Practice Question Set For GCSE
Subject : Physics
Paper-1 Topic : 7_ Astronomy

Name of the Student:_____
Max. Marks : 17 Marks **Time : 17 Minutes**

Q1.

(a) The Sun is at the centre of our Solar System.

(i) Complete the following sentence.

(1)

Our Solar System is near the edge of a galaxy called the .....

(ii) Complete the sentence by putting a cross (☒) in the box next to your answer.

When the Sun nears the end of its life it will become a

(1)

☒ **A** black hole
☒ **B** neutron star
☒ **C** supernova
☒ **D** white dwarf

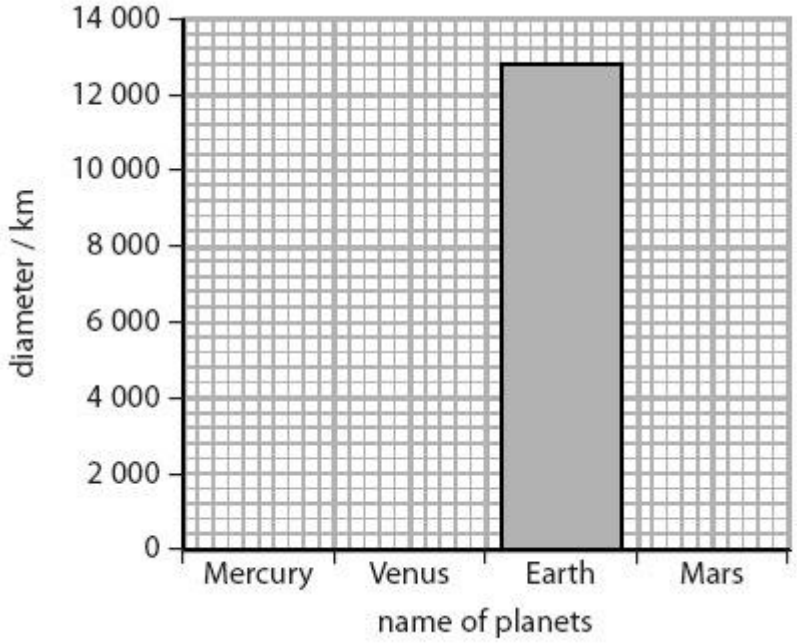
(b) The table gives information about the diameters and distances of the four planets closest to the Sun.

planet	distance from the Sun / AU	diameter of the planet / km
Mercury	0.39	4 900
Venus	0.72	12 100
Earth	1.00	12 800
Mars	1.52	6 800

(i) Put the information about the diameter of the planets on to the bar chart.

The diameter for Earth has been done for you.

(2)



(ii) The distance of the planets from the Sun has been given in Astronomical Units (AU).
1 AU is 150 000 000 km.
Calculate the distance of Mars from the Sun in kilometres.

(2)

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*(c) For many years scientists have searched for evidence of intelligent life in our Solar System and in the rest of the Universe.

Describe the methods scientists have used to help with this search in both our Solar System and the rest of the Universe.

(6)

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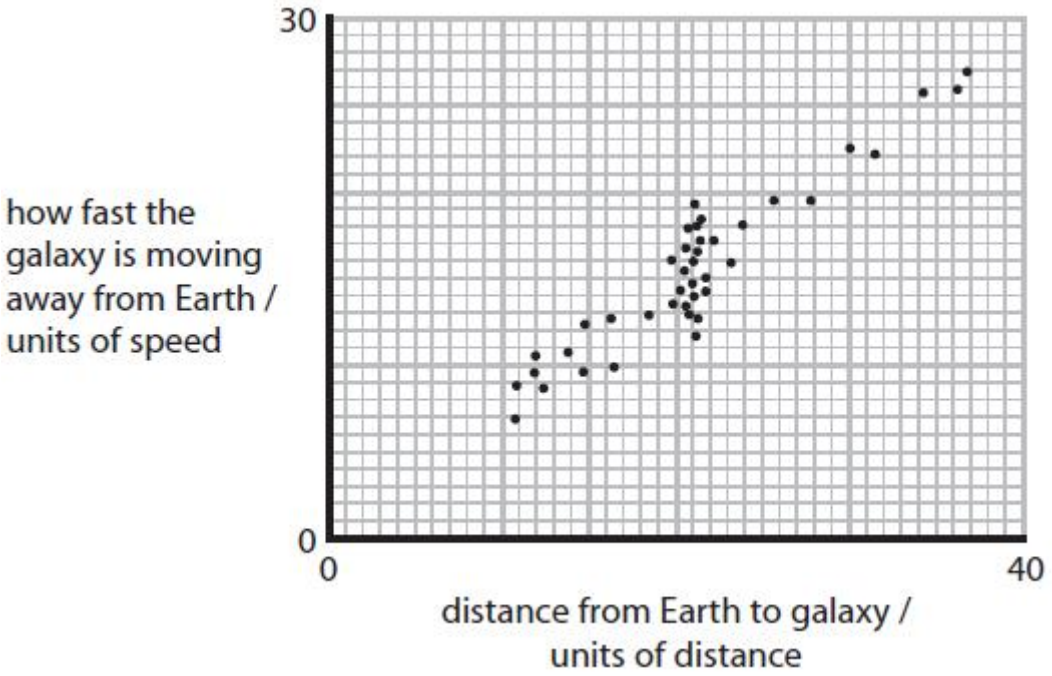
(Total for Question = 12 marks)

Q2.

(a) Hubble measured the distance of many galaxies from Earth.
He also measured the speed at which each galaxy moved away from Earth.

Hubble plotted his data on a graph like this.



(i) Plot the point: distance = 5 units, speed = 4 units

(1)

(ii) Draw the straight line of best fit.

(1)

(b) Hubble's work led to the theory of the Big Bang.

Describe what is meant by the Big Bang theory.

(2)

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(Total for Question = 5 marks)