	Utech
Name :	
Roll No.:	To Open O' Exercising and Explana
Invigilator's Signature :	

# CS/M.Sc (IS)/SEM-2/MI-201/2011 2011

## LIBRARY AND INFORMATION SCIENCE

Time Allotted: 3 Hours Full Marks: 70

The figures in the margin indicate full marks.

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

# GROUP - A

## ( Multiple Choice Type Questions )

- 1. Choose the correct alternatives for the following:  $10 \times 1 = 10$ 
  - The mode of formation of the subject 'Oceanography' is an example of
    - a) Fusion
- b) Clustering
- c) Distillation
- d) None of these.
- ii) The subject 'Research in Computer Science' contains
  - a) a basic subject only
  - b) an isolate only
  - c) a basic subject and an isolate
  - d) none of these.

30151 (M.Sc) [ Turn over

#### CS/M.Sc (IS)/SEM-2/MI-201/2011

The broad discipline 'Cognitive Science' iii) subject a) English literature b) Political Science Physiology. Psychology d) c) The broad discipline of 'Natural Science' is represented iv) in Dewey Decimal Classification scheme by the number a) 200 b) 800 500 d) 700. c) The number of areas exists in a catalogue is v) a) 5 b) 6 7 c) d) 8. The 'Author Productivity' is expressed by vi) Zipf's law a) Ranganathan's law b) c) Lotka's law Bradford's law. d) vii) One Petabyte of information is equal to 1000 Terabyte b) 1000 Exabyte a)  $(10)^{12}$  Byte c) d) None of these. viii) An increase in entropy of an information system indicates the change from order to chaos b) chaos to order a) no change none of these. c) d)



- ix) 'Newspaper' is an example of
  - a) primary source of information
  - b) secondary source of information
  - c) tertiary source of information
  - d) none of these.
- x) Increase in 'Loss' of an information system will decrease the
  - a) precision
- b) recall

c) hit

d) none of these.

#### **GROUP - B**

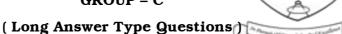
#### (Short Answer Type Questions)

Answer any *three* of the following.

 $3 \times 5 = 15$ 

- Define 'Universe of subjects' and 'Library classification'. State how 'Universe of subjects' was classified by Melvil Dewey in his Decimal Classification Scheme.
- 3. Identify the fundamental categories and basic subject of the following title :
  - "Calculation of stellar radiation by spectroscopic method in Indian Institute of Astrophysics during 2010".
- 4. What is 'Keyword' ? Distinguish between 'Keyword' and 'Word'. Describe with examples different kernels of a keyword. 1+2+2
- 5. State and explain Bradford's law and Lotka's law of informetrics.





Answer any three of the following.

 $3 \times 15 = 45$ 

- 6. Describe in detail the role of libraries and information centres in modern society. Define 'Proliferation of subjects' and 'information explosion'. How these two concepts are related? 9+4+2
- 7. Discuss different types of data generally used in different areas of sciences. State and explain different properties of data. Define 'Documentary chaos'. How this 'Chaos' can be controlled? Explain with examples. 6 + 6 + 3
- 8. What is 'Knowledge society'? Elucidate the evolutionary stages of primitive society towards knowledge society. Discuss with examples the following modes of formation of subjects:
  - a) Lamination
  - b) Distillation
  - c) Cluster.

3 + 4 + 8

9. Establish mathematically that no subject can grow indefinitely. Describe the 'Vicious triangle of information abuse'. State and explain Brookes' fundamental equation of information. 8+4+3