جامعة ابن خلدون ـ تيارت كلية علــــوم المادة قسـم الفــيزياء

Academic Year 2023-2024

### **English correction: 2nd Year Physic**

## Task 1: Reading Comprehension 4pts (1pt\*1)

- 1. Einstein's work on general relativity brought about a new understanding of gravity, describing it as the curvature of spacetime caused by mass and energy.
- 2. General relativity provides an observatory for understanding the universe's mechanisms in astrophysics.
- 3. Theories like curved spacetime and gravitational time dilation are considered important because they provide important new understandings of the nature of space, time, and matter.
- 4. General relativity has changed our understanding of the cosmos by providing rigorous experimental validation and confirming phenomena like black holes and gravitational lensing.

#### Task 2: True or False 4pts (1pt\*1)

- 1. True
- 2. False
- 3. True
- 4. False

#### Task 3: Choose the correct answer to each definition from the text:3pts (1pt\*1)

- 1. Mass
- 2. Energy
- 3. Cosmos

#### Part II : Mastery of Language :

# Task 1: Identify the different underlined parts of speech in each sentence, while also clarifying the tense used in each sentence :6.5 pts (0.25pt\*1)

- 1. Energy (noun) powers (verb) interesting phenomena (adjective + noun) in the universe. [Present tense]
- 2. They (pronoun) are (verb) currently (adverb) experimenting (verb) with quantum mechanics (noun) to understand (verb) particle behavior (noun). [Present continuous tense]
- 3. The scientist (noun) conducted (verb) experiments (noun) to measure (verb) the velocity (noun) of light (noun). [Past tense]
- 4. The team (noun) was (verb) tirelessly (adverb) working (verb) on their revolutionary theory (adjective + noun). [Past continuous tense]

## Part III: Writing.2.5 pts

#### Compose a brief and a comprehensive summary of the preceding text, in no more than 5 lines.

Einstein's groundbreaking work on general relativity revolutionized our grasp of gravity, defining it as spacetime curvature by mass and energy. Predicting phenomena like black holes and gravitational lensing, it extends insights from cosmic to subatomic scales, shaping astrophysics profoundly. The theory challenges conventional notions with concepts like curved spacetime and gravitational time dilation, redefining our understanding of space, time, and matter. Rigorously validated, general relativity now stands as a cornerstone of modern physics, fundamentally reshaping our comprehension of the cosmos.