



UTTARAKHAND OPEN UNIVERSITY, HALDWANI (NAINITAL)
उत्तराखण्ड मुक्त विश्वविद्यालय, हल्द्वानी (नैनीताल)

**POSTGRADUATE DIPLOMA IN GEO INFORMATICS
ASSIGNMENT**

Last Date of Submission: 15 May, 2012

Course Title: Introduction to Informatics
Year: 2011-12 (summer)

Course Code: PGDGIS-01
Maximum Marks: 40 Marks

Section 'A'

Section 'A' contains 08 short answer type questions of 5 marks each. Learners are required to answer 4 questions only. Answers of short answer-type questions must be restricted to 250 words approximately.

1. Discuss following:
 - a. Registers
 - b. Memories
2. Differentiate between Internal and External storage devices.
3. Discuss the various services provided by the operating system.
4. Discuss the significance of algorithm in solving problems.
5. Define network topologies with the advantages and disadvantages of each.
6. What are the advantages of normalization?
7. Define rational constraints with the suitable example.
8. write short notes on the following:
 - a. Switch
 - b. Router
 - c. Firewall
 - d. Security.

Section 'B'

Section 'B' contains 04 long answer-type questions of 10 marks each. Learners are required to answer 02 questions only.

1. What is Error Detecting Codes, demonstrate working of it with taking appropriate example.
2. How data is represented in a computer discuss in detail?
3. Convert following:
 - a. To Decimal:
 - i. $(A2FC)_{16}$
 - ii. $(785)_8$
 - b. To Hexadecimal:
 - i. $(1011001)_2$
 - ii. $(1457)_8$
 - c. To Octal:
 - i. $(101100100)_2$
 - ii. $(2AB4)_{16}$
 - d. To Binary:
 - i. $(B2CD)_{16}$
 - ii. $(5627)_8$
4. Discuss the significance of DBMS in information management system

