

second term examination 3ASS/3ASM/ 3AGE

Part one : Reading and interpreting (15pts)

Read the text carefully then do the activities:

Astronomers believe that the expanding universe is the result of an enormous and powerful explosion called the Big Bang. The Big Bang Theory may explain how the universe formed. It states that the universe began to expand with the explosion of concentrated matter energy and has been expanding ever since. According to the theory, all the matter and energy in the universe was once concentrated in a single place. This place, of course, was extremely hot and dense. Then some 15 to 20 billion years ago, an explosion- the Big Bang- shot the concentrated matter and energy in all directions. This fasted moving matter travelled farthest away. Energy too, began moving away from the area of the Big Bang.

If the Big Bang is correct, the energy left from it, will be evenly spread out throughout the universe. This energy is known as background radiation. And indeed, scientists have discovered that the background radiation is almost the same throughout the entire universe. This constant background radiation is one observation that supports the Big Bang theory.

After the initial Big Bang, the force of gravity began to affect the matter racing outward in every direction. Gravity is a force of attraction between objects. All objects have a gravitational attraction. This force of gravity began to pull matter into clumps.

At some time, the clumps formed huge clusters of matter. These clumps became the galaxies of the universe. But even as the galaxies were forming, the matter inside them continued to race away from the area where the Big Bang occurred. And this is just what astronomers have discovered. All of the galaxies are speeding away from the center of the universe.

A/ Comprehension/Interpretation (8pts)

1) Say whether the following statements are true or false according to the text (1,5pts)

- a/ Big Bang theory explains the formation of the universe.
- b/The energy theory was concentrated in a hot and dense place.
- c/ The gravity is a force of repulsion between objects.

2) Answer the following questions, according to the text :(3pts)

- a/ How long ago did the Big Bang happen?
- b/ What does the expression « background radiation » mean ?
- c/ What was at the origin of the universe ?

3) What or who the underlined words refer to in the text? (2pts)

It (§1) → that (§2) → Them (§4) →

4) in which paragraph is it mentioned that the galaxies of the universe were formed by the theory of Big Bang. (1pt)

5) Find a title to the text (0,5pt)

B/ Text exploration (7pts)

1. Form words which are opposite in meaning to the following by adding the appropriate prefix :(1,5pts)

- a/ correct ≠, b/ known ≠, c/ constant ≠

2. Fill in the table with the missing word category : (1pt)

Nouns	Adjectives
a-	1- deep
b- Explosion	2-
c-	3- Gravitational
d- density	4-

3. Ask question on the underlined word (1pt)

Earth rotates around its axis in twenty three hours and fifty six minutes.

4. Combine the following pairs of sentences using the connectors between brackets making the necessary changes .(1pt)

- Stars are very distant. Planets are distant (less)
- Earth moves round the sun in its orbit. Jupiter moves round the sun in its orbit (both)

5. Rewrite the sentences “b” so they mean as sentences “a” (1pt)

- a) They are launching a new satellite.
- b) A new satellite.....
- a) we don't believe on the existence of the Martians on Mars.
- b) If....., they would cure many deseases.

6. Circle the silent letter in the following words (0,5 pt)

length - know - weight high

7. Classify the following words according to the pronunciation of their final “s” (1pt)

Researches - orbits - satellites - capacities - energies -sources -proofs

systems

Part two : Written expression (5pts)

Choose one of the following topics.

Topic 1 : - Some people argue that the budget spend on space exploration is a waste of money.

Do you agree / disagree with them? Write an article in which you state your opinion and you give your arguments.

Topic 2 : - You have read in a certain newspaper several articles about the existence of an extra-terrestrial life in the outer space and about a probable attack on Earth.

- Write a letter of complaint to the editor of the newspaper about the fear and anxiety these articles caused in your family and among the society