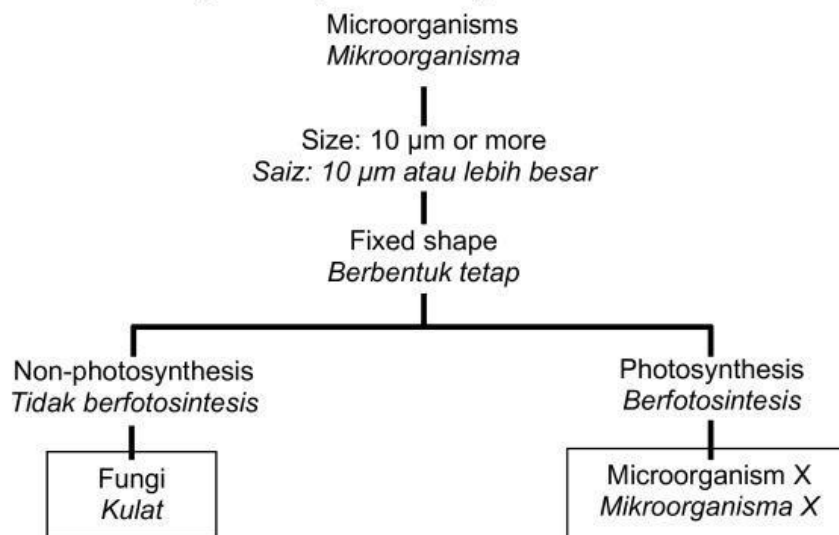


What is the microorganism?
Apakah mikroorganisma tersebut?

- | | |
|-------------------------|-----------------------------------|
| A Yeast
<i>Yis</i> | C Euglena
<i>Euglena</i> |
| B Mucor
<i>Mukor</i> | D Paramecium
<i>Paramesium</i> |

Aras Rendah

- 2 The diagram below shows a type of microorganism.
Rajah di bawah menunjukkan sejenis mikroorganisma.



What is the microorganism?
Apakah mikroorganisma tersebut?

- | | | | |
|---|-----------------------------|---|-----------------------------|
| A | Algae
<i>Alga</i> | C | Virus
<i>Virus</i> |
| B | Bacteria
<i>Bakteria</i> | D | Protozoa
<i>Protozoa</i> |

Aras Sederhana

- 3 Which microorganism reproduces through spore formation?
Mikroorganisma yang manakah membiak melalui pembentukan spora?

- | | | | |
|---|-----------------------|---|----------------------|
| A | Virus
<i>Virus</i> | C | Algae
<i>Alga</i> |
| B | Fungi
<i>Kulat</i> | D | Yeast
<i>Yis</i> |

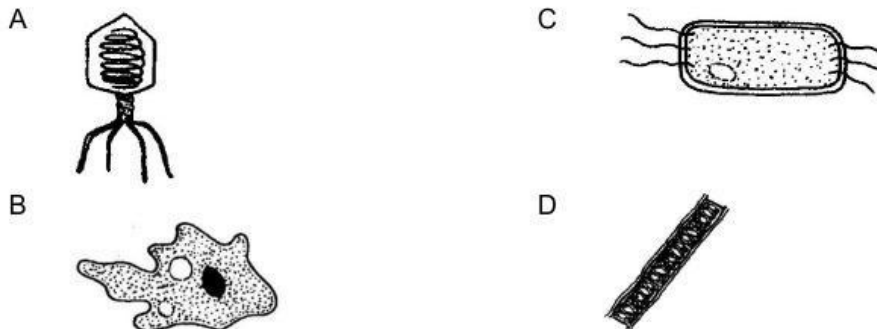
Aras Rendah

- 4 Which microorganism is an algae?
Mikroorganisma yang manakah adalah alga?



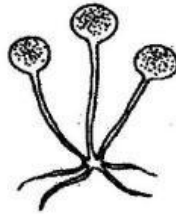
Aras Rendah

- 5 Which diagram shows an alga?
Rajah manakah yang menunjukkan alga?



Aras Rendah

- 6 The diagram below shows a type of microorganism.
Rajah di bawah menunjukkan sejenis mikroorganisma



Which group does this microorganism belongs to?
Dalam kumpulan manakah mikroorganisma ini?

- | | |
|------------------|------------------------|
| A Fungi
Kulat | C Bacteria
Bakteria |
| B Virus
Virus | D Protozoa
Protozoa |

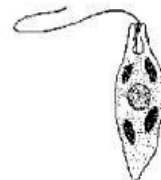
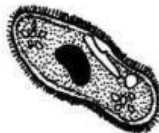
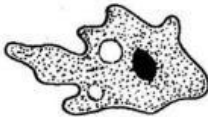
Aras Rendah

- 7 Which microorganism can carry out photosynthesis?
Mikroorganisma manakah yang boleh menjalankan fotosintesis?

- | | |
|------------------|------------------------|
| A Algae
Alga | C Fungi
Kulat |
| B Virus
Virus | D Protozoa
Protozoa |

Aras Rendah

- 8 The diagram below shows examples of microorganisms.
Rajah di bawah menunjukkan contoh-contoh mikroorganisma.



Which group represents the microorganisms?
Kumpulan manakah yang mewakili mikroorganisma itu?

- | | |
|------------------|------------------------|
| A Fungi
Kulat | C Protozoa
Protozoa |
| B Virus
Virus | D Bacteria
Bakteria |

Aras Rendah

1.2 Factors That Affect The Growth Of Microorganisms

1.2 Faktor-Faktor Yang Mempengaruhi Pertumbuhan Mikroorganisma

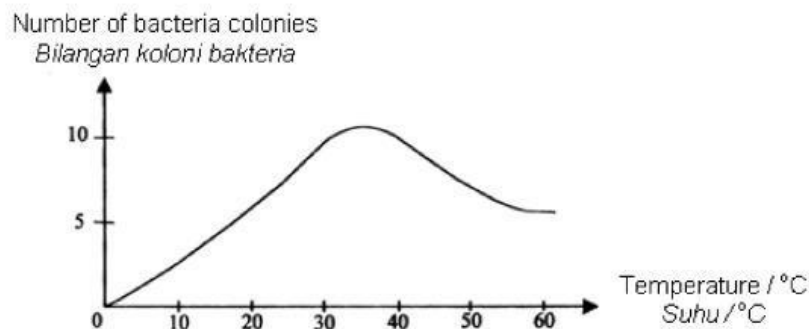
9 What is the optimum temperature for the growth of bacteria that can cause diseases?
Apakah suhu optimum untuk pertumbuhan bacteria yang boleh menyebabkan penyakit?

- | | | | |
|---|-----|---|------|
| A | 0°C | C | 37°C |
| B | 5°C | D | 60°C |

Aras Sederhana

10 The diagram below is a graph showing the relationship between the number of bacteria colonies and temperature.

Rajah di bawah ialah graf yang menunjukkan hubungan antara bilangan koloni bakteria dan suhu.



What is the optimum temperature for the growth of the bacteria?
Berapakah suhu optima bagi pertumbuhan bakteria itu?

- | | | | |
|---|------|---|------|
| A | 0°C | C | 35°C |
| B | 30°C | D | 60°C |

Aras Sederhana

11 Meat that is kept in the fridge retains its freshness because

Daging yang disimpan dalam peti sejuk dapat dikekalkan kesegarannya kerana

- A the enzymes are destroyed
enzimnya telah dimusnahkan
- B the microorganisms are killed
mikroorganisma telah dibunuh
- C the activities of microorganisms increase
aktiviti mikroorganisma meningkat
- D the growth rate of microorganisms is slowed down
kadar pertumbuhan mikroorganisma diperlahankan

Aras Sederhana

- 12 The table below shows the result of an experiment to study the effect of temperature on the growth of bacteria.

Jadual di bawah menunjukkan keputusan eksperimen untuk mengkaji kesan suhu terhadap pertumbuhan bakteria.

Temperature (°C) <i>Suhu (°C)</i>	Size of bacteria colony after 24 hours (mm) <i>Saiz koloni bakteria selepas 24 jam (mm)</i>
5	2
15	5
25	8
35	11
60	3

What is the most suitable temperature for the growth of the bacteria?

Berapakah suhu yang paling sesuai bagi pertumbuhan bakteria itu?

- | | | | |
|---|------|---|------|
| A | 5°C | C | 35°C |
| B | 15°C | D | 60°C |

Aras Sederhana

- 1.3 Knowledge About Useful Microorganisms
1.3 *Pengetahuan Tentang Mikroorganisma Yang Berguna*

13. The diagram shows two types of food.
Gambar rajah menunjukkan dua jenis bahan makanan.



Which of the following microorganisms is used to produce the food?

Antara mikroorganisma berikut yang manakah digunakan untuk menghasilkan makanan itu?

- | | | | |
|---|----------------------|---|-----------------------------|
| A | Yeast
<i>Yis</i> | C | Bacteria
<i>Bakteria</i> |
| B | Algae
<i>Alga</i> | D | Protozoa
<i>Protozoa</i> |

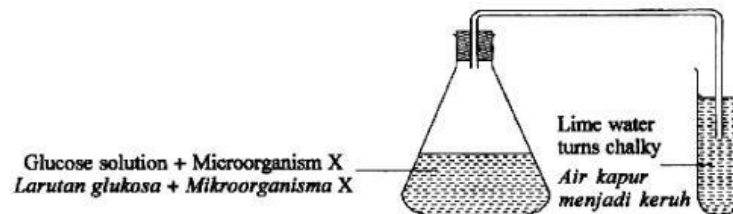
Aras Rendah

- 14 The microorganism which helps in the digestion of cellulose in herbivores is
Mikroorganisma yang membantu proses pencernaan selulosa bagi herbivor ialah

A Algae Alga	C Virus Virus
B Fungi Kulat	D Bacteria Bakteria

Aras Sederhana

- 15 The diagram below shows the apparatus set-up for an experiment.
Rajah di bawah menunjukkan susunan radas bagi satu eksperimen.



What is microorganism X?
Apakah mikroorganisma X?

A Yeast Yis	C Euglena Euglena
B Amoeba Ameba	D Paramecium Paramecium

Aras Rendah

- 16 Aminah wants to make soft bread. Which microorganism is used?
Aminah ingin membuat roti yang lembut. Mikroorganisma manakah yang digunakan?

A Mucor Mukor	C Yeast Yis
B Algae Alga	D Protozoa Protozoa

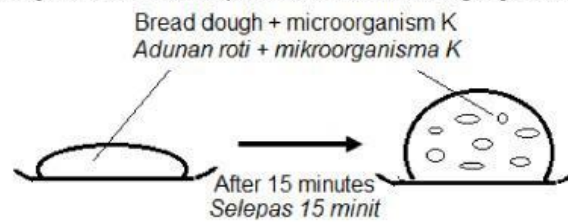
Aras Sederhana

- 17 Which microorganism can be used to make a vaccine?
Mikroorganisma manakah yang boleh digunakan untuk membuat vaksin?

A Algae Alga	C Fungi Kulat
B Virus Virus	D Protozoa Protozoa

Aras Sederhana

- 18 The diagram below shows the experiment to study the activity of microorganism K
Rajah di bawah menunjukkan satu eksperimen untuk mengkaji aktiviti mikroorganisma K



What is K?
Apakah K?

- | | |
|------------------------------------|---------------------------------------|
| A Yeast
<i>Yis</i> | C Mucor
<i>Mukor</i> |
| B Penicillium
<i>Penisilium</i> | D Bacteriophage
<i>Bakteriofaj</i> |

Aras Sederhana

- 1.4 Harmful Effects Of Microorganisms
 1.4 *Kesan Buruk Mikroorganisma*

- 19 The diagram below shows an example of a vector.
Rajah di bawah menunjukkan contoh sejenis vektor.



The disease spread by the vector is
Penyakit yang disebarkan oleh vektor itu ialah

- | | |
|-------------------------------|-----------------------------|
| A tuberculosis
<i>tibi</i> | C mumps
<i>beguk</i> |
| B cholera
<i>taun</i> | D malaria
<i>malaria</i> |

Aras Rendah

- 20 Which of the following diseases is caused by bacteria?
Antara penyakit berikut, yang manakah disebabkan oleh bakteria?

- | | |
|---------------------------|---------------------------------------|
| A AIDS
<i>AIDS</i> | C Malaria
<i>Malaria</i> |
| B Dengue
<i>Denggi</i> | D Tuberculosis
<i>Tuberkulosis</i> |

Aras Sederhana

- 21 A boy and his family have the following symptoms.
 Seorang budak lelaki dan keluarganya mempunyai gejala-gejala berikut.

- White spots on the skin
 Tompok putih pada kulit
- Spots appear on the face, neck and arms
 Tompok kelihatan pada muka, leher dan lengan

Which of the following can spread this disease?
 Antara yang berikut, yang manakah boleh menyebarkan penyakit ini?

- | | |
|--|--|
| A Through mosquito bite
Melalui gigitan nyamuk | C Drinking unboiled water
Minum air yang tidak dididihkan |
| B Eating uncovered food
Makan makanan yang terdedah | D Sharing towels or clothes
Berkongsi tuala dan pakaian |

Aras Sederhana

- 22 The diagram below shows an insect which can spread the pathogen of a disease
 Rajah di bawah menunjukkan sejenis serangga yang boleh menyebabkan petogen sejenis penyakit



What is the disease?
 Apakah penyakit itu?

- | | |
|-------------------|------------------------------|
| A AIDS
AIDS | C Malaria
Malaria |
| B Cholera
Taun | D Hepatitis B
Hepatitis B |

Aras Rendah

- 23 Which disease is caused by fungi?
 Penyakit manakah disebabkan oleh kulat?

- | | |
|-------------------|--------------------------------|
| A AIDS
AIDS | C Ringworm
Kurap |
| B Cholera
Taun | D Tuberculosis
Tuberkulosis |

Aras Rendah

- 1.5 Ways To Prevent Infection Caused By Microorganisms
1.5 Cara-Cara Untuk Mengelakkan Jangkitan Penyakit Yang Disebabkan Oleh Mikroorganisma

- 24 Which temperature will destroy microorganisms and its spores?
Suhu manakah yang akan memusnahkan mikroorganisma dan sporanya?

- | | | | |
|---|------|---|-------|
| A | 0°C | C | 60°C |
| B | 37°C | D | 121°C |

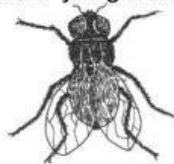
Aras Sederhana

- 25 An individual can acquire artificial passive immunity after
Seseorang individu boleh mendapat keimunan pasif buatan selepas

- A drinking mother's milk
menyusu susu ibu
- B being injected with vaccine
disuntik dengan vaksin
- C recovering from illness
sembuh daripada penyakit
- D being injected with antiserum
disuntik dengan antiserum

Aras Sederhana

- 26 The diagram below shows a vector which carries an infectious disease.
Rajah di bawah menunjukkan satu vektor yang membawa sejenis penyakit berjangkit.



Which method is used to control the reproduction of the vector?
Kaedah yang manakah digunakan untuk mengawal pembiakan vektor itu?

- A Dispose of garbage in covered garbage bins
Membuang sampah ke dalam tong sampah yang bertutup
- B Cover the surface of ponds with oil
Selaputi permukaan kolam dengan minyak
- C Sleep under a mosquito net
Tidur di dalam kelambu
- D Rear guppy fish
Membela ikan gapi

Aras Rendah

- 27 An outbreak of dengue fever has occurred in a village. What action can be taken to control the outbreak?
Wabak demam denggi telah berlaku di sebuah kampung. Apakah tindakan yang boleh diambil untuk mengawal wabak tersebut?

- A Cover the food
Tutup makanan
- B Clear out stagnant water
Hapuskan air bertakung
- C Avoid contact with the patients
Elakkan bersentuhan dengan pesakit
- D Have an efficient sanitary system
Mewujudkan sistem pembuangan najis yang efisien

Aras Sederhana

- 28 The diagram below shows a vector at a particular stage.
Rajah di bawah menunjukkan sejenis vektor pada peringkat tertentu.

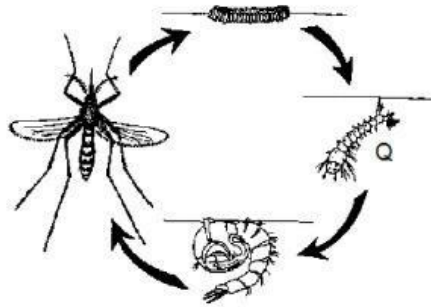


Which method is the most suitable to control the vector at this stage?
Kaedah manakah yang paling sesuai untuk mengawal vektor itu pada peringkat ini?

- A Rear fish
Membela ikan
- B Spray insecticide to the surrounding area
Sembur insektisid ke kawasan persekitaran
- C Spray oil on the surface of water
Sembur minyak di atas permukaan air
- D Put abate inside the water container
Meletakkan abate ke dalam bekas air

Aras Sederhana

- 29 The diagram below shows a vector at a particular stage.
Rajah di bawah menunjukkan sejenis vektor pada peringkat tertentu.



What is the best method to destroy the vector at stage Q?
Apakah kaedah terbaik untuk memusnahkan vektor pada peringkat Q?

- | | |
|--|--|
| A Fogging
<i>Semburan kabus</i> | C Rearing fish in the pond
<i>Membela ikan dalam kolam</i> |
| B Using mosquito coil
<i>Menggunakan lingkaran nyamuk</i> | D Applying mosquito repellent
<i>Menyapu krim penghalang nyamuk</i> |

Aras Sederhana

- 1.6 How Diseases Caused By Microorganisms Are Treated
 1.6 *Bagaimana Penyakit Yang Disebabkan Oleh Mikroorganisma Dirawat*

- 30 Penicillin is an
Penisilin adalah sejenis

- | | |
|-----------------------------------|-----------------------------------|
| A antigen
<i>antigen</i> | C antitoxin
<i>antitoksin</i> |
| B antiseptic
<i>antiseptik</i> | D antibiotic
<i>antibiotik</i> |

Aras Sederhana