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Term End Examination - December, 2017
Diploma in Computer Application
DCA-03: NETWORK FUNDAMENTALS

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'

Mark: 5 X 4= 20

*(Answer any **four** questions each within 100 words)*

Q. No. 1

- a) Name the five elements of a data communication system.
- b) What are the similar functions of data link and the transport layer?
- c) What is Internet Protocol? Explain its services.
- d) List the various guided media used for transmission.
- e) What are the functions of a switch in a network?
- f) Differentiate between Internet and Intranet.
- g) What do you mean by multiplexing? Give an example.

Group 'B'

Mark: 10 X 2= 20

*(Answer any **two** questions each within 250 words)*

Q. No. 2

- a) Discuss various types of topologies used in computer networks.
- b) Compare and contrast between Guided and Unguided Media.
- c) Write briefly about IPV4 addresses and its classification
- d) What are Domain names? Give examples of some domain names
- e) Explain about the working and uses of Electronic Mail.

Group 'C'

Mark: 20 X 3= 60

*(Answer any **three** questions each within 500 words)*

- Q. No. 3. Discuss the functions and services provided by the OSI Network architecture.
4. Describe the Simple Mail Transfer Protocol (SMTP) in detail.
 5. Differentiate between the approaches of packet switching and circuit switching.
 6. Discuss and differentiate between LAN, MAN & WAN.
 7. Describe the construction and components of fiber optic cable. Write its advantages and disadvantages.
 8. Discuss about the WWW and the Internet. Write the applications of the Internet.