## 2015

### M.Sc.

# 4th Semester Examination

#### **ELECTRONICS**

PAPER-ELC-402

Full Marks: 50

Time: 2 hours

The figures in the right-hand margin indicate full marks.

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

Illustrate the answers wherever necessary.

## (Computer Networking)

Answer Q. No. 1 and any three from the rest.

- 1. (a) State the difference between BUS topology and star topology.
  - (b) State and explain Nyquist theorem.

- (c) What is single bit error and burst error?
- (d) How IMEI number of your mobile helps in tracking your device?
- (e) What do you mean by a leased line connection?
- 2. (a) What is different types of protocols used in data link layer? Briefly discuss one of them.
  - (b) Why byte stuffing is used?
  - (c) What is the funtion of switch?
  - (d) Write down advantages of optical fibre.

4+2+2+2

- 3. (a) What is FDDI?
  - (b) What is quantization, used in PCM?
  - (c) Write short notes on ISDN.

2+3+5

- 4. (a) Briefly explain the architecture of mobile communication.
  - (b) Describe, how mobile communication is operated in roaming.5+5

- 5. (a) What is the difference between Packet switching and Message Switching?
  - (b) What do you mean by Token? Briefly describe with proper diagram of Token ring access method.

4+(2+3)

- **6.** (a) What is the difference between network layer delivery and transport layer delivery?
  - (b) Is there any drawback of using piggy backing? Explain.
  - (c) Why is IP called 'best-effort-delivery' protocol?

4+3+3

Internal Assessment - 10