1511/1
Science
Paper 2
May 2010
1 1/4 hours

JABATAN PELAJARAN NEGERI TERENGGANU

# PEPERIKSAAN PERTENGAHAN TAHUN (OTI 1)
# SIJIL PELAJARAN MALAYSIA 2010

## SCIENCE

## Paper 1

## One Hour and Fifteen Minutes

## DO NOT OPEN THIS TEST PAPER UNTIL YOU ARE TOLD TO DO SO

1 *This question paper consists of* **50** *questions.*

2 *Answer* **all** *questions.*

3 *Answer each question by blackening the correct space on the objective answer sheet.*

4 *Blacken only* **one** *space for each question.*

5 *If you wish to change your answer, erase the blackened mark that you have made. Then blacken the space for the new answer.*

6 *The diagrams in the questions provided are not drawn to scale unless stated.*

7 *You may use a non-programmable scientific calculator.*

*Disediakan Oleh:*
AKRAM NEGERI TERENGGANU

*Dibiayai Oleh:*
KERAJAAN NEGERI TERENGGANU

TERENGGANU ANJUNG ILMU

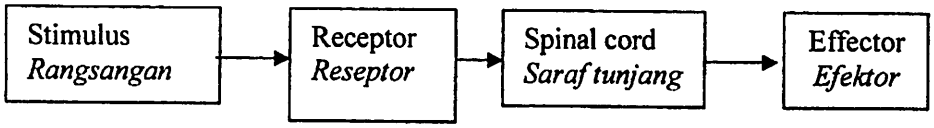
*Dicetak Oleh:*
***Percetakan Yayasan Islam Terengganu Sdn. Bhd.***
*Tel: 609-666 8611/6652/8601 Faks: 609-666 0611/0063*

*This question paper consists of 24 printed pages*

1 What is body coordination?
*Apakah maksud koordinasi badan?*

**A** To coordinate body's growth
*Menyelaras pertumbuhan badan*
**B** To coordinate position and balance of the body
*Menyelaras kedudukan dan keseimbangan badan*
**C** To coordinate body's responses towards any stimuli
*Menyelaras gerak balas badan terhadap sebarang rangsangan*
**D** To coordinate secretion of hormone by endocrine gland
*Menyelaras perembesan hormon oleh kelenjar endokrin*

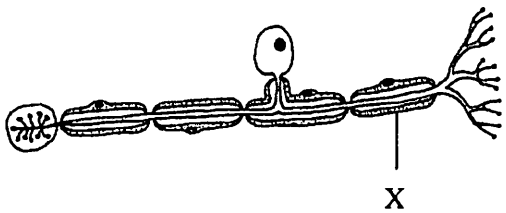
2 The diagram shows the pathway of an impulse in an action.
*Rajah menunjukkan laluan impuls dalam satu tindakan.*




Which reaction involves the above pathway of nerve impulse?
*Tindakan yang manakah melibatkan laluan impuls saraf di atas?*

**A** Reading
*Membaca*
**B** Knee jerk
*Sentakan lutut*
**C** Heartbeat
*Denyutan jantung*
**D** Sneezing
*Bersin*

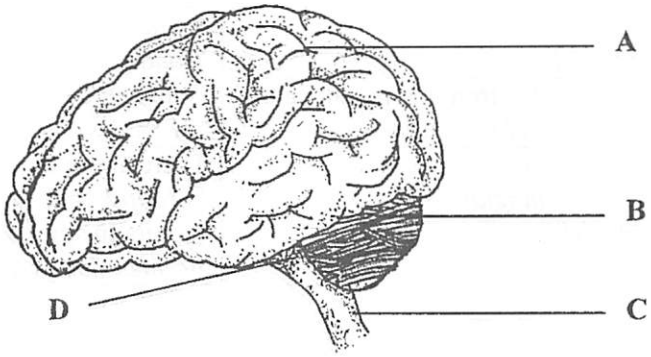
3 The diagram shows the structure of a neurone.
*Rajah menunjukkan struktur neuron.*




What is X?
*Apakah X?*

**A** Axon
*Akson*
**B** Dendron
*Dendron*
**C** Cell body
*Badan sel*
**D** Myelin sheath
*Salut mielin*

4 The diagram shows the structure of the human brain. Which part controls the involuntary actions?
*Rajah menunjukkan struktur otak manusia. Rajah menunjukkan struktur otak manusia. Bahagian manakah mengawal tindakan luar kawal ?*




5 The diagram shows an effect of hormone imbalance in the human body.
*Rajah menunjukkan kesan ketidakseimbangan hormon dalam badan manusia.*

Which of the following endocrine glands causes the effect?
*Antara kelenjar endokrin berikut, yang manakah menyebabkan kesan itu?*

A Thyroid
*Tiroid*
B Pituitary
*Pituitari*
C Adrenal
*Adrenal*
D Pancreas
*Pankreas*

6 Which is **true** about the differences between mitosis and meiosis?
*Yang manakah **benar** tentang perbezaan antara mitosis dan meiosis?*

| | Mitosis | Meiosis |
|---|---|---|
| **A** | Causes variation<br>*Menyebabkan variasi* | No variation<br>*Tiada variasi* |
| **B** | Daughter cells may differ from the parent cell<br>*Sel anak berbeza daripada sel induk* | Daughter cells are similar to the parent cell<br>*Sel anak serupa dengan sel induk* |
| **C** | There is one cell division<br>*Terdapat sekali pembahagian sel.* | There are two cell divisions<br>*Terdapat dua kali pembahagian sel* |
| **D** | Occurs in gamete cells<br>*Berlaku dalam sel gamet* | Occurs in somatic cells<br>*Berlaku dalam sel soma* |

7 A skin cell of a frog has 26 chromosomes. What is the number of chromosomes in its gamete?
*Sel kulit seekor katak mempunyai 26 kromosom. Apakah bilangan kromosom dalam gametnya?*

**A** 62
**B** 26
**C** 52
**D** 13

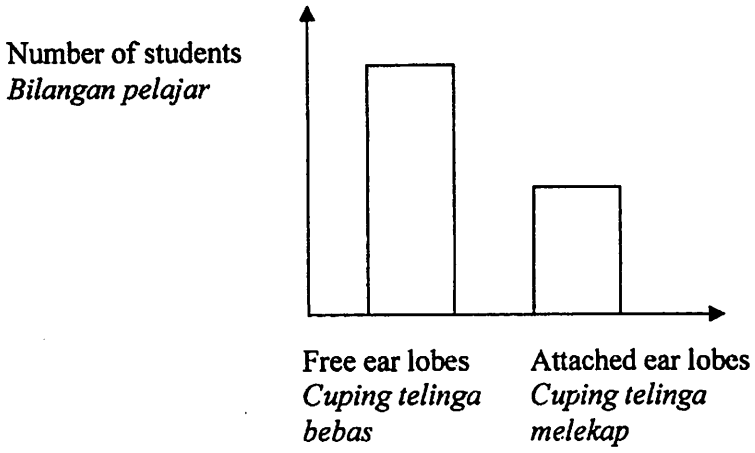
8 A man with a straight hair marries a woman with curly hair. The genotype of the man is hh, while the genotype of the woman is Hh. What is the chance of having a child with straight hair?
*Seorang lelaki berambut lurus berkahwin dengan seorang perempuan berambut kerinting. Genotip lelaki tersebut ialah hh, manakala genotip perempuan ialah Hh. Apakah kebarangkalian mempunyai seorang anak berambut lurus?*

**A** 75%
**B** 50%
**C** 25%
**D** 0%

9 What will happen when two ova are fertilized by two different sperms carrying Y chromosomes?
*Apakah akan berlaku apabila dua ovum disenyawakan oleh dua sperma berlainan yang membawa kromosom Y?*

**A** Siamese twins are formed
*Kembar siam terbentuk*
**B** One male baby and one female baby are formed
*Seorang bayi lelaki dan seorang bayi perempuan terbentuk*
**C** Two male babies are formed
*Dua orang bayi lelaki terbentuk*
**D** Two female babies are formed
*Dua orang bayi perempuan terbentuk*

10 The graph shows an example of variation among the students in a class.
*Graf menunjukkan suatu contoh variasi di kalangan pelajar dalam sebuah kelas.*



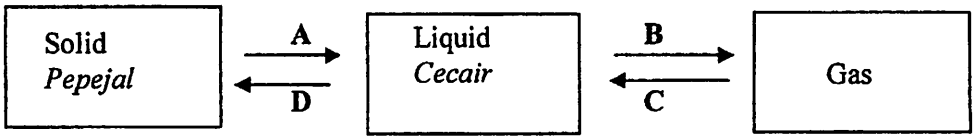

What is another example of the same type of variation above?
*Apakah contoh lain bagi jenis variasi di atas?*

**A** Height
*Ketinggian*
**B** Body weight
*Berat badan*
**C** Circumference of the head
*Ukur lilit kepala*
**D** Ability to roll tongue
*Keupayaan menggulung lidah*

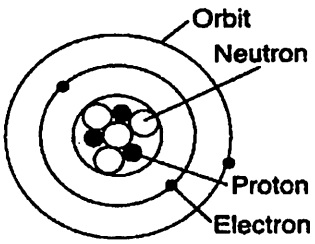
11 Which of the following is caused by chromosome mutation?
*Yang manakah disebabkan oleh mutasi kromosom?*

**A** Sickle-cell anaemia
*Anemia sel sabit*
**B** Down's Syndrome
*Sindrom Down*
**C** Colour blindness
*Buta warna*
**D** Haemophilia
*Hemofilia*

12 Which process represents freezing?
*Proses manakah mewakili pembekuan?*



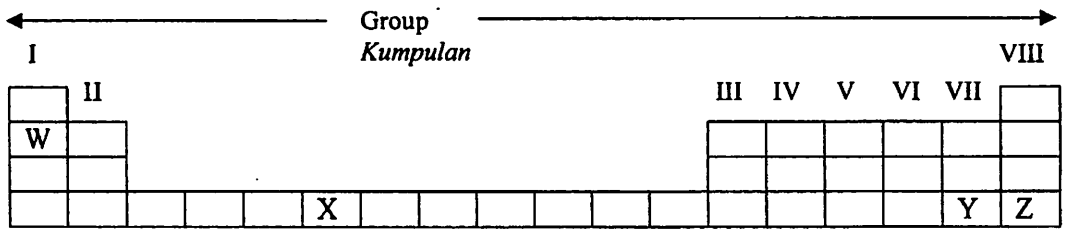

13 The diagram shows the particles in an atom.
*Rajah menunjukkan zarah-zarah dalam atom.*




What are the proton number and nucleon number of the above atom?
*Apakah nombor proton dan nombor nukleon bagi atom di atas?*

| | Proton number<br>*Nombor proton* | Nucleon number<br>*Nombor nukleon* |
|---|---|---|
| **A** | 3 | 4 |
| **B** | 3 | 7 |
| **C** | 4 | 7 |
| **D** | 6 | 10 |

14 The diagram shows the location of four elements in the Periodic Table.
*Rajah menunjukkan kedudukan empat unsur dalam Jadual Berkala.*




Which elements can be combined to form an ionic substance?
*Manakah unsur-unsur apabila digabungkan membentuk bahan ion?*

**A** X and Z
*X dan Z*

**B** Y and Z
*Y dan Z*

**C** W and X
*W dan X*

**D** W and Y
*W dan Y*

15 The table shows electrical conductivity of substances X and Y.
*Jadual menunjukkan kekonduksian elektrik bahan X dan Y.*

| Substance *Bahan* | Electrical conductivity *Kekonduksian elektrik* | |
|---|---|---|
| | Solid state *Keadaan pepejal* | Molten state *Keadaan lebur* |
| X | Yes | Yes |
| Y | No | Yes |

Which of the following are examples of substances X and Y?
*Antara berikut yang manakah contoh bahan X dan Y?*

| | Substance X *Bahan X* | Substance Y *Bahan Y* |
|---|---|---|
| **A** | Lead *Plumbum* | Lead (II) bromide *Plumbum (II) bromida* |
| **B** | Sulphur *Sulfur* | Iron *Besi* |
| **C** | Zinc *Zink* | Carbon *Karbon* |
| **D** | Aluminium oxide *Aluminium oksida* | Chlorine *Klorin* |

16 The information below shows the characteristics of material X.
*Maklumat di bawah menunjukkan ciri-ciri suatu bahan X.*

- Dull surface
  *Permukaan pudar*
- Brittle
  *Rapuh*
- Good conductor of electric
  *Konduktor elektrik yang baik*

What is material X?
*Apakah bahan X?*

**A** Carbon
*Karbon*

**B** Zinc
*Zink*

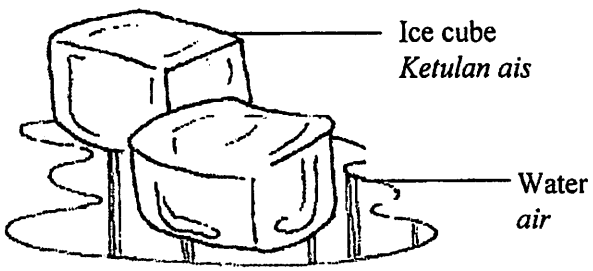
**C** Sulphur
*Sulfur*

**D** Magnesium
*Magnesium*

17 Liquid M has boiling points of 78 $^0$C and liquid N has boiling point of 100 $^0$C. How to obtain liquid M from the mixture of the two liquids ?
*Cecair M mempunyai takat didih 78 $^0$C dan takat didih cecair N 100 $^0$C. Bagaimanakah cara untuk mengasingkan cecair M daripada campuran kedua-dua cecair tersebut ?*

**A** Filtration
*Penurasan*
**B** Crystallization
*Penghabluran*
**C** Distillation
*Penyulingan*
**D** Boiling
*Pendidihan*

18 The diagram shows a melting ice cube.
*Rajah menunjukkan ketulan ais yang sedang melebur.*




Which statement is **true**?
*Pernyataan yang manakah **benar**?*

**A** New substance is formed
*Bahan baru terbentuk*
**B** The process is irreversible
*Proses di atas tidak boleh berbalik*
**C** The process involves physical change
*Proses tersebut melibatkan perubahan fizikal*
**D** Heat energy is released during the process
*Tenaga haba dibebaskan semasa proses tersebut*

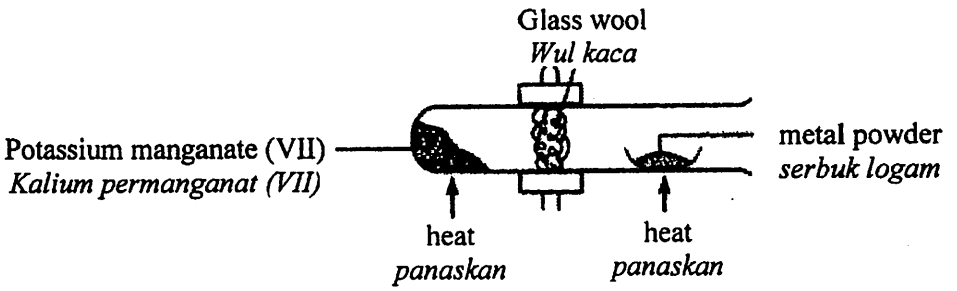
19 The table shows the results of two experiments involving heat change.
*Jadual menunjukkan keputusan dua eksperimen yang melibatkan perubahan haba.*

| Experiment *Eksperimen* | Substance *Bahan* | Initial temperature (°C) *Suhu awal* | Final temperature (°C) *Suhu akhir* |
|---|---|---|---|
| P | Sodium hydroxide crystals dissolve in distilled water *Hablur natrium hidroksida dilarutkan dalam air suling* | 30 | 38 |
| Q | Ammonium nitrate dissolve in distilled water *Ammonium nitrat dilarutkan dalam air suling* | 30 | 25 |

Which is **true** about experiment P and Q ?
*Yang manakah **benar** tentang eksperimen P dan Q ?*

| | P | Q |
|---|---|---|
| **A** | Endothermic *Endotermik* | Exothermic *Eksotermik* |
| **B** | Exothermic *Eksotermik* | Endothermic *Endotermik* |
| **C** | Endothermic *Endotermik* | Endothermic *Endotermik* |
| **D** | Exothermic *Eksotermik* | Exothermic *Eksotermik* |

20 The diagram shows the apparatus set up of an experiment.
*Rajah menunjukkan susunan radas bagi suatu eksperimen.*




What is the function of potassium manganate (VII)?
*Apakah fungsi kalium permanganate (VII) ?*

**A** Supply oxygen
*Membekalkan oksigen*

**B** Reacts with metal powder
*Bertindak balas dengan serbuk logam*

**C** Act as a catalyst
*Bertindak sebagai mangkin*

**D** Releases heat for the reaction
*Membekalkan haba untuk tindak balas*

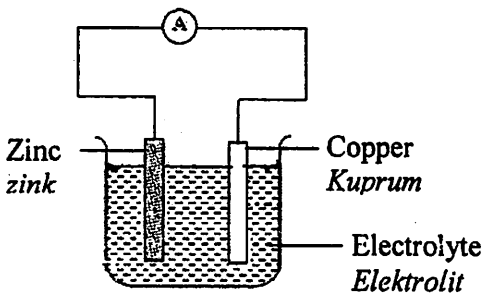
21 The word equation below represents a chemical process.
*Persamaan perkataan di bawah mewakili suatu proses.*

| Lead bromide<br>*Plumbum bromida* | Process X<br>*Proses X* → | Lead<br>*Plumbum* | + | bromine<br>*bromin* |
|---|---|---|---|---|

What is process X ?
*Apakah proses X ?*

**A** Crystallisation
*Penghabluran*
**B** Electroplating
*Penyaduran*
**C** Purification
*Penulenan*
**D** Electrolysis
*Elektrolisis*

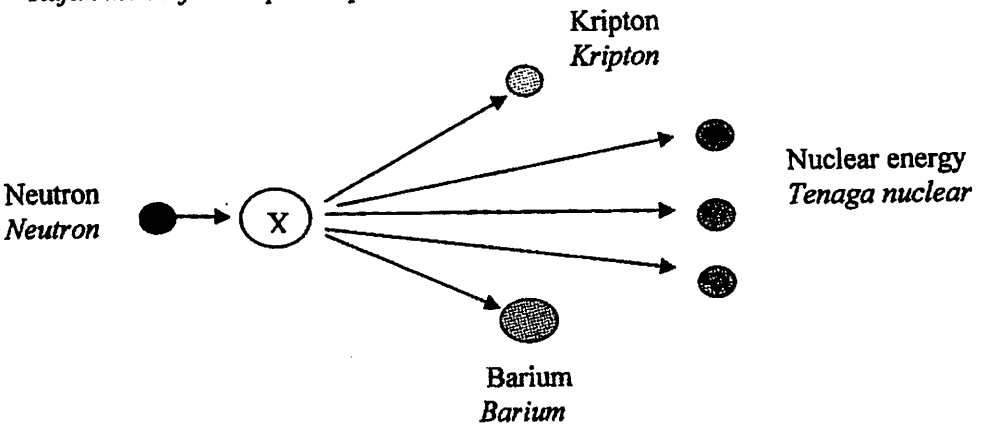
22 The diagram shows a simple cell which is connected to an ammeter.
*Rajah menunjukkan satu sel ringkas yang disambungkan kepada ammeter.*




What is the electrolyte used?
*Apakah elektrolit yang digunakan?*

**A** Alcohol
*Alkohol*
**B** Distilled water
*Air suling*
**C** Salt solution
*Larutan garam*
**D** Glucose solution
*Larutan gula*

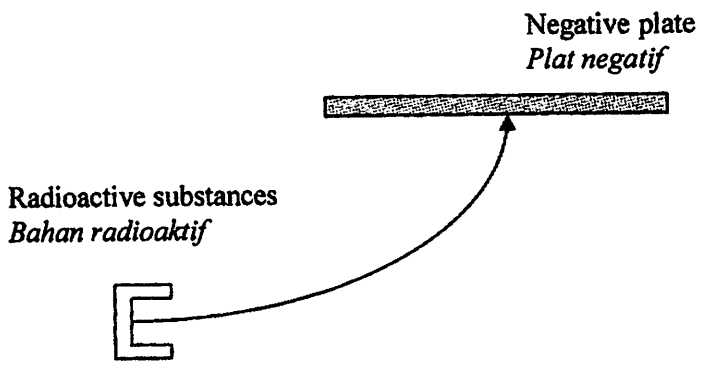
23 The diagram shows the process of nuclear fissions
*Rajah menunjukkan proses pembelahan nukleus.*




What is element X?
*Apakah unsur X?*

A Iodine - 131
*Iodin - 131*
B Cobalt - 60
*Kobalt - 60*
C Carbon -14
*Karbon -14*
D Uranium - 235
*Uranium - 235*

24 The diagram shows a radioactive radiation diverges towards the negative plate.
*Rajah menunjukkan sinaran radioaktif terpesong ke arah plat negatif.*



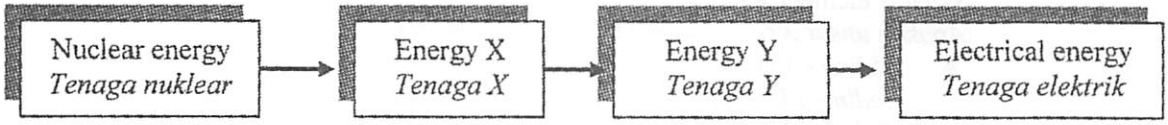

Which statement is **correct** about above radioactive radiation.
*Pernyataan manakah yang **betul** mengenai sinaran radioaktif di atas.*

A Consists of positive particles
*Terdiri daripada zarah-zarah positif*
B Can penetrate by a thin metal sheet
*Boleh menembusi sehelai kepingan logam yang nipis*
C Moves in the form of wave
*Bergerak dalam bentuk gelombang*
D Consits of negatively charged
*Terdiri daripada cas-cas negatif*

25 Which element is used as a source of energy in a nuclear reactor?
*Unsur yang manakah digunakan sebagai sumber tenaga dalam reaktor nuklear?*

A Cobalt
*Kobalt*
B Carbon
*Karbon*
C Radium
*Radium*
D Uranium
*Uranium*

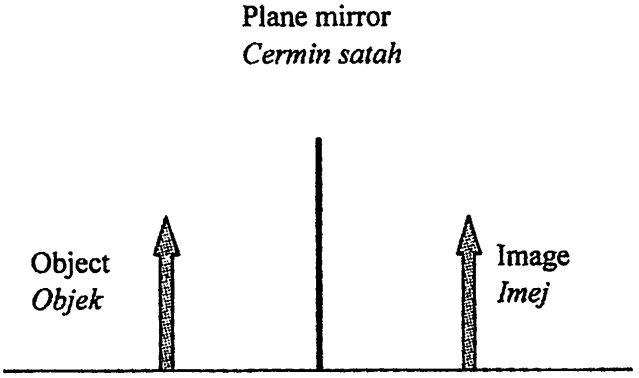
26 The diagram shows the sequence of energy transformation which occurs in nuclear energy.
*Rajah menunjukkan urutan perubahan tenaga yang berlaku di stesen janakuasa nuklear.*




What ray is represented by energy X and energy Y
*Tenaga apakah yang diwakili oleh X dan Y*

| | Energy X<br>Tenaga X | Energy Y<br>Tenaga Y |
|---|---|---|
| **A** | Kinetic<br>*Kinetic* | Heat<br>*Haba* |
| **B** | Chemical<br>*Kimia* | Potential<br>*Keupayaan* |
| **C** | Kinetic<br>*Kinetik* | Chemical<br>*Kimia* |
| **D** | Heat<br>*Haba* | Kinetic<br>*Kinetik* |

27 The diagram shows an image of an object formed in a plane mirror.
*Rajah menunjukkan imej suatu objek terbentuk dalam cermin satah.*




What is the characteristics of the image that shown above?
*Apakah ciri imej yang ditunjukkan pada rajah di atas?*

**A** Real
*Nyata*

**B** Upright
*Tegak*

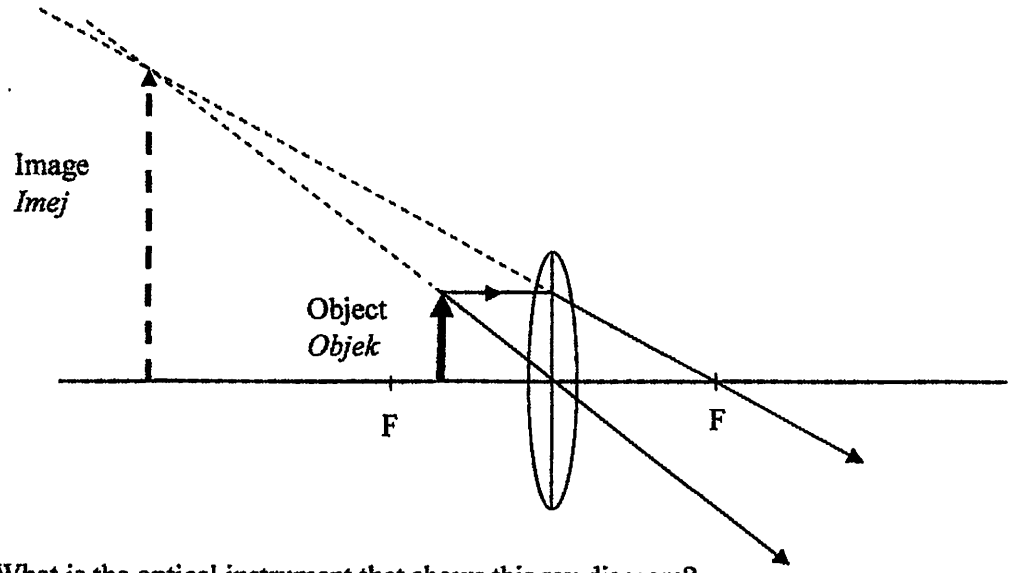
C Inverted
*Songsang*

**D** Larger than the object
*Lebih besar daripada objek*

28 Which structure of the eye and camera are correctly matched based on the function?
*Struktur manakah pada mata dan kamera adalah pasangan betul berdasarkan fungsinya?*

| | Eye<br>*mata* | Camera<br>*Kamera* |
|---|---|---|
| **A** | Iris | Shutter<br>*Pengatup* |
| **B** | Retina | Film<br>*Filem* |
| **C** | Pupil<br>*Anak mata* | Diaphragm<br>*Diafragma* |
| **D** | Lens<br>*Kanta* | Focus regulator<br>*Pelaras fokus* |

29 The diagram shows a ray diagram to produced a virtual, upright and magnified image.
*Rajah menunjukkan rajah sinar yang menghasilkan imej maya, tegak dan lebih besar.*



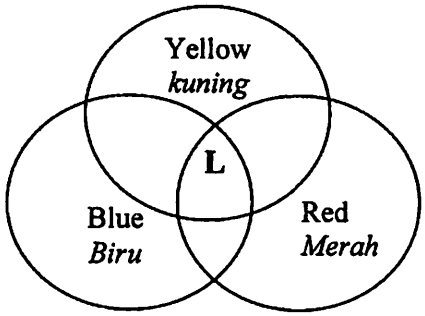

What is the optical instrument that shows this ray diagram?
*Apakah alatan optik yang ditunjukkan oleh rajah sinar ini?*

A Camera
*Kamera*
B Telescope
*Teleskop*
C Periscope
*Periskop*
D Magnifying glass
*Kanta pembesar*

30 What is the importance of colour to animals?
*Apakah kepentingan warna kepada haiwan?*

A Printing
*Percetakan*
B Pollination
*Pendebungaan*
C Camouflage
*Penyamaran*
D Traffic lights
*Lampu isyarat*

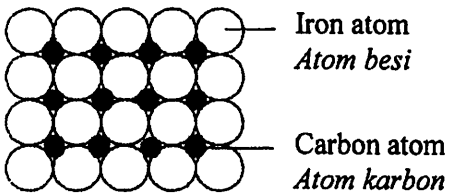
31 The diagram shows the overlapping of three coloured pigment.
*Rajah menunjukkan pertindihan tiga pigmen warna*




What is the colour of L?
*Apakah warna L?*

**A** White
*Putih*
**B** Green
*Hijau*
**C** Black
*Hitam*
**D** Cyan
*Sian*

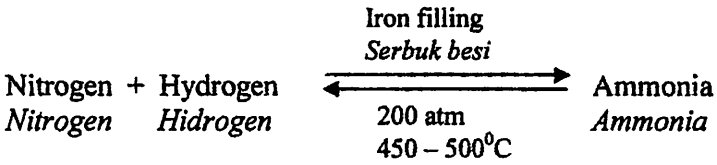
32 The diagram shows the arrangement of atoms in a substance.
*Rajah menunjukkan susunan atom dalam sesuatu bahan*




Which of the following substance has the same arrangement of atoms as in figure ?
*Bahan yang manakah mempunyai susunan atom yang sama seperti rajah ?*

**A** Steel
*Keluli*
**B** Brass
*Loyang*
**C** Bronze
*Gangsa*
**D** Aluminium
*Aluminium*

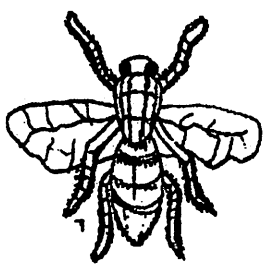
33 The information shows a word equation of Haber process.
*Maklumat menunjukkan persamaan perkataan bagi proses Haber*




What happens when the temperature decreased to 200°C?
*Apakah yang berlaku apabila suhu diturunkan kepada 200°C?*

**A** More ammonia is produced
*Lebih banyak ammonia dihasilkan*
**B** Solid ammonia is produced
*Pepejal ammonia terhasil*
**C** The reaction becomes slow
*Tindak balas menjadi lambat*
**D** The reaction becomes faster
*Tindak balas menjadi cepat*

34 The diagram shows an example of a vector.
*Rajah menunjukkan suatu contoh vektor.*



What disease is spread by the vector?
*Apakah penyakit yang disebarkan oleh vektor tersebut?*

**A** Cholera
*Taun*
**B** Malaria
*Malaria*
**C** Tuberculosis
*Tibi*
**D** Mumps
*Beguk*

35 How an individual acquires artificial passive immunity?
*Bagaimanakah seseorang individu boleh memperolehi keimunan pasif buatan?*

A Being injected with vaccine
*Disuntik dengan vaksin*
B Being injected with antiserum
*Disuntik dengan anti serum*
C Recovering from an illness
*Sembuh daripada sesuatu penyakit*
D Drinking mother's milk
*Menyusu susu ibunya*

36 A girl has the following symptoms.
*Seorang budak perempuan mempunyai gejala yang berikut.*

- Ring-shaped infection on the skin
*Jangkitan berbentuk cincin pada kulit*
- Itchy red spots on the skin
*Tompok merah yang gatal pada kulit*

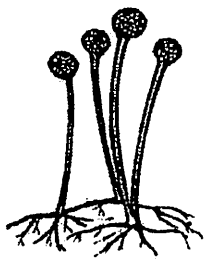
Which of the following can spread the diseases?
*Manakah antara berikut boleh menyebarkan penyakit ini?*

A Sharing towels or clothes
*Berkongsi tuala atau pakaian*
B Drinking water that is not boiled
*Minum air yang tidak dididihkan*
C Eating contaminated food
*Memakan makanan tercemar*
D Through mosquito bites
*Melalu gigitan nyamuk*

37 Which disease cannot be prevented by vaccination?
*Apakah penyakit yang tidak boleh dicegah melalui pemvaksinan?*

A Tuberculosis
*Tibi*
B Hepatitis B
*Hepatitis B*
C Malaria
*Malaria*
D Poliomielitis
*Poliomilitis*

38 The diagram shows a type of microorganism.
*Rajah menunjukkan sejenis mikroorganisma.*



How the microorganism reproduce?
*Bagaimanakah mikroorganisma tersebut membiak?*

**A** Conjugation
*Pengkonjugatan*
**B** Binary fission
*Belahan dedua*
**C** Budding
*Penunasan*
**D** Spore formation
*Pembentukan spora*

39 Which disease is correctly matched with its way of infection?
*Penyakit manakah dipadankan dengan betul dengan cara jangkitannya?*

| | Disease<br>*Penyakit* | Way of infection<br>*Cara jangkitan* |
|---|---|---|
| **A** | Gonorrhoea<br>*Gonorea* | Through vectors<br>*Melalui vektor* |
| **B** | Tinea<br>*Kurap* | Through touch<br>*Melalui sentuhan* |
| **C** | Dengue<br>*Denggi* | Through the air<br>*Melalui udara* |
| **D** | Malaria<br>*Malaria* | Through food<br>*Melalui makanan* |

40 The table shows the calorific values for three classes of food.
*Jadual menunjukkan nilai kalori bagi tiga kelas makanan.*

| Food class<br>*Kelas makanan* | Calorific value per gram (KJ $g^{-1}$)<br>*Nilai kalori per gram* |
|---|---|
| Carbohydrate | 16.7 |
| Protein | 16.7 |
| Fat | 37.6 |

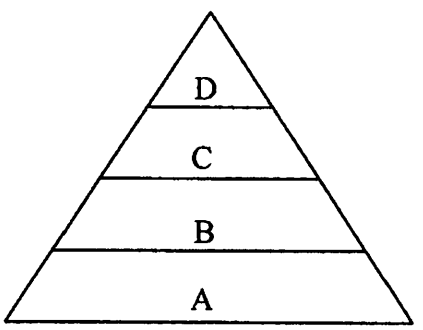
Ali eats food P which contains 5 g of carbohydrate, 3 g of protein and 3.5 g of fat. What is the calorific values of food P which eat by Ali?
*Ali makan makanan P yang mengandungi 5 g karbohidrat, 3 g protein dan 3.5 g lemak. Apakah nilai kalori makanan P yang dimakan oleh Ali ?*

**A** 71.0 kJ
**B** 133.6 kJ
**C** 265.2 kJ
**D** 347.7 kJ

41 What is the meaning of **balanced diet**?
*Apakah maksud **diet seimbang**?*

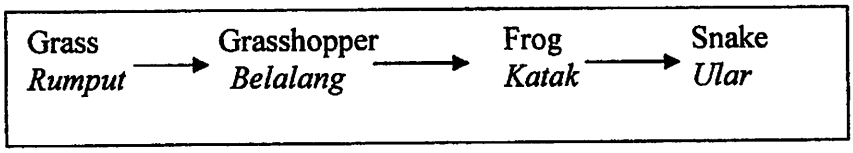
**A** The food taken by an individual according to his appetite.
*Mengambil makanan mengikut selera seseorang*
**B** The food that can help an individual to resist disease.
*Makanan yang dapat menghalang penyakit pada seseorang*
**C** The food that contains sufficient proportion of all classes of food
*Makanan yang mengandungi semua kelas makanan pada kadar yang betul*
**D** The food that provides energy to maintain an individual physical activities.
*Makanan yang menyediakan cukup tenaga untuk melakukan aktiviti fizikal*

42 The diagram shows a pyramid of numbers
*Rajah menunjukkan satu piramid nombor*




Which of the organisms A, B, C or D is a producer?
*Antara organism A, B, C atau D yang manakah pengeluar?*

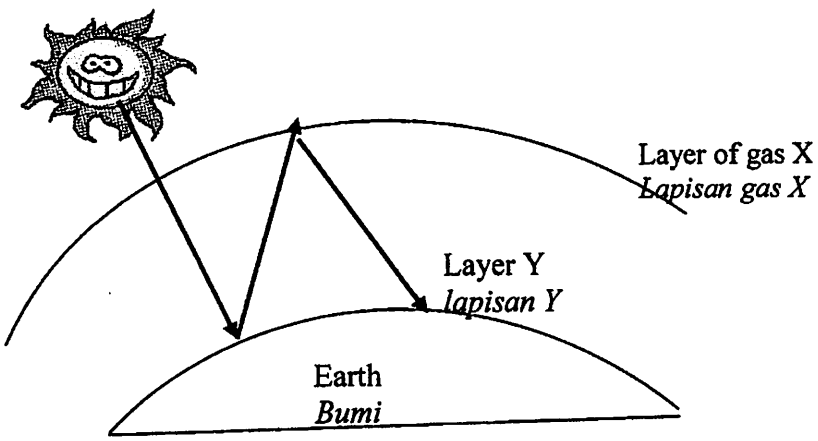
43 The diagram shows a food chain
*Rajah menunjukkan satu rantai makanan*




What will happen to the population of grasshoppers and grass if the snake population decreases?
*Apakah yang akan terjadi kepada populasi belalang dan rumput jika populasi ular berkurangan?*

| | Grasshoppers *Belalang* | Grass *Rumput* |
|---|---|---|
| **A** | Increase *Bertambah* | Decrease *Berkurangan* |
| **B** | Decrease *Berkurangan* | Decrease *Berkurangan* |
| **C** | Increase *Bertambah* | Increase *Bertambah* |
| **D** | Decrease berkurangan | Increase *Bertambah* |

44 The diagram shows a layer of gas X in the atmosphere which causes the temperature increases layerY.
*Rajah menunjukkan satu lapisan gas X di atmosfera yang menyebabkan suhu meningkat di lapisan Y*




What is the factor that influence the increses of gas X in atmosphere?
*Apakah faktor yang mempengaruhi peningkatan gas X dalam atmosfera?*

**A** Photosynthesis
*Fotosintisis*

**B** Evaporation
*Penyejatan*

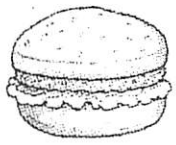
**C** Combustion of fossil fuel
*Pembakaran bahan api fosil*

**D** The uses of chlorofluorocarbon
*Penggunaan kloroflorokarbon*

45 A farmer finds the soil fertility decreases after planting sweets potatoes. Which plant is suitable to regain fertility of the soil?
*Seorang petani mendapati kesuburan tanah merosot selepas ditanam dengan ubi keledek. Apakah tanaman yang sesuai ditanam untuk meningkatkan kesuburan tanah?*

**A** Spinach
*Bayam*
**B** Maize
*Jagung*
**C** Water-melon
*Tembikai*
**D** Ground nuts
*Kacang tanah*

46 The following are some sources of fats.
*Berikut adalah beberapa sumber lemak*


P


Q

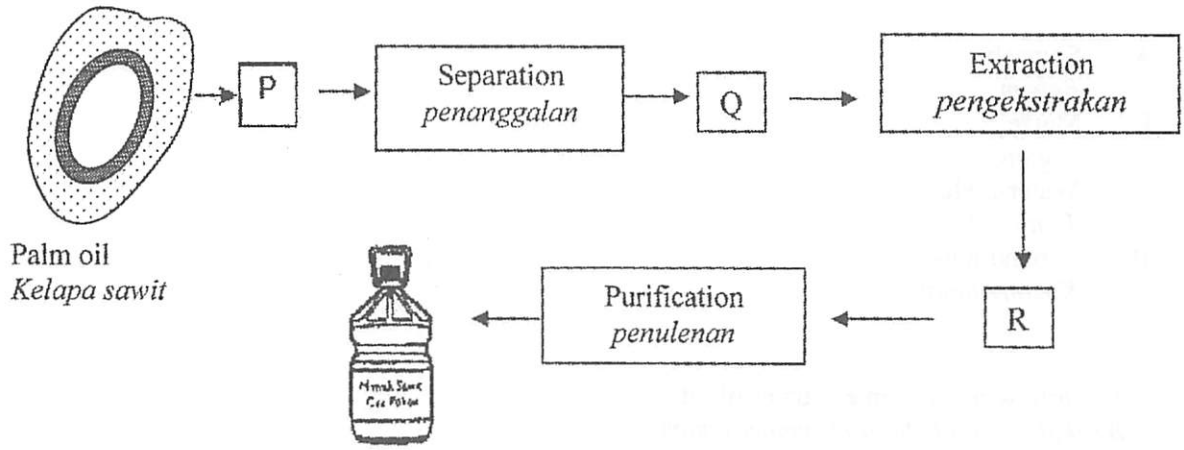

R


S

Which of the following food has saturated fat?
*Antara berikut makanan yang manakah mempunyai lemak tepu?*

**A** P, Q,
**B** P, S
**C** P, Q, R
**D** P, R, S

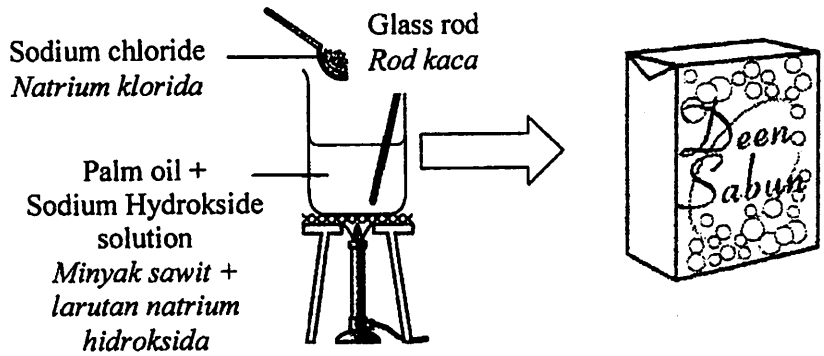
47 The diagram shows the step of extraction an oil palm in industry.
*Rajah menunjukkan peringkat-peringkat pengekstrakkan minyak sawit dalam industri.*




What is step P, Q and R?
*Apakah peringkat P, Q dan R ?*

| | P | Q | R |
|---|---|---|---|
| **A** | Pensterilan *Sterilization* | Penurasan *filtration* | Pencernaan *Digestion* |
| **B** | Penurasan *Filtration* | Pencernaan *Digestion* | Pensterilan *Sterilization* |
| **C** | Pensterilan *Sterilization* | Pencernaan *Digestion* | Penurasan *Filtration* |
| **D** | Pencernaan *Digestion* | Pensterilan *Sterilization* | Penurasan *Filtration* |

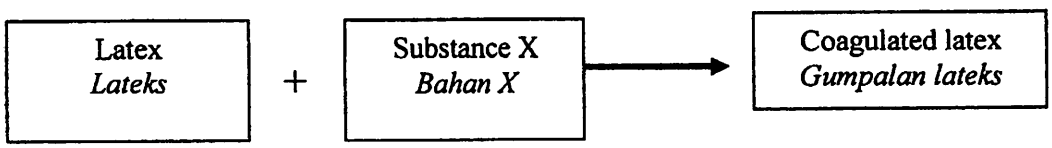
48 The diagram shows the process to making a soap in laboratory
*Rajah menunjukkan proses membuat sabun di makmal*




What is the process of making a soap?
*Apakah proses dalam pembuatan sabun*

A Esterification
*Pengesteran*
B Fermentation
*Penapaian*
C Saponification
*Saponifikasi*
D Vulcanisation
*Pemvulkanan*

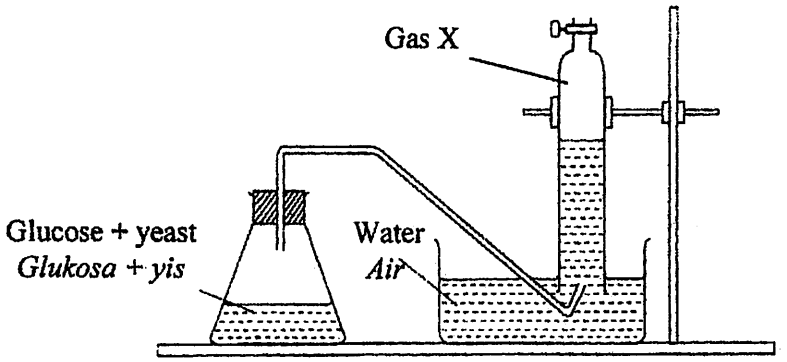
49 The diagram shows how latex can coagulated.
*Rajah menunjukkan bagaimana lateks boleh menggumpal*




What is substance X?
*Apakah bahan X?*

A Ethanoic acid
*Asid etanoik*
B Alcohol
*Alkohol*
C Sulphur
*Sulfur*
D Sodium chloride
*Natrium klorida*

50 The diagram shows an experiment on fermentation of glucose.
*Rajah menunjukkan eksperimen penapaian glukosa.*




What is gas X?
*Apakah gas X?*

A Hydrogen
*Hidrogen*
B Oxygen
*Oksigen*
C Carbon dioxide
*Karbon dioksida*
D Nitrogen
*Nitrogen*

**END OF QUESTION PAPER**
***KERTAS SOALAN TAMAT***