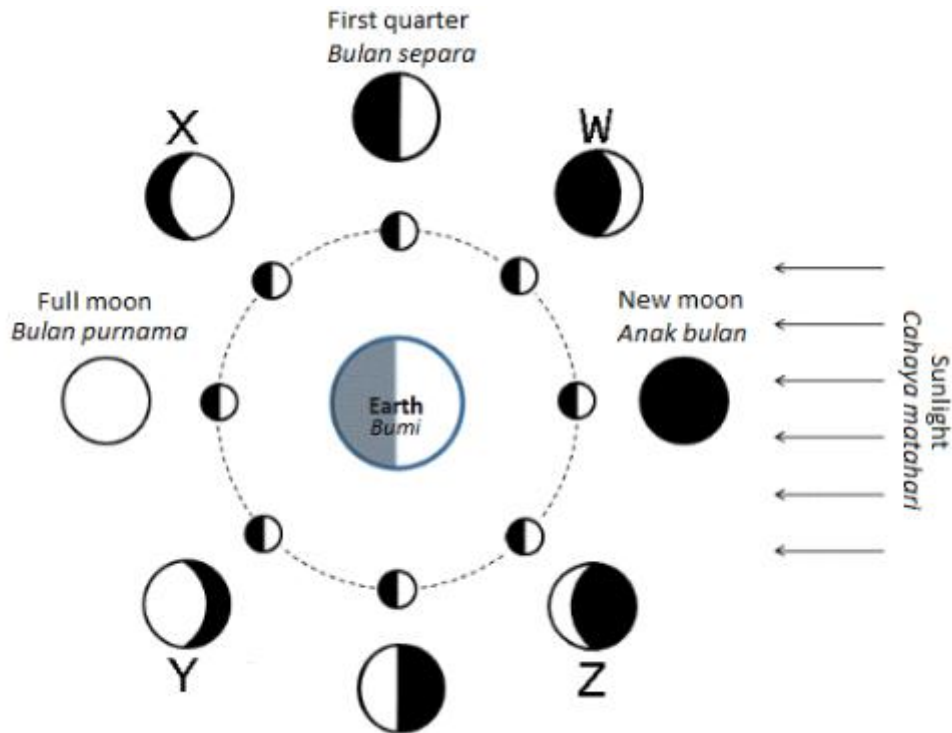


**MALAYSIAN EARTH SCIENCE OLYMPIAD**  
**SAMPLE QUESTIONS**

**ASTRONOMY**

- Between which two planets are asteroids mainly found?
  - Earth and Mars
  - Saturn and Uranus
  - Jupiter and Saturn
  - Mars and Jupiter
- Declination is measured in degrees ( $^{\circ}$ ), arc-minutes ( $'$ ) and arc-seconds ( $''$ ), and is similar to \_\_\_\_\_ on earth.
  - Meridian
  - Latitude
  - Longitude
  - Eliptic
- The below figure shows the phases of the moon. Which of the following is true?



- W: Waning crescent
- X: Waxing crescent
- Y: Waning gibbous
- Z: Waxing gibbous

**MALAYSIAN EARTH SCIENCE OLYMPIAD**  
**SAMPLE QUESTIONS**

4. In August 2006, the International Astronomical Union (IAU) announced a new definition of planet that cause the demotion of Pluto from a planet to a dwarf planet. The new definition are

- I. In orbit around the sun
- II. Has sufficient mass to assume hydrostatic equilibrium (a nearly spherical shape)
- III. Has one or more natural satellites
- IV. Has cleared the neighborhood around its orbit

- A. I, II & III
- B. I, II & IV
- C. I, III & IV
- D. II, III & IV

5. Figure (a) shows an image of the moon taken from PERMATApintar observatory. Based on the positions marked in Figure (b), which positions most probably is correct for the moon when the image was taken?



Figure (a): The moon taken from PERMATApintar observatory

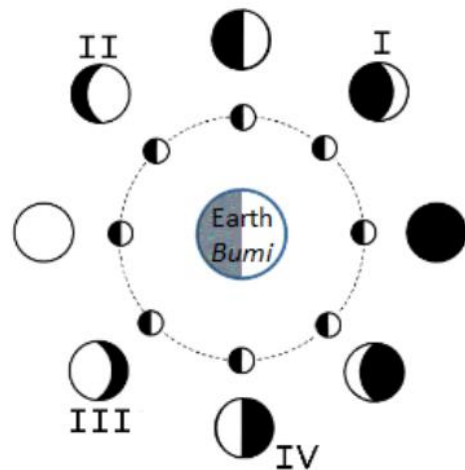


Figure (b): Diagram of lunar phases

- A. I
- B. II
- C. III
- D. IV

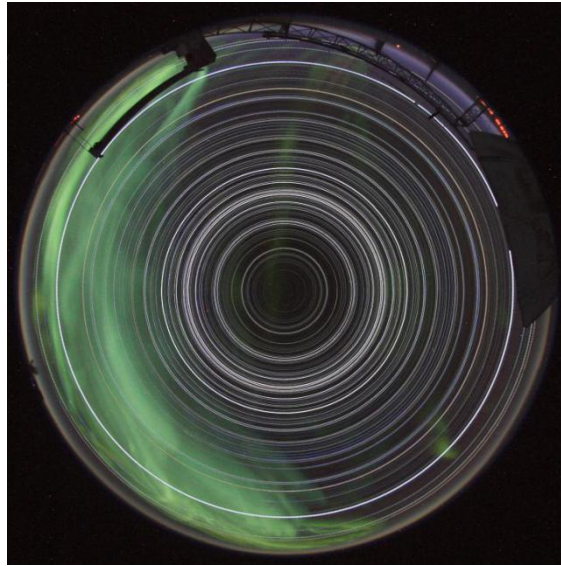
6. Which of the following are the phenomena that happened in Malaysia due to the interaction of sun-earth-moon system?

- I. Tides
- II. Solar and lunar eclipses
- III. Days and nights
- IV. Four seasons

- A. I, II & III
- B. I, II & IV
- C. I, III & IV
- D. II, III & IV

**MALYSIAN EARTH SCIENCE OLYMPIAD**  
**SAMPLE QUESTIONS**

7. Based on what you can see in the below figure, the star trail was taken at



A Star trail by Robert Schwarz  
Source: <https://apod.nasa.gov/>

- A. North Pole
- B. Korea
- C. Australia
- D. South Pole

**ANSWER:**

1. D      2. D      3. B      4. C      5. C      6. A      7. D