Day and Date: Friday, 01 - 04 - 2016

Time: 11.00 a.m. to 02.00 p.m.

Instructions:
1) All questions are compulsory.
2) All questions carry equal marks.

Q1) A) Multiple choice questions (choose the correct answer):

[20]

a) Which is the most common internet activity used for communication purpose from the given below
   i) e-learning
   ii) e-commerce
   iii) e-business
   iv) e-mail

b) In computer connotation (terminology) ‘nt’ refers to -
   i) nation
   ii) network
   iii) nature
   iv) nomenclature

c) A thin strand of glass wrapped on a protective coating used for networking purpose is called -
   i) Fiber optic cable
   ii) Co-axial cable
   iii) Twisted pair cable
   iv) None of these

d) CD-ROM is an example of -
   i) Optical media
   ii) Magnetic media
   iii) Hyper media
   iv) Transfer media

e) In circulation system, charging means -
   i) Issuing of books
   ii) Returning of books
   iii) Withdrawal of books
   iv) Reservation of books
f) A 'Hub' is a -
   i) Software program ii) Malware
   iii) Protocol iv) Network component

G) The term 'communication' came from which language?
   i) Greek ii) Latin
   iii) German iv) French

H) The term 'Information Technology' consist of -
   i) Communication Technology
   ii) Computer Technology
   iii) Reprographic, Micrographic, Printing technology
   iv) All the above

I) Libsys is -
   i) Library software ii) an operating system
   iii) Hardware component iv) A protocol

J) The capacity (speed) of a data transmission medium is measured in bits per second. The name for this capacity is -
   i) Bandwidth ii) Data flow
   iii) Bit capacity iv) Electronic transfer rate

B) Answer the following questions in one or two sentences:
   a) What is gateway?
   b) Who developed 'SOUL' library software?
   c) Which type of switching system is the telephone network?
   d) Name the device which convert analog signal into digital signal and digital signal into analog signal.
   e) What is OPAC?
   f) 'NIC and routers are the part of network component'. State whether it is true or false.
   g) The term 'Mesh' is related to -
   h) What is the full form of ISDN?
   i) The 'jpeg' extension refers to what kind of file?
   j) What is the name of network, if the device in the network can serve as both server and clients?
Q2) Define Research Explain its need, process and Ethical issues involved in research. [20]

OR

Define Hypothesis. Describe in detail the procedure for testing of the hypothesis.

Q3) Explain Historical method of research stating its characteristics, advantages and disadvantages. [20]

OR

Write an essay on 'Observation method' as a data collection tool and technique stating its characteristics, advantages and disadvantages.

Q4) Write short notes (any four): [20]
   a) Empirical Research.
   b) Research Design.
   c) Qualities of a good hypothesis.
   d) Literature search.
   e) Schedule.
   f) Record Analysis.