**Programme: Bachelor of Science (Information Technology)
Semester-VI**

Course Title: Computer Graphics

Course Code: BITL-6111

Time Allowed: 3 Hours   **Max Marks: 60**

Note: Attempt five questions. Each question carries equal marks. Candidate are required to attempt at least one question from each section and fifth question can be attempted from any section.

SECTION A

1. Define Computer Graphics. What are the types of Computer Graphics? Explain different application areas of Compute Graphics in detail.   (12)

2. a. Difference between Raster Scan and Random Scan.

   b. List different display devices? Explain the working of LCD monitor.   (6+6)

SECTION B

3. What are the various line drawing algorithms? Explain the Bresenhem's Line drawing algorithm with an example.   (12)

---

4. Write an algorithm to draw a circle using Midpoint Circle Drawing algorithm along with its derivation. Also plot a circle with centre (30,40) having radius 8 using circle midpoint method. (12)

SECTION C

5. a. What is the importance of homogeneous coordinates? Write matrices corresponding to various transformations in homogeneous coordinates.

   b. Explain the transformation when a point R (x,y) is rotated by Q about a fixed point Q (h,k). Rotate a square A (1,1), B (3,1), C (3,3) and D (1,3) by an angle 45° keeping A as a fixed point. (6+6)

6. What is Clipping? Explain Cohen-Sutherland algorithm in detail with an example. (12)

SECTION D

7. Explain different types of 3D transformation in detail along with matrix representation. (12)

8. a. What is projection? Explain types of projection.

   b. What is Vanishing point? Explain One point perspective projection, Two point perspective projection and Three point perspective projection. (6+6)

Programme: Bachelor of Science (Information Technology)
Semester-VI

Course Title: Digital Marketing

Course Code: BITL-6112

Time Allowed: 3 Hours   **Max Marks: 60**

Note: Attempt five questions selecting at least one from each section, fifth question may be attempted from any section. All questions carry equal marks (12).

SECTION A

1. What is Marketing? Explain 4Ps of marketing.   (12)

2. What is decision making process? Explain AIDAA model.
                                                       (12)

SECTION B

3. What is Search Engine Optimization? Discuss working of SEO.   (12)

4. Explain Search Engine Marketing Auction models.
                                                       (12)

SECTION C

5. What are the factors affecting Social Media Marketing?

(12)

6. Explain B2B and B2C Social media platforms.

(12)

SECTION D

7. What do you know about Digital Analytics ?

(12)

8. What is Mobile Marketing? Discuss its working and types.

(12)

Exam Code: 105706   Paper Code: 6197
(20)

Programme: Bachelor of Science (Information Technology)
Semester-VI

Course Title: Data Mining Tool

Course Code: BITM-6115

Time Allowed: 3 Hours   Max Marks: 30

Note: Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any section. Each question carries 6 marks

Section —I

1. Explain Confusion Matrix, Precision and recall in Machine Learning   6

2. Explain the terms: preparing the dataset, ARFF Format, Plot Histogram.   6

Section — II

3. Explain various steps required for preprocessing of data.
                                                                        6

4. Explain the steps to load various data steps into Weka and run aproroiri algorithm with different support and confidence values. 6

Section — III

5. Explain J48 classification algorithm with examples using Weka. 6

6. Explain the terms a. Entropy values b. Kappa Statistics. 6

Section — IV

7. Explore visualization features of Weka to visualize the clusters. 6

8. Explain clustering techniques available in Weka. 6