Syllabus Unitization & Prescribed Books (Session 2023-2024)

Department of CS & IT

Class – BSc IT-VI Semester

<u>Pattern of Question Paper -</u> Eight questions of equal marks (Specified in the syllabus), two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

COMPUTER GRAPHICS

Marks: 75

| Month wise Division | Syllabus Unitization |
|---------------------|--|
| Jan-Feb | SECTION—A Overview of Graphics system: Computer Graphics and their applications. Display Devices: CRT Monitors (Random – Scan and Raster Scan), DVST, Plasma – Panel Display, LED and LCD Monitors SECTION—B Two Dimensional Transformations: Basic Transformations, Scaling, Translation, Rotation, Reflection, Shear, Matrix representation of Basic transformations and homogenous coordinates. 3D transformations. translation, scaling, rotation |
| March | Section A Elementary Drawing: Points and various line drawing Algorithms and their comparisons. Circle generating algorithms, Algorithms for ellipse, arc and spiral SECTION-C Hidden Surfaces Depth comparisons, Z-buffer algorithm, Scan line algorithms |
| April | SECTION-D Projections, parallel projections. Perspective projection. |

Prescribed Book

Book Name – Computer Graphics

<u>Author</u> – Charanjit Singh

Publisher – Kalyani Publishers