1) List down configurations of a computer by mentioning each part and expected configurations for each if it is going to be used only for study activities. Mention the brand, model of each component and the specification.
2) Explain what is meant by a computer in your own words.
3) Compare and contrast computer with typical machine. You may use appropriate diagrams if needed.
4) Compare and contrast System software with Application software.
5) What are the classifications of a computer?
6) What is the main function of a computer system?
7) What are the characteristics of a computer
8) What are the components of a computer?
9) What are the functions of a computer?
10) Write the bootup process of a computer
11) What is CMOS and write a short note
12) Write a short note on mother board.
13) A short note on Power supply Unit
14) Explain what is meant by Computer hardware and software with appropriate examples.
15) What are some other types of software available?
16) Explain the contribution of the motherboard in your own words.
17) Explain the difference between HDD and SSD Hard disk drives.
18) Compare and contrast (Similarities and difference) CRT, LCD, and LED monitors.
19) Explain the contribution of a processor by your own words with the architectural diagram of the processor.

20) Explain what is meant by Binary number system.
21) Explain the impotency of Binary number system in computing.
22) Explain what is meant by Most Significant Bit (MSB) and Least Significant Bit (LSB) in a binary number.
23) Explain what is meant by Octal number system.
24) Explain what is meant by Hexadecimal number system.
25) Briefly explain the usage of Hexadecimal number system in computing.
26) Explain how characters are stored inside the computer in your own words.
27) Explain the importance of number representation in computing.
28) Explain what is meant by BCD representation.
29) Explain Zone decimal representation.
30) Explain packed decimal representation.
31) Explain one's compliment. And why is it a failure
32) Explain Twos compliment.
33) What is the character encoding scheme
34) What are optical disks and list down their advantages of them.
35) What are some optical devices and write a short note on them.
36) Write a short note on optical devices and magnetic devices and solid state devinces

37) Explain the difference between CD-R and CD-RW explaining the data storing mechanisms.
38) How is data read in CD's and DVD's
39) What are the differences between a CD and DVD.
40) What are the differences between Primary and Secondary storage.
41) What is cache memory
42) Draw the computer memory pyramid
43) What is CPU registers
44) What is the difference between Registers, cache memory, and RAM
45) How does a Hard drive work?
46) How does a hard drive store data?
47) What are the parts of a hard dick
48) A magnetic disk has 10 platters. 6000 tracks on each surface and 30 sectors per track. The capacity of a sector is 5KB.
   a) Find the capacity of a track.
   b) Find the capacity of a surface.
   c) Find the capacity of total HDD.
   d) Find the capacity of a cylinder

49) Write about RAM and ROM
50) What is data storing mechanism in RAM and ROM

51) What are some digital image sources?
52) Explain what is meant by a pixel and how pixel values are being store inside the computer.
53) What are some Digitalizing methods?
54) Explain the process of digitalizing an image inside the computer
55) Compare and contrast characteristics of grayscale image and color image.
56) What are the digital images' 2D array of values?
57) What does a screen with 200x350 pixels mean?
58) What is image resolution
59) How are digital images stored
60) How many bytes to store an image. Assume that we have two images that is 500 x 500 pixels in size and 400 x 600 in size
   a) Total resolution
   b) Binary image
   c) Greyscale image
   d) Color image
61) Assume that there are two screens one with 200x350 pixels and second screen with 560x780 pixels. Which screen has clear footages. Explain your answer in your own words
62) Assume that image contains 240x860 pixels. If the image stores inside the computer as Binary image how much memory it will consume? Explain your answer

63) What is an open system and closed system?
64) What is a network?
65) What are the advantages and disadvantages of a network?
66) Connecting devices can be of two types what are they?
67) Draw the connection device category diagram.
68) Write a short note on Repeaters, bridges, switch, hub, Routers and gateways.
69) What is a model and protocol.
70) What are the factors to consider while choosing a network topology.
71) What are the categories of a network and the devices used. Write a short note of each.
72) What are the types of topologies write the advantages and disadvantages.
73) What is internet and provide few example for internet applications?
74) Write about Internet vs WWW vs WAN.
75) What is a server?
76) Explain what is meant by Internet and why it's getting slow in Covid 19 pandemic situation. Explain your answer in your own words.
77) By considering the computer network in NSBM Green university as for example answer the following questions.
   I.   What are the benefits of computer network for different users involved with the university?
   II.   Considering the size of the organization which type of a network is more suitable?
   III. What are the factors need to be considered in choosing a network topology?
   IV.   Discuss the advantages and disadvantages of network topology STAR
   V.   What are the possible network risks associated with the university network?

78) Discuss 3 Latest Technologies in detail ?
79) Write a computer Classification for the General office usage ? (Technical and Non technical details should be included)
80) Discuss Few Latest IT Applications available ?
81) Explain the following ? Cloud Computing , Health Treds , Internet security , Digital Sound & image
82) Explain 5 Latest IT trends available in srilanka ?
83) Explain three advantages of Scoial networks in brief