



**NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
**FACULTY OF INFORMATION AND COMMUNICATION SCIENCE**  
**DEPARTMENT OF JOURNALISM AND MEDIA STUDIES**  
**BACHELOR OF SCIENCE (HONS) IN JOURNALISM AND MEDIA STUDIES**  
**ECO AND SCIENCE JOURNALISM II**  
**(IJM4227)**

**Final Examination Paper**  
**May 2017**

This examination paper consists of 4 pages

**Time Allowed:** 3 hours  
**Total Marks:** 100  
**Examiner's Name:** Mr. Lenient Chidyagwayi

**INSTRUCTIONS**

1. Section **A** is compulsory.
2. Answer **any two** questions from Section **B**.
3. Start each question on a new page.
4. Poor spellings and grammar will be penalised.

**MARK ALLOCATION**

<b>QUESTION</b>	<b>MARKS</b>
<b>1.</b>	<b>40</b>
<b>2.</b>	<b>30</b>
<b>3.</b>	<b>30</b>
<b>4.</b>	<b>30</b>
<b>5.</b>	<b>30</b>

## SECTION A

### QUESTION 1

Use **Annexure A** to answer the following questions:

- a) To what extent is this story good or bad science journalism? **(10 Marks)**
- b) Choose two of the problems identified above, and explain how you would fix them. **(10 Marks)**
- c) Interrogate the factors that impact on the media's ability to promote good ecological and science-based reporting. **(20 Marks)**

**TOTAL** **[40 Marks]**

## SECTION B

### QUESTION 2

Assess the potential contribution of new media technologies to the practice of eco and science journalism. **[30Marks]**

### QUESTION 3

Identify the gaps in the traditional coverage of eco and science issues that eco-science journalism can potentially address. **[30 Marks]**

### QUESTION 4

Discuss ethical challenges which potentially confront eco and science journalism. Give examples to support your answer. **[30Marks].**

### QUESTION 5

Describe the factors that have made eco and science stories less comprehensible to the average person. **[30 Marks]**

## **Annexure A**

**THE universe is a “vast and complex hologram” and our world is actually like a 3D movie, according to an astonishing theory from researchers.**

By [Sean Martin](#)

PUBLISHED: 13:40, Tue, Jan 31, 2017 | UPDATED: 13:46, Tue, Jan 31, 2017

The universe could be a hologram.

The three-dimensional life that we see is merely an illusion, so say astrophysicists who have been analysing cosmic microwaves.

The cosmic microwave background (CMB) is the afterglow of radiation left over from the Big Bang. By studying it, researchers claim to have unearthed substantial proof the universe is a hologram.

Niayesh Afshordi from the University of Waterloo in Ontario, Canada, said: "We are proposing using this holographic Universe, which is a very different model of the Big Bang than the popularly accepted one that relies on gravity and inflation".

"Each of these models makes distinct predictions that we can test as we refine our data and improve our theoretical understanding - all within the next five years."

We could actually be living in a two-dimensional world

The researchers propose the way we see the universe might be the same way we watch a 3D movie at the cinema – we can experience the depth, even if it is simply a two-dimensional projection.

Kostas Skenderis, a professor of mathematical sciences at the University of Southampton, added: "Imagine that everything you see, feel and hear in three dimensions (and your perception of time) in fact emanates from a flat two-dimensional field.

"The idea is similar to that of ordinary holograms where a three-dimensional image is encoded in a two-dimensional surface, such as in the hologram on a credit card.

The Big Bang cannot explain certain laws of the universe

"However, this time, the entire universe is encoded."

While the idea of a holographic universe does seem like something from a science fiction movie, many physicists agree that it would help solve some of the mysteries of the universe, mainly the Big Bang.

Is life an illusion?

In the Big Bang theory, chemical reactions caused the universe to expand from sub atomic sized to the size of a golf ball in an instant. While cosmic inflation, as it is known, is a probability, it has so far proved impossible to show what mechanism caused the universe to expand faster than the speed of light.

Professor Skendris continued: "Holography is a huge leap forward in the way we think about the structure and creation of the universe.

"Einstein's theory of general relativity explains almost everything large scale in the universe very well, but starts to unravel when examining its origins and mechanisms at quantum level.

"Scientists have been working for decades to combine Einstein's theory of gravity and quantum theory. "Some believe the concept of a holographic universe has the potential to reconcile the two. I hope our research takes us another step towards this."