S-791

Total Pages: 4 Roll No. -----

GIS-501/DGIS-501

Introduction to Informatics (MAGIS/MSCGIS/DGIS/CGIS)

1st Semester, Examination 2022(Dec.)

Time: 2 Hours Max. Marks: 70

Note: This paper is of Seventy (70) marks divided into two (02) Sections A and B. Attempt the questions contained in these sections according to the detailed instructions given therein.

Section - A

(Long Answer – type questions)

Note: Section 'A' contains Five (05) long-answer-type questions of Nineteen (19) marks each. Learners are required to answer any two (02) questions only.

 $[2 \times 19 = 38]$

P.T.O.

- Q.1. What is operating system? Explain different types of Operating Systems.
- Q.2. What do you understand by Keys in database. Explain different types of keys with examples.
- Q.3. Explain computer networks with its types. Also explain the different type of network topologies.
- Q.4. Define DBMS and normalization. Explain 1st, 2nd and3rd normal forms with examples.
- Q.5. Answer the following:
 - (a) Explain internal and external storage devices in details.
 - (b) Differentiate Primary and Secondary memory.

 Explain RAM along with its types and how RAM is different from ROM?

Section - B

(Short-answer-type questions)

Note: Section 'B' contains Eight (08) short-answer-type questions of Eight (08) marks each. Learners are required to answer any Four (04) questions only.

$$[4 \times 8 = 32]$$

- Q.1. Convert any two of the following:
 - a. $(111011.101)_2$ to its decimal equivalent.
 - b. $(1234.675)_{10}$ to its hexadecimal equivalent.
 - c. (4A83)₁₆ to its decimal equivalent.
 - d. $(3229)_{10}$ to its octal equivalent.
- Q.2. Explain ISO-OSI reference model in details.
- Q.3. Define DBMS. Explain the architecture of a database system with diagram.
- Q.4. Explain the functions of an operating system.

P.T.O.

- Q.5. Write short note on any two of the following:
 - a. Proprietary software
 - b. Shareware software
 - c. Freeware software
 - d. Open-source software
- Q.6. Write short note on below:
 - a. Hardware and software
 - b. Types of computers
- Q.7. Define Integrity and Domain constraints in detail.
- Q.8. Write short note on any two of the following:
 - a. Magnetic Disk
 - b. Magnetic Tape
 - c. Cache Memory
 - d. Registers
