

**2007**

**INFORMATION SCIENCE**

**PAPER-I**

*Full Marks* 80

*Time* :  $\frac{31}{2}$  hours

Answer **Q. No. 1** and any *four* questions, taking one from each Unit

*The figures in the right-hand margin indicate marks*

1. Write briefly on any *two* of the following : 8 x 2
- (a) **Knowledge Pentagon Model** : The role of libraries.
  - (b) **Open Knowledge Movement** : Features and advantages.
  - (c) **Theory of Integrative Levels and Knowledge Organisation.**
  - (d) **Elasticity of Demand for Information.**

**UNIT -I**

2. (a) **Sum up the vision** of Semantic Web as propounded by W3C.

- (b) Explain in brief the use of the core tools of Semantic Web in knowledge organisation process.
- (c). **Examine** the role of Taxonomy, **Thesaurus and** Ontology as knowledge organisation tool. 4+6+6
- (a) Delineate Machlup's approach to Information Science as a cluster of many disciplines wherein the central core is information.
- (b) **Examine the implications of Ranganathan's Five Laws of Library Science in** the context of **Information Science.** 8+&

### UNIT-II

4. Describe the concept of Sociology of Knowledge as propounded by Karl Mannheim. Discuss the Knowledge Generation, Exchange and Utilisation (KGEU) process **with illustration.** 4+12
5. What are the major components of knowledge infrastructure? Critically evaluate the knowledge **infrastructure of India in the field of Science and** Technology. 4+12

### UNIT-III

6. **What is meant by modes of formation of subjects ?** Explain, with examples, the various modes through which different subjects are formed. 2+14

7. What is **absolute syntax** ? How does it differ from **linguistic syntax** ? Critically **examine the role of Ranganathan's Postulate of Absolute Syntax in knowledge / information organisation.** 2+4+10

UNIT-N

8. What are different pricing types adopted for marketing of information products and services ? Examine the role of equilibrium analysis in price determination in the situation arising out of changes in prices but when other factors affecting demand and supply remain constant. 4+12
9. What is market segmentation ? Identify and describe the bases for market segmentation in library and information sector. Explain how different strategies of market segmentation can be implemented efficiently in libraries and information agencies. 2+8+6
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