Sri Lanka Institute of Information Technology

B.Sc. Special Honours Degree
in
Information Technology

Final Examination
Year 1, Semester 1 (2018)
June Batch
IT1040 – Communication Skills

Duration: 3 Hours

October 2018

Instructions to Candidates:

♦ This paper contains **four** main questions.

♦ Answer all questions in the paper itself.

♦ Total marks for this paper is 100 which contribute to 50% of the final grade.

Q1	Q2	Q3	Q4	Total
40	10	20	30	100

1

Read the following passage and answer the questions.

World renowned physicist dies aged 76

Scientist Stephen Hawking was known for his groundbreaking work with black holes and relativity, and was the author of several popular science books including 'A Brief History of Time.'

Who was Stephen Hawking?

Professor Stephen William Hawking was born on 8th January 1942 (exactly 300 years after the death of Galileo) in Oxford, England. His parents' house was in north London but during the Second World War, Oxford was **considered** a safer place to have babies. When he was eight his family moved to St. Albans, a town about 20 miles north of London. At the age of eleven, Stephen went to St. Albans School and then on to University College, Oxford (1952); his father's old college. Stephen wanted to study mathematics although his father would have preferred medicine. Mathematics was not available at University College, so he pursued physics instead. After three years and not very much work, he was awarded a first class honours degree in natural science.

In October 1962, Stephen arrived at the Department of Applied Mathematics and Theoretical Physics (DAMTP) at the University of Cambridge to do research in cosmology, there being no-one working in that area in Oxford at the time. His supervisor was Dennis Sciama, although he had hoped to get Fred Hoyle who was working in Cambridge. After **gaining** his PhD (1965) with his thesis titled 'Properties of Expanding Universes', he became, first, a research fellow (1965) then Fellow for Distinction in Science (1969) at Gonville & Caius College. In 1966 he won the Adams Prize for his essay 'Singularities and the Geometry of Space-time'. Stephen moved to the Institute of Astronomy (1968), later moving back to DAMTP (1973), employed as a research assistant, and published his first academic book, *The Large Scale Structure of Space-Time*, with George Ellis. During the next few years, Stephen was elected a Fellow of the Royal Society (1974) and Sherman Fairchild Distinguished Scholar at the California Institute of Technology (1974). He became a Reader in Gravitational Physics at DAMTP (1975), progressing to Professor of Gravitational Physics (1977). He then held the position of Lucasian Professor of Mathematics (1979-2009). The chair was **founded** in 1663 with money left in the

will of the Reverend Henry Lucas who had been the Member of Parliament for the University. It was first held by Isaac Barrow and then in 1669 by Isaac Newton.

Professor Stephen Hawking has worked on the basic laws which govern the universe. With Roger Penrose he showed that Einstein's general theory of relativity **implied** space and time would have a beginning in the Big Bang and an end in black holes (1970). These results **indicated** that it was necessary to unify general relativity with quantum theory, the other great scientific development of the first half of the 20th century. One consequence of such a **unification** that he discovered was that black holes should not be completely black, but rather should emit 'Hawking' radiation and eventually evaporate and disappear (1974). Another **conjecture** is that the universe has no edge or boundary in imaginary time. This would imply that the way the universe began was completely **determined** by the laws of science. At the time of death, Stephen had been working with colleagues on a possible resolution to the black hole information paradox, where debate centres on the conservation of information.

The famous theoretical physicist helped to bring his ideas about black holes and quantum gravity to a broad public audience. For much of his time in the public eye, though, he was **confined to** a wheelchair by a form of the motor-neuron disease amyotrophic lateral sclerosis (ALS). And since 1985 he had to speak through his **trademark** computer system—which he operated with his cheek—and had around-the-clock care.

But his disease hardly seemed to slow him down. Hawking spent 30 years as a full professor of mathematics at the University of Cambridge. And he was the director of research at the school's Center for Theoretical Cosmology.

Quotes:
Intelligence is the ability to adapt to change.
The greatest enemy of knowledge is not ignorance, it is the illusion of knowledge.
I have noticed even people who claim everything is predestined, and that we can do nothing to change it, look before they cross the road.

(Source: http://www.lankadesha.com/world-renowned-greatest-physicist-dies-aged-76/)

3

Part A   (02x03= 06 marks)

Underline the most suitable answer

1. What was the subject that Stephen studied at college level?
   a. Chemistry
   b. Medicine
   c. Physics
   d. Maths

2. Which of these titles/awards did Stephen **not** receive as a university academic?
   a. Fellow for Distinction in Science
   b. Fellow of the Royal Society
   c. Professor of Gravitational Mathematics
   d. Lucasian Professor of Mathematics

3. Which of the following statements is true of Stephen Hawking's scientific theories?
   a. The cosmos does not have a limit
   b. Space and time have no beginning or end
   c. Black holes are completely black
   d. Black holes should emit 'Hawking' radiation and eventually thicken

Part B   (02x10=20marks)

Choose the most suitable word from the box given below and write it in front of each definition.

implied	determined	conjecture	unification
indicated	confined		considered
founded	trademark	gaining	

1) Thought   - _____
2) Merger   - _____
3) Obtaining   - _____
4) Established   - _____
5) Symbolic/distinctive   - _____
6) Decided   - _____

4

7) Suggested   - _____

8) Showed   - _____

9) Assumption/ supposition - _____

10) Restricted   - _____

Part C   **(04x02=08 marks)**

Mark each statement as either true ☐T **or false** ☐F **according to the reading.**

Then justify your answers, <u>incorporating relevant information</u> from the passage.

(Correct response 1 mark, justification 3 marks. Total- 4 marks)

1. Stephen's illness greatly reduced his efficiency during the latter part of his life. ☐

_____

_____

_____

_____

2. Although some people say that everything happens according to destiny, they themselves do not seem to believe it a hundred percent. ☐

_____

_____

_____

_____

Part D   **(02x03=06 marks)**

Answer the following questions.

1. Name two individuals who had held the position of Lucasian Professor of Mathematics before Stephen Hawking.

I. _____

II. _____

2. How did Stephen Hawking communicate with others after he succumbed to the motor-neuron disease?

_____

_____

Question 2   **(Total = 10 Marks)**

Rewrite the following sentences in the nonsexist or gender neutral language.

(02x05=10marks)

1. The department chair must submit his budget by March 1st.

_____

_____

2. If the writer plans ahead, he will save a lot of effort.

_____

_____

3. As someone grows older, he becomes more reflective.

_____

_____

4. Students are different: one may be assertive in his interpersonal relations, while another may be timid in his approach to the world.

_____

_____

5. With the recent fall in prices and the rapid technological developments, a consumer is more likely to change his computer within three years.

_____

_____

3.1 Identify the specific elements of the following jumbled business letter and arrange all its elements by adding numbers from 1 -10 in the correct order.

(01 x 10 = 10 marks)

1. Mark Smith

   Manager

   Cabinet World

   555 Broadway

   City Ville   (……..)

2. The cabinet doors do not open and shut properly and the stain on the cabinet is unalike, with one half darker than the other. The cabinet is not of acceptable quality and does not match the sample cabinet I was shown in store. I would like you to replace it with one of the same quality and arrange for return of the faulty cabinet at no cost.   (……..)

3. Complaint about a faulty television cabinet purchased from the Cabinet World on 15 December 2016   (……..)

4. Dear Mr Smith   (……..)

5. 10 March 2017

6. Morgan Wilson

   123 Main Street

   London   (……..)

7. I would like to have this problem fixed quickly please. If I do not hear from you within 10 days, I will lodge a formal complaint with Consumer Affairs in my state. As proof of purchase, I have also attached a photocopy of my receipt.   (……..)

8. Yours Sincerely (……..)

9. I am unhappy with the quality of a television cabinet I bought on 15 December and I am writing to seek a replacement. (……..)

10. *Morgan*

   Morgan Wilson   (……..)

3.2 Use the following information and compile a formal letter including a suitable subject and other relevant elements of a business letter. **(10 marks)**

You are an undergraduate at Sri Lanka Institute of Information Technology. You are the batch representative for your batch and you want to reschedule a lecture due to (put your own reason). Write to the respective lecturer of your selected module providing details of who you are, what your request is, the reason for your request and any other relevant information.

The letter should not be less than 150 words.

....
....
....
....
....
....
....
....
....
....
....
....
....
....
....
....
....
....

....
....
....
....
....
....
....
....
....
....
....
....
....
....
....
....
....
....
....
....
....
....

Question 4 (Total = 30 Marks)

Write an essay on **one** of the following topics. Limit your essay to **250 words**.

1. Nowadays people who live in large cities face many problems. What are these problems? Do you think governments should encourage living in smaller cities instead of large cities? Give your opinion in this regard.

2. Some people believe that all criminals should be kept in prison while some others believe that criminals should be used for community service.

   To what extent do you agree or disagree with this statement?

3. "I could not believe what was happening right in front of me. I wanted to scream out loud."…....................

   Write a narrative essay using the prompt given as the beginning to the essay.