

**Bahagian A**

*Jawab semua soalan.*

- 1 Antara berikut, yang manakah komponen sistem Bumi?

*Which of the following are the components of the Earth system?*

I Hidrosfera

*Hydrosphere*

II Mesosfera

*Mesosphere*

III Biosfera

*Biosphere*

IV Termosfera

*Thermosphere*

A I dan and II

B II dan and III

C I dan and III

D I dan and IV

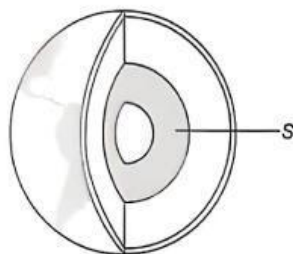
- 2 Antara berikut, yang manakah lapisan atmosfera yang betul dipadankan dengan kepentingannya?

Which of the following atmospheric layer is correctly matched to its importance?

|   | Lapisan<br>Layer                   | Kepentingan<br>Importance                                                                   |
|---|------------------------------------|---------------------------------------------------------------------------------------------|
| A | Troposfera<br><i>Troposphere</i>   | Memantulkan isyarat radio ke Bumi<br><i>Reflects radio signals to Earth</i>                 |
| B | Stratosfera<br><i>Stratosphere</i> | Melindungi Bumi daripada sinar ultraungu<br><i>Protects the Earth from ultraviolet rays</i> |
| C | Termosfera<br><i>Thermosphere</i>  | Melindungi Bumi daripada meteoroid<br><i>Protects the Earth from meteoroids</i>             |
| D | Mesosfera<br><i>Mesosphere</i>     | Membentuk aurora<br><i>Forms auroras</i>                                                    |

- 3 Rajah berikut menunjukkan lapisan utama Bumi.

The diagram shows the main layers of the Earth.



Apakah lapisan S?

What is layer S?

- |                           |                                    |
|---------------------------|------------------------------------|
| A Kerak<br><i>Crust</i>   | C Teras luar<br><i>Outer core</i>  |
| B Mantel<br><i>Mantle</i> | D Teras dalam<br><i>Inner core</i> |

- 4 Jenis batuan yang manakah terbentuk melalui proses penyejukan dan pembekuan magma atau lava?

Which type of rock is formed through the processes of cooling and freezing of magma or lava?

- A Batuan igneus  
*Igneous rock*

- B Batuan sedimen  
*Sedimentary rock*  
C Batuan metamorfik  
*Metamorphic rock*  
D Batuan basalt  
*Basalt rock*

- 5 Antara berikut, yang manakah contoh proses endogen dan eksogen yang betul?

Which of the following are the correct examples of the endogenic and exogenic processes?

|   | Proses endogen<br><i>Endogenic process</i>             | Proses eksogen<br><i>Exogenic process</i>                |
|---|--------------------------------------------------------|----------------------------------------------------------|
| A | Pergerakan kerak Bumi<br><i>Earth's crust movement</i> | Pengenapan<br><i>Sedimentation</i>                       |
| B | Luluhawa<br><i>Weathering</i>                          | Aktiviti magma<br><i>Magma activity</i>                  |
| C | Hakisan<br><i>Erosion</i>                              | Proses olakan mantel<br><i>Mantle convection process</i> |
| D | Pengenapan<br><i>Sedimentation</i>                     | Pergerakan kerak Bumi<br><i>Earth's crust movement</i>   |

- 6 Antara berikut, yang manakah geobencana yang disebabkan oleh manusia?

Which of the following geohazards are caused by humans?

- I Tanah runtuh  
*Landslide*  
II Pemanasan global  
*Global warming*  
III Tsunami  
*Tsunami*  
IV Hujan asid  
*Acid rain*  
A I, II dan and III  
B I, II dan and IV  
C I, III dan and IV  
D II, III dan and IV

7 Di manakah tanah jerlus biasanya berlaku?  
*Where does quicksand usually happen?*

- A Tanah tinggi  
*Highlands*
- B Paya  
*Wetlands*
- C Gua  
*Caves*
- D Lereng bukit  
*Hillsides*

8 Apakah alat yang digunakan untuk mengesan gempa bumi?  
*What device is used to detect earthquakes?*

- A Alat pengumpul hujan asid  
*Acid rain collector*
- B Pemetaan LIDAR  
*Light Detection and Ranging (LIDAR) mapping*
- C Tsunameter  
*Tsunameter*
- D Seismometer  
*Seismometer*

9 Pada era yang manakah manusia mula wujud di muka Bumi?  
*In which era do humans first appear on Earth?*

- A Mesozoik  
*Mesozoic*
- B Paleozoik  
*Paleozoic*
- C Prakambria  
*Precambrian*
- D Senozoik  
*Cenozoic*

10 Organisma pertama yang wujud di Bumi ialah

*The first organism that exists on Earth is*

- A bakteria  
*bacteria*
- B protozoa  
*protozoa*
- C rumpai laut  
*seaweed*
- D dinosaur  
*dinosaur*

11 Antara pernyataan berikut, yang manakah salah tentang air permukaan?

*Which of the following statements about surface water is incorrect?*

- A Mudah tercemar  
*Easily contaminated*
- B Sumber utama untuk kegunaan harian  
*The main source for daily use*
- C Contoh air permukaan ialah akuifer  
*An example of surface water is an aquifer*
- D Dijumpai di permukaan Bumi  
*Found on the surface of the Earth*

12 Mineral ekonomi di Bumi terdiri daripada  
*Economic minerals in the Earth consists of*

- I mineral logam  
*metallic minerals*
- II mineral fosil  
*fossil minerals*
- III mineral bukan logam  
*non-metallic minerals*
- IV mineral nadir  
*rare earth minerals*
- A I, II dan and III
- B I, II dan and IV
- C I, III dan and IV
- D II, III dan and IV