

1.

Consider a disk with the following characteristics: block size  $B = 512$  bytes, interblock gap size  $G = 128$  bytes, number of blocks per track = 200, number of tracks per surface = 800. A disk pack consists of 15 double-sided disks.

- a. What is the total capacity of a track and what is its useful capacity
- b. What are the total capacity and the useful capacity of a cylinder?
- c. What are the total capacity and the useful capacity of a disk pack?

2

- a) Write short Notes on following Hardware items?
  - a. RAM
  - b. ROM
  - c. Processor
  - d. Optical & Magnetic devices

3. i. Convert the following Numbers to their Binary equivalent.
  - a)  $95_{10}$
  - b)  $4109_{16}$
  - c)  $3120_8$

- ii.  $110011 + 101111$  (Binary)       $1100000 - 100111$  (Binary)

- iii. Convert the following into Decimal a) 110011 b) 11110011 c) 1010101

4.
  - a) What is a Network ?
  - b) Mention the Advantages and Disadvantages of Network ?
  - c) Describe www and Internet ?

5. Discuss 3 Latest Technologies in detail ?

6. Write a computer Classification for the General office usage ? (Technical and Non technical details should be included)

7. What is network ? discuss different types of networks?  
What is internet and provide few example for internet applications?
8. Discuss Few Latest IT Applications available ?
9. Explain the following ? Cloud Computing , Health Treds , Internet security ,  
Digital Sound & image
10. Explain 5 Latest IT trends available in srilanka ?