

Tribhuvan University

2078

Bachelor Level [4 Yrs.]/Ist Year/Science & Tech.

Full Marks: 50

Scientific Communication - Sc. 101 (Regular)

Time: 2 hrs.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Attempt All the questions.

1. Read the given text carefully and answer the following questions. [5]

Today scientists describe the universe in terms of two basic partial theories- the general theory of relativity and quantum mechanics, the great intellectual achievements of the first half of this century. The general theory of relativity describes the force of gravity and the large-scale structure of the universe, that is, the structure on scales from only a few miles to as large as a million million million million (1 with twenty-four zeros after it) miles, the size of the observable universe, Quantum mechanics, on the other hand, deals with phenomena on extremely small scales, such as a millionth of a millionth of an inch. Unfortunately, however, these two theories are known to be inconsistent with each other - they cannot both be correct. One of the major endeavors in physics today is the search for a new theory that will incorporate them both - a quantum theory of gravity. We do not yet have such a theory, and we may still be a long way from having one, but we do already know many of the properties that it must have.

- a) What is the general theory of relativity?
- b) What is the quantum mechanics?
- c) What do you understand by a quantum theory of gravity that scientists are in quest for today?

5. Remove possible ambiguities in the following sentences by changing the position of faulty modifiers. [5]

- a) Mohan only scored ten runs.
- b) He promised when a vacancy occurred to consider me for the position.
- c) He found a dog in the boat, which was dark brown in color with a white tail.
- d) A car came down the street decked with flowers.
- e) The car is in the garage which he smashed.

6. Put the following sentences in the right order, so that they read like a coherent paragraph: [5]

- a) Ten miles further down, the water is pure again.
- b) This overwhelming kind of pollution is called super-pollution.
- c) But if large quantities of sewage are dumped continuously, the purifying bacteria are killed and the stream loses its power to purify.
- d) If sewage is dumped into a stream in small quantities, the stream dissolves it and purifies it.

7. What are the different modes of communication? [5]

OR

What are the basics of communication?

8. Write a paragraph about the relation between science and religion. [5]

9. The structure of proposals contains three main integrating parts: prefatory parts, body of proposal and supplementary parts. Write about the information we include under these parts. [10]

OR

Write an essay on "Computer and its advantages and disadvantages."