Term End Examination - December, 2016 Diploma in Computer Applications DCA-03: NETWORK FUNDAMENTALS (2016 Syllabus)

Time - 3 hours Full Mark - 100

Answer any four questions from Group - 'A', any two questions from Group - 'B' and any three questions from Group - 'C'

Group 'A' Marks: $5 \times 4 = 20$

(Answer any four questions each within 100 words)

Q. No. 1

- a) Outline the characteristics of data communication.
- b) Name and explain the three modes of data transmission.
- c) What are the drawbacks of a star topology?
- d) Name two similar functions of data link and the transport layer.
- e) Differentiate between node-to-node and source-to-destination delivery.
- f) What is a Search Engine? Give two examples of Search Engines.
- g) Write short notes on Intranet.

Group 'B' Marks: $10 \times 2 = 20$

(Answer any two questions each within 250 words)

Q. No. 2

- a) Draw the block diagram for the data communication system. Explain each of its components.
- b) What do you mean by a network topology? Write the features, advantages and disadvantages of a Bus topology.
- c) Compare and contrast between Guided and Unguided Media.
- d) What are Domain names? Give examples of some domain names.
- e) Explain the services provided by the Internet.

Group 'C' Mark: $20 \times 3 = 60$

(Answer any three questions each within 500 words)

- Q.No. 3. Explain the functions of all the Layers of OSI reference Model.
 - 4. Differentiate between the packet switching and the circuit switching.
 - 5. Discuss the features, merits and demerits of LAN and WAN.
 - 6. Discuss the services provided by the protocols ARP, RARP and IP.
 - 7. Discuss about the WWW and the Internet. Write the applications of the Internet.
 - 8. Write briefly about IPV4 addresses and its classification.