**BACHELOR IN COMPUTER
APPLICATIONS
Term - End Examination
December, 2006
CS - 612: PG SOFTWARE SKILLS**

Time: 2 hours   Maximum Marks: 60

Note: Question number 1 is compulsory. Answer any three questions from the rest.

l. (a) A certain number of men could do a piece of work in 60 days. If there were 8 more men it could be ' finished in 10 days less. Find the number of men that were there in the beginning.   (6)

(b) Differentiate between the different text functions by giving examples:(9)

(i) CHAR & CODE
(ii) FIND & SEARCH
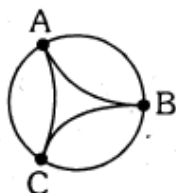(iii) UPPER & LOWER

(c) Using an example write down the steps that are to be followed to send an e-mail by selecting the address from the address book.   (3)

(d) Prove that for any positive integer n, is $3^{4n} - 4^{3n}$ always divisible by 17 .   (5)

(e) Explain the use of the following Internet tools: (6)

(i) Multicast Backbone
(ii) Finger
(iii) Internet Relay Chat

(f) Do you think that the graph shown below has ' Eulerian walk or not? Give reason in support of your answer.   (3)

2 (a) Explain whether for a prime number p > = 5, $p^2 + 5$ is composite or not.
                                                                  (5)
(b) Write a short note on Gopher.   (3)

(c) Briefly discuss who governs the Internet. (2)

3. (a) Explain the use of the following functions with example:

(i) EXACT( )
(ii) RAND( )
(iii) ABS( )
(iv) SUMIF( )

(b) Find the least square number exactly divisible by 8, 12, 15 and 20. (2)

4. (a) Explain any four top level domain names . (2)

(b) Explain the use of Auto filters and Advanced filters in MS-EXCEL with example. (5)

(c) Write the purpose of the following protocols: (3)

(i) FTP
(ii) TELNET
(iii) HTTP

5. (a) Explain what is firewall. Describe the role of firewall in protecting network from hackers. (5)

(b) The sum of four numbers A, B, C and D is 110. C is twice A, sum of A and D is equal to that of B and C and A : B is 3 : 5. Find the value of A, B, C and D.