



FINAL EXAMINATION / PEPERIKSAAN AKHIR
SEMESTER 2 – SESSION 2017 / 2018
PROGRAM KERJASAMA

COURSE CODE : ULAB 1022
KOD KURSUS

COURSE NAME : ENGLISH FOR ACADEMIC STUDY
NAMA KURSUS

YEAR / PROGRAMME : 1 – ALL PROGRAMMES / 1 – SEMUA PROGRAM
TAHUN / PROGRAM

DURATION : 2 HOURS / 2 JAM
TEMPOH

DATE : APRIL 2018
TARIKH

INSTRUCTION/ARAHAN :

- i) Answer **ALL** questions in the spaces given.
(Jawab **SEMUA** soalan di dalam ruangan yang disediakan).
- ii) Candidates are required to follow all instructions given by the exam invigilator.
(Calon dikehendaki mematuhi semua arahan daripada penyelia peperiksaan).

(You are required to write your name and your lecturer's name on this question paper)
(Pelajar dikehendaki tuliskan nama dan nama pensyarah pada kertas soalan ini)

STUDENT'S NAME / NAMA PELAJAR	:
I.C NO. / NO. K/PENGENALAN	:
YEAR / PROGRAMME TAHUN / PROGRAM	:
NAME OF COLLEGE NAMA KOLEJ	:
LECTURER'S NAME NAMA PENSYARAH	:

This examination paper consists of **12** pages including the cover
Kertas soalan ini mengandungi **12** muka surat termasuk kulit hadapan



PUSAT PROGRAM KERJASAMA

**PETIKAN DARIPADA PERATURAN AKADEMIK
ARAHAN AM - PENYELEWENGAN AKADEMIK**

1. SALAH LAKU SEMASA PEPERIKSAAN

1.1 Pelajar tidak boleh melakukan mana-mana salah laku peperiksaan seperti berikut :-

- 1.1.1 memberi dan/atau menerima dan/atau memiliki sebarang maklumat dalam bentuk elektronik, bercetak atau apa jua bentuk lain yang tidak dibenarkan semasa berlangsungnya peperiksaan sama ada di dalam atau di luar Dewan Peperiksaan melainkan dengan kebenaran Ketua Pengawas; atau
- 1.1.2 menggunakan makluman yang diperolehi seperti di atas bagi tujuan menjawab soalan peperiksaan; atau
- 1.1.3 menipu atau cuba untuk menipu atau berkelakuan mengikut cara yang boleh ditafsirkan sebagai menipu semasa berlangsungnya peperiksaan; atau
- 1.1.4 lain-lain salah laku yang ditetapkan oleh Universiti (seperti membuat bising, mengganggu pelajar lain, mengganggu Pengawas menjalankan tugasnya).

2. HUKUMAN SALAH LAKU PEPERIKSAAN

2.1 Sekiranya pelajar didapati telah melakukan pelanggaran mana-mana peraturan peperiksaan ini, setelah diperakukan oleh Jawatankuasa Peperiksaan Fakulti dan disabitkan kesalahannya, Senat boleh mengambil tindakan dari mana-mana satu yang berikut :-

- 2.1.1 memberi markah SIFAR (0) bagi keseluruhan keputusan peperiksaan kursus yang berkenaan (termasuk kerja kursus); atau
- 2.1.2 memberi markah SIFAR (0) bagi semua kursus yang didaftarkan pada semester tersebut.

2.2 Jawatankuasa Akademik Fakulti boleh mencadangkan untuk diambil tindakan tata tertib mengikut peruntukan Akta Universiti dan Kolej Universiti, 1971, Kaedah-kaedah Universiti Teknologi Malaysia (Tatatertib Pelajar-pelajar), 1999 bergantung kepada tahap kesalahan yang dilakukan oleh pelajar.

2.3 Pelajar yang didapati melakukan kesalahan kali kedua

SECTION A (50 marks)

READING: TEXT I (30 marks)

Read the text below and answer all the questions that follow.

- I Every living cell on this planet depends on minerals for proper function and structure. Minerals are needed for the proper composition of body fluids, the formation of blood and bone, the maintenance of healthy nerve function, and the regulation of muscle tone, including that of muscles of the cardiovascular system. Like vitamins, minerals function as coenzymes, enabling the body to perform its functions, including energy production, growth and healing. Minerals are essential for the proper utilisation of vitamins and other nutrients since they are involved in all enzyme activities.
- II The human body must maintain its proper chemical balance. This balance depends on the level of different minerals in the body and especially the ratios of certain mineral levels to one another. The level of each mineral in the body influences one another one, so if one is out of balance, all mineral levels are affected. If not corrected, this can start a chain reaction of imbalances that leads to illness.
- III Minerals are naturally occurring elements found in the earth. Mineral salts are mostly found in rocks. Rock and stone are gradually broken down into tiny fragments by erosion, a process that can take literally millions of years. The resulting dust and sand accumulate, forming the basis of soil. The soil is teeming with microbes that utilise these tiny crystals of mineral salts, which are then passed from the soil to plants. Herbivorous animals eat the plants. We obtain these minerals by consuming plants or herbivorous animals.
- IV Nutritionally, minerals belong to two groups: bulk minerals (also called macrominerals) and trace minerals (microminerals). Bulk minerals include calcium, magnesium, sodium, potassium and phosphorus. These are needed in larger amounts than trace minerals. Although only minute quantities of trace minerals are needed, they are nevertheless important for good health. Trace minerals include boron, chromium, copper, germanium, iodine and zinc.
- V Because minerals are stored primarily in the body's bone and muscle tissue, it is possible to develop mineral toxicity if extremely large quantities are consumed. Such situations are rare, however because toxic levels of minerals generally accumulate only if massive amounts are ingested for a prolonged period of time.

- VI **As with vitamins, it can be difficult, if not impossible, to obtain the amount of minerals needed for optimum health through diet alone.** Mineral supplements can help to make sure you are getting all the minerals your body requires.
- VII Minerals are often found in multivitamins formulas. They are also sold as single supplements. These are available in tablet, capsule, powder and liquid forms. Some are available in chelated forms, which means that the minerals are bonded to protein molecules that transport them to the bloodstream and enhance their absorption. When mineral supplements are taken with a meal, they are usually automatically chelated in the stomach during digestion. There is some controversy over which mineral supplements are the best, but we prefer the chelated preparations. Our experience with the various chelated formulas available has shown that, in general, chelated forms of minerals are the most effective supplements.
- VIII Once a mineral is absorbed, it must be carried by the blood to the cells and then transported across the cell membranes in a form that can be utilised by the cells. After minerals enter the body, they compete with one another for absorption. For example, too much zinc can deplete the body of copper; excessive calcium intake can affect magnesium absorption (and vice versa). Consequently, supplemental minerals should always be taken in balanced amounts. Otherwise, they will not be effective and may even be harmful. The absorption of minerals can also be affected by the use of fiber supplements. Fiber decreases the body's absorption of minerals. Therefore, supplemental fiber and minerals should be taken at different times.

Adapted from:

Balch, P. A. (2010). *Prescription for nutritional healing* (5th Ed.). England: Penguin Group.

AI Write the main ideas for paragraphs II, III, V and VII in the blank spaces provided.

Paragraph	Main Idea
I	The importance of minerals for the proper function and structure of cells
II	
III	
IV	Bulk minerals and trace minerals
V	
VI	Chelated forms of minerals are the most effective supplements
VII	
VIII	Supplemental minerals should be taken in balanced amount

(4 x 2m = 8 marks)

AI Answer the following questions based on the text.

1. The functions of minerals to living cells:

- i. _____
- ii. _____
- iii. _____
- iv. _____

(4 x 1/2m = 2 marks)

2. Why must human maintain a proper chemical balance in their body?

(2 marks)

3. How are minerals from soil passed to human?

(2 marks)

4. ***As with vitamins, it can be difficult, if not impossible, to obtain the amount of minerals needed for optimum health through diet alone.*** (Paragraph VI) Why did the author say so?

(2 marks)

5. Why is chelated preparation mineral better than other forms of mineral?

(2 marks)

6. To ensure minerals can be utilised by cells effectively, the author advises us to

- i. _____
ii. _____

(2 x 1m = 2marks)

A III State in the brackets provided whether each of the statements given below is True (T) or False (F).

1. Minerals are not vital for the absorption of vitamins and nutrients. []
2. The chemical balance in human relies on the various minerals in the body. []
3. Mineral salts are derived from rocks. []
4. Trace minerals are more needed than bulk minerals. []
5. Excessive magnesium intake can affect calcium absorption. []

(5 x 1m = 5 marks)

A IV Choose the correct meaning of the words highlighted in the following sentences according to the context in which they are used. Circle the correct option.

1. The human body must **maintain** its proper chemical balance.
 - A. keep
 - B. uphold
 - C. preserve

2. Rock and stone are **gradually** broken down into tiny fragments by erosion, a process that can take literally millions of years.
 - A. slowly
 - B. steadily
 - C. regularly

3. The soil is **teeming** with microbes that utilise these tiny crystals of mineral salts, which are then passed from the soil to plants.
 - A. crowded
 - B. abundant
 - C. over-flowing

4. Although only **minute** quantities of trace minerals are needed, they are nevertheless important for good health.
 - A. tiny
 - B. small
 - C. microscopic

5. For example, too much zinc can **deplete** the body of copper; excessive calcium intake can affect magnesium absorption (and vice versa).
 - A. reduce
 - B. remove
 - C. empty

(5 x 1m = 5marks)

TEXT II (20 marks)

Read the text below and then complete the tasks that follow.

- I From maintaining a healthy heart rate and building strong bones to making hormones and boosting brain power, minerals are important for a healthy body and mind. As they cannot be produced by the body, they have to be obtained by following a wholesome diet that is full of mineral-rich foods. A balanced diet usually provides all of the essential minerals. Here are four of the many essential minerals required by the body, their functions and their best food sources.
- II First, boron enhances brain function and alertness, and plays a role in how the body utilises energy from fats and sugars. In addition, it helps to prevent postmenopausal osteoporosis and build muscle. Boron is found naturally in apples, carrots, grapes, dark green leafy vegetables, raw nuts, pears and whole grain. Therefore, most people are not deficient in boron. However, elderly people usually benefit from taking a supplement of 2 to 3 milligrams daily because they have problems with nutrient absorption. Boron deficiency increases the risk of vitamin D deficiency.
- III Second, calcium is vital for the formation of strong bones and teeth, and for the maintenance of healthy gums. In addition, it helps to lower cholesterol levels and prevent cardiovascular disease. Calcium is found in dairy foods, salmon and sardines (with bones), seafood and dark green leafy vegetables. Calcium deficiency can lead to the following problems: aching joints, eczema, hypertension and insomnia. Deficiency in calcium is also associated with cognitive impairment, depression and hyperactivity. However, studies have shown that calcium from dairy and supplements increases the risk of prostate cancer. Men in the United States who consumed more than two servings a day of dairy products (about 600 milligrams) had a 32 per cent increase in prostate cancer.
- IV Third, copper aids in the formation of bone, haemoglobin and red blood cells. This mineral is also needed for healthy nerves and joints. It is also essential for the formation of collagen, one of the fundamental proteins making up bones, skin and connective tissues. Food sources that contain copper include almonds, avocados, garlic, liver, oranges and green leafy vegetables. The early signs of copper deficiency are osteoporosis, anaemia, baldness and skin sores. A lack of copper can also lead to increased blood fat levels. On the other hand, excessive intake of copper can lead to toxicity, which has been associated with depression, nausea and vomiting, and joint and muscle pain.

V Fourth, magnesium is a vital catalyst in enzyme activity, especially the activity of those enzymes involved in energy production. It also assists in calcium and potassium uptake. Research has shown that magnesium may help prevent cardiovascular disease, osteoporosis and certain forms of cancer. Magnesium is found in most foods, especially dairy products, meat, seafood, fruits and green leafy vegetables. Magnesium deficiency may be a major cause of hypertension, asthma, chronic fatigue, depression and insomnia.

VI Minerals are essential nutrients because they perform hundreds of roles in the body. The millions of tiny cells in your body require essential nutrients to grow, develop and work together in perfect harmony. These essential nutrients, those that your body needs but cannot produce; include the inorganic substances found in foods. There is a fine line between getting enough of these nutrients (which is healthy) and getting too much (which can end up harming you). Eating a healthy diet remains the best way to get sufficient amounts of the vitamins and minerals you need.

Adapted from: Balch, P. A. (2010). *Prescription for nutritional healing* (5th Ed.). England: Penguin Group.

B I Based on Text II, fill in the blanks to complete the table below.

Title: _____ (1 mark)

Mineral	Function	Source	Effect of Deficiency
Boron	<ul style="list-style-type: none"> enhances brain function and alertness _____ _____ (1m) prevent postmenopausal osteoporosis build muscle 	<ul style="list-style-type: none"> Apples Carrots Grapes Dark green leafy vegetables _____ (1/2m) _____ (1/2m) Whole grains 	<ul style="list-style-type: none"> _____ _____ _____ (1m)

Mineral	Function	Source	Evidence of Deficiency
Calcium	<ul style="list-style-type: none"> • Vital for formation of strong bones and teeth • Maintenance of healthy gums • _____ _____ (1m) • _____ _____ (1m) 	<ul style="list-style-type: none"> • Dairy foods • _____ _____ (1/2m) • seafood • _____ _____ (1/2m) 	<ul style="list-style-type: none"> • Aching joints • Eczema • Hypertension • Insomnia • Cognitive impairment • _____ _____ (1/2m) • _____ _____ (1/2m)
Copper	<ul style="list-style-type: none"> • Aids in the formation of bone, haemoglobin and red blood cells • _____ _____ (1m) • _____ _____ (1m) 	<ul style="list-style-type: none"> • Almonds • Avocados • Barley • Garlic • Liver • Mushrooms • Oranges • Nuts • Green leafy vegetables 	<ul style="list-style-type: none"> • Osteoporosis • Anemia • Baldness • _____ _____ (1/2m) • _____ _____ (1/2m)
Magnesium	<ul style="list-style-type: none"> • A catalyst in enzyme activity especially those involved in energy production • _____ _____ (1m) • _____ _____ (1m) 	<ul style="list-style-type: none"> • _____ _____ (1/2m) • _____ _____ (1/2m) • Seafood • Fruits • Green leafy vegetables 	<ul style="list-style-type: none"> • _____ _____ (1/2m) • _____ _____ (1/2m) • Chronic fatigue • Depression • Insomnia

(15 marks)

B II Match the bold words in the following sentences with the words that mean the same as in the text. Refer to the part of the text indicated in the brackets. Write the word from the text in the spaces provided.

1. A lot of money is **needed** to pay for tertiary education nowadays. (Paragraph I) _____

2. Petronas fully synthetic engine oil **improves** the performance of daily driving experience and car engine life. (Paragraph II) _____

3. Scientists are studying whether cellphone radiation is **linked to** cancer in children. (Paragraph III) _____

4. Having enough sleep is **necessary** for alertness during lectures. (Paragraph IV) _____

5. Digital advertising and social media are the two popular **types** of direct marketing. (Paragraph V) _____

(5x1m=5marks)

SECTION B (10 marks)

Fill in each blank with the correct word from the options given in the box.

time	interfere	opposed	boost	nutritious
healthier	recover	aligns	risers	skills

They say the early bird always gets the worm, but in the case of workouts, that is not necessarily true. We always try to pin down the answer to when the best (1)_____ to work out is, whether it is at the crack of dawn or after a long workday. But the answer is that, there is no right answer. While research supports both morning and evening workouts, your best option is to pick a workout that (2)_____ with your long-term fitness goals, and something you can stick with. For example, a morning workout is going to require a (3)_____ dinner, a more rigorous warm up and lots of sleep, while an evening one will require you to fuel right throughout the day, and to make sure parties or events do not (4)_____ with your gym schedule.

Here are the pros of morning workouts. First, you get it out of the way in the morning. Many early (5)_____ cite this as the reason they prefer morning workouts. You do not have to worry about a workday that will tire you to the couch, or unexpected outings like dinner or happy hour, because you have already got your workout in and can take part in all activities. Additionally, you will have a (6)_____ of energy for the rest of the day, thanks to the daylong effects of morning exercise and the rush of endorphins. Maybe you will even be able to skimp on the coffee.

Second, it is better for weight loss. Morning workouts are known to kickstart your metabolism early, so you burn more calories during the day, as (7)_____ to when you are sleeping. You are also more likely to burn fat. Research shows when you are fasting and exercising, you burn more stored fat.

Third, it motivates you to be healthier. A 2012 Women Health study found after a 45-minute morning workout, women were more likely to eat less for breakfast and make (8)_____ food choices. Moreover, they also tend to increase their physical activities more throughout the day.

Lastly, your body is prepared for the next day. Sleep is the optimal time for your body to (9)_____. That means it repairs used muscles and converts your food into energy (glucose) for the following day. Moreover, during deep sleep, dreams help your body learn and improve motor (10)_____. This means your body may have already practised your morning workout in your dreams.

(10 x 1m = 10 marks)

Adapted from <https://www.elitedaily.com/life/theres-big-difference-working-morning-night/1035312>

END OF QUESTION PAPER

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