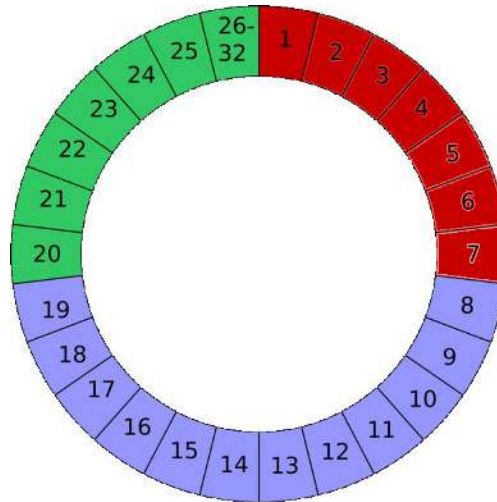


**SAMPLE QUESTIONS**  
**CATEGORY: GAMMA**

**SECTION A**  
**BAHAGIAN A**



1. Diagram above shows the phases in the menstrual cycle. What is happening at 14<sup>th</sup> day of menstruation?

*Rajah di atas menunjukkan fasa dalam kitaran haid. Apa yang berlaku pada hari ke 14 haid?*

- A. An ovum is released from the ovary  
*Ovum dikeluarkan dari ovari*
- B. The uterine lining breaks down  
*Lapisan dinding uterus terurai*
- C. The uterus lining becomes thicker and richly supplied with blood vessels  
*Lapisan dinding uterus menebal dan kaya dengan kapilari darah*
- D. Fertilization occurs  
*Berlaku persenyawaan*
- E. The uterus lining becomes thicker  
*Lapisan dinding uterus menebal semula*

2. Malaysia was the world's premier producer of tin, supplying some 40 per cent of the world's tin until the late 70's. Besides that, Malaysia's key natural resources include natural gas, copper, petroleum, tin, bauxite and iron ore. Oil and gas industry especially have contributed a very significant income to Malaysia and drive the economy of Malaysia until now. Which of the following Malaysia's natural resources are neither a mixture or a compound?

*Malaysia adalah pengeluar utama timah dunia, membekalkan kira-kira 40 peratus tin dunia sehingga lewat 70-an. Di samping itu, sumber asli utama Malaysia termasuk gas asli, tembaga, petroleum, timah, bauksit dan bijih besi. Industri minyak dan gas menyumbang pendapatan yang besar ke Malaysia dan memacu ekonomi Malaysia sehingga kini. Yang mana antara berikut bukan merupakan campuran atau sebatian sumber semula jadi Malaysia?*

- |                                   |                                    |
|-----------------------------------|------------------------------------|
| I. Gold<br><i>Emas</i>            | IV. Bauxite<br><i>Bauksit</i>      |
| II. Petroleum<br><i>Petroleum</i> | V. Tin<br><i>Timah</i>             |
| III. Copper<br><i>Tembaga</i>     |                                    |
| A. I and II<br><i>I dan II</i>    | D. III and IV<br><i>III dan IV</i> |
| B. II and IV<br><i>II dan IV</i>  | E. II and V<br><i>II dan V</i>     |
| C. I and III<br><i>I dan III</i>  |                                    |

3. Air pollution has been an ongoing problem in many countries in the Southeast Asia region, and Malaysia is one of the worst affected. In 2015, a haze spread across South East Asia mainly in Malaysia, Singapore, the south of Thailand and the Philippines, causing a significant deterioration in air quality for months. Forest fires in Indonesia had resulted in a smoky haze blanketing the South East Asian region for months.

*Pencemaran udara telah menjadi masalah yang berterusan di banyak negara di rantau Asia Tenggara, dan Malaysia adalah salah satu yang paling teruk terjejas. Pada tahun 2015, jerebu merebak di Asia Tenggara terutamanya di Malaysia, Singapura, selatan Thailand dan Filipina, menyebabkan kemerosotan ketara dalam kualiti udara selama berbulan-bulan. Kebakaran hutan di Indonesia telah mengakibatkan kabut asap yang menyelimuti rantau Asia Tenggara selama berbulan-bulan.*



During haze, what is the air pollutant that can be found in the mixture of air?

*Semasa jerebu, apakah pencemar udara yang boleh didapati dalam campuran udara?*

- |   |                            |
|---|----------------------------|
| A. Nitrogen<br><i>Nitrogen</i>              | D. Ozone<br><i>Ozon</i>    |
| B. Carbon dioxide<br><i>Karbon dioksida</i> | E. Helium<br><i>Helium</i> |
| C. Oxygen<br><i>Oksigen</i>                 |                            |

**SECTION B**  
**BAHAGIAN B**



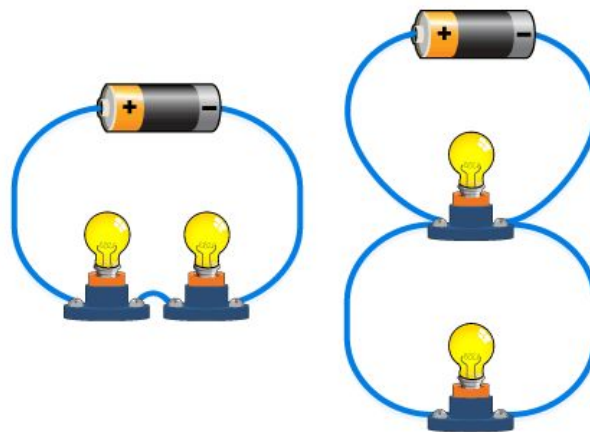
- (a) Diagram above shows the physical condition of people who suffer from malnutrition. Name the disease above?  
*Rajah di atas menunjukkan keadaan fizikal yang dihadapi manusia akibat malnutrisi. Namakan penyakit itu?*
- (b) What is the cause of the disease?  
*Apakah punca penyakit tersebut berlaku?*
- (c) Suggest one way to prevent this disease?  
*Cadangkan satu cara untuk mencegah penyakit ini?*

**[3 marks / 3 markah]**

**SECTION C**  
**BAHAGIAN C**

Electrical circuit components can be connected in series, parallel, or series-parallel. Components connected in series are connected along a single conductive path, so the same current flows through all of the components but voltage is lost across each of the resistances. Components connected in parallel are connected along multiple paths so that the current can split up and the same voltage is applied to each component.

*Komponen litar elektrik boleh disambungkan secara bersiri, selari, atau bersiri selari. Komponen yang disambungkan secara bersiri disambungkan sepanjang laluan konduktif tunggal, sehingga arus yang sama mengalir melalui semua komponen tetapi voltan hilang di setiap rintangan. Komponen yang disambungkan secara selari disambungkan di sepanjang laluan berbilang supaya arus boleh berpecah dan voltan yang sama digunakan untuk setiap komponen.*



Based on the diagram above,  
*Berdasarkan rajah di atas,*

- Draw the series and parallel electric circuits by using the symbols of electrical circuit components  
*Lukis litar elektrik bersiri dan selari dengan menggunakan simbol komponen litar elektrik*
- Label the type of electrical circuit  
*Labelkan jenis litar elektrik tersebut*
- What will happen to the bulb in the parallel circuit if one of the bulbs is removed?  
*Apakah yang akan berlaku kepada mentol di litar selari jika salah satu mentol itu dikeluarkan?*

**[5 marks / 5 markah]**