

Stars & The Universe

Question Paper

Course	CIE IGCSE Physics
Section	6. Space Physics
Topic	Stars & The Universe
Difficulty	Easy

Time Allowed 10

Score /5

Percentage /100

Question 1

Which two elements are the most commonly found in the Sun?

- A. Hydrogen and oxygen
- B. Helium and carbon
- C. Hydrogen and helium
- D. Nitrogen and oxygen

[1 mark]

Question 2

Light from distant galaxies is redshifted when measured on Earth.

Which of the following ideas does this provide evidence for?

1. The Big Bang Theory
2. The Universe is expanding
3. Distant Galaxies are moving both towards us and away from us

- A. 1 only
- B. 1 and 2
- C. 2 only
- D. 1, 2 and 3

[1 mark]

Question 3

Extended tier only

Which of the following describes the lifecycle of a star about the size of the Sun?

- A. interstellar hydrogen clouds → protostar → main sequence star → red supergiant → black hole
- B. interstellar hydrogen clouds → planetary nebula → main sequence star → red giant → protostar → white dwarf
- C. interstellar hydrogen clouds → protostar → main sequence star → red giant → planetary nebula → white dwarf
- D. interstellar hydrogen clouds → protostar → main sequence star → red supergiant → neutron star

[1 mark]

Question 4

Extended tier only

What does the constant 2.2×10^{-18} per second represent?

- A. 1 light year
- B. Red-shift
- C. The CMBR
- D. The Hubble constant

[1 mark]

Question 5

Which part of the electromagnetic spectrum does the Sun radiate most of its energy in?

- A.** radio, visible and gamma
- B.** infrared, visible and ultraviolet
- C.** infrared, X-rays and gamma
- D.** infrared, visible and gamma

[1 mark]