नोट : सभी 04 प्रश्न पत्र हल करना अनिवार्य है।

नोट : प्रत्येक प्रश्न-पत्र को पृथक्-पृथक् उत्तर-पुस्तिका में लिखना अनिवार्य है।

Note: Each paper is compulsorily written on separate answer sheet.

## FS-1671

# M. Sc. (Fourth Semester) Examination, 2020

#### **COMPUTER SCIENCE**

Paper: First

## (Internetwork Applications)

Maximum Marks: 40

**Note:** Attempt all questions. Each question carry equal marks. Each question must be answered in maximum 800 words.

- 1. What is the main function of Internet Protocol? Which types of information are contained in IP header? Discuss.
- 2. Explain the usage and major services offered by ARP and RARP Protocols.
- 3. What do you understand by Proxy Services? Discuss.
- **4.** Discuss the features and services offered by T-1, T-3 and Frame Relay systems.
- **5.** Write short notes on any **one** of the following :
  - (a) TFTP
  - (b) UDO

## FS-1672

# M. Sc. (Fourth Semester) Examination, 2020

#### **COMPUTER SCIENCE**

Paper: Second

(Computer Graphics & Multimedia)

Maximum Marks: 40

**Note:** Attempt all questions. Each questions carry equal marks. Each question must be answered in maximum 800 words.

- **1.** Write short note on the following:
  - (a) LED and LCD monitor
  - (b) Refresh cathode-ray tube
  - (c) Plotters
- 2. Explain anti aliasing lines. Describe and derive Bresenham's circle drawing algorithm.

- 3. Derive with a neat sketch various steps needed for reflection about the line  $P_x = Q_y = r = 0$ . Write short note on 3D transformation.
- **4.** Explain JPEG compression process in detail. Write short note on multimedia hardware.
- **5.** Explain parametric representation of ellipse with example.

### FS-1673

# M. Sc. (Fourth Semester) Examination, 2020

#### COMPUTER SCIENCE

Paper: Third

(Artificial Intelligence)

Maximum Marks: 40

**Note:** All questions are compulsory. Each questions carry equal marks. Each question must be answered in maximum 800 words.

- 1. Explain any two situations where hill climbing algorithm may fail to find a solution.
- 2. What do you understand by knowledge organization? How do we represent knowledge? Explain in brief.
- **3.** "Some medicines are dangerous only if taken in excessive amount" Translate his sentence into formulas in predicate logic and then a clause form.
- **4.** Explain in short the working of DENDRAL and MYCIN. Discuss the concept of uncertainty in expert system.
- **5.** What is difference between information and knowledge? Explain.

### FS-1674

# M. Sc. (Fourth Semester) Examination, 2020

#### **COMPUTER SCIENCE**

Paper: Fourth

(Software Engineering)

Maximum Marks: Regular 40

**Note:** All questions are compulsory. All questions carry equal marks. Each question must be answered in maximum 800 words.

- 1. Describe software development life cycle.
- 2. What are design of solution strategies? How would you assess the quality of software design?
- **3.** What are software mannuals? Describe in details.
- **4.** What do you understand by exception handling?
- 5. Describe "Validation".