

Name of the Student: _____

Max. Marks : 21 Marks

Time : 21 Minutes

Q1.

This passage is from a science magazine.

A star forms when enough dust and gas are pulled together. Masses smaller than a star may also be formed when dust and gas are pulled together.

(a) What is the force which pulls the dust and gas together?

(1)

(b) Complete the sentences.

(i) The smaller masses may be attracted by the star and become

_____.

(1)

(ii) Our nearest star, the Sun, is stable because the gravitational forces and the radiation pressure are _____.

(1)

(iii) The Sun is one of billions of stars in the galaxy called the

_____.

(1)

(Total 4 marks)

Q2.

(a) Choose the best words from the box to complete the following sentences.

billions	fission	friction	fusion	gases
gravity	liquids	millions	thousands	

(i) Stars form when enough dust and _____ from space are pulled together by _____.

(2)

(ii) Stars are able to give out energy for millions of years by the process of

(1)

(iii) The Sun is one of many _____ of stars in our galaxy.

(1)

(b) What is the name of our galaxy?

(1)

(Total 5 marks)

Q3.

(a) Complete the **two** spaces in the sentence.

Stars form when enough _____ and gas from _____ are pulled together by gravitational attraction.

(2)

(b) How are stars able to give out energy for millions of years?

Put a tick (✓) next to the answer.

By atoms joining together

By atoms splitting apart

By burning gases

(1)

(c) There are many billions of stars in our galaxy. Our Sun is one of these stars. What is the name of our galaxy?

(1)

(d)

Why was the Universe created?

We cannot expect scientists to answer this question. What is the reason for this?

Put a tick (✓) next to the reason.

It will take too long to collect the scientific evidence.

The answer depends on beliefs and opinions, not scientific evidence.

There is not enough scientific evidence.

(1)

Q4.

Light is given out by the Sun and a distant galaxy.

- (a) Compared to the light from the Sun, the light from the distant galaxy has moved towards the red end of the spectrum.

- (i) What name is given to this effect?

(1)

- (ii) Complete the following sentence by drawing a ring around the line in the box that is correct.

The fact that light from a distant galaxy seems to move towards the red end of

the spectrum gives scientists evidence that

galaxies are shrinking
galaxies are changing colour
the universe is expanding

(1)

- (b) Scientists have a theory that the universe began from a very small point and then exploded outwards.

- (i) What name is given to this theory?

(1)

- (ii) Which statement gives a reason why scientists think that the universe began with an explosion?

Put a tick (✓) in the box next to your choice.

At the moment it is the best way of explaining our scientific knowledge.

It can be proved using equations.

People felt the explosion.

(1)

(Total 4 marks)

Q5.

Complete the following sentences by choosing the correct words from the box. Each word may be used once or not at all.

dwarf	giant	neutron	proton	supernova
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If a red _____ star is large enough, it may eventually blow up in an explosion called a _____, leaving behind a very dense _____ star.

(Total 3 marks)