NIELIT Gorakhpur

<u>Course Name: O Level (2nd Sem)</u> <u>Topic: Disk Defragmentation</u> **Subject: ICT Date: 22-04-2020**

Chapter 2nd [Utilities]

Disk Defragmentation:

Defragmentation is the process of consolidating fragmented files on the user's hard drive. Files become fragmented when data is written to disk, and there is not enough contiguous space to hold the complete file. Disk fragmentation occurs when a file is broken up into pieces to fit on the disk. Because files are constantly being written, deleted and resized, fragmentation is a natural occurrence.

When it saves changes to the file, it saves the changes to another empty space on the disk. Each time it saves the file, it puts information about it into whatever large empty space on the disk it can find. Because the different pieces of the file are separated or fragmented opening and reading the file can get slower and slower.

The solution is to defragment the disk. Disk defragmentation takes all the pieces of each file, and stores them in one place. It also makes sure programs are each in one place, and that unused space on the hard disk is all together.

Defragmenting a disk is like sorting and arranging items in a storage room; boxes holding similar things are combined, and all the boxes in the room are stacked neatly to create more space. Defragmenting does not change any of the files' contents, and does not affect anything you see on the screen (documents, shortcuts on the desktop, etc.) will be unaffected.

steps for defragmentation is listed below:-

1-Click on the Start button

2-Type the word defrag.

3-From the options suggested, click on Defragment and Optimize drives

4-Click on Optimize.

5-Finish.



<u>Disk cleanup:</u>

Disk Cleanup is computer maintenance utility that is included in the Microsoft Windows operating system and it is designed to free up space on the hard drive. The cleanup process involves searching and analyzing the hard drive for files that are no longer needed. Then it proceeds to remove them and thus freeing up disk space on the hard drive.

The Disk Cleanup utility built into Windows removes temporary, cache and log files created by the operating system and other programs. Disk Cleanup will not remove files that the computer needs, making it a safe way to free up some space on our PC. Following is the step to use disk cleanup:

- 1. From the Start button_menu, choose All Programs→Accessories→System Tools→Disk Cleanup.
- 2. In the Disk Cleanup dialog box, click the More Options tab. ...
- 3. Click the Disk Cleanup tab.
- 4. Place check marks by all items you want to remove. ...
- 5. Click the OK button. ...
- 6. Click the Yes button to begin the cleanup process.

Here is the list of all the files that can be deleted for Windows XP:



Assignment:-

- 1- Explain the process Defragmentation.
- 2- What is disk cleanup and why is it essential for system?