Mohammad Akhtar

Scheme of Teaching and Examination for
1st Semester of 3 Years Diploma in Engineering (All Branches except Non Tech)

Duration of Semester : 14 Weeks
Student Contact Hours : 36 Hrs
Total Marks : 800
Effective from : 2017 -18 Session

Sl. No.	Name of Subject	Subject Code	Subject	Teaching Scheme L	Teaching Scheme T	Teaching Scheme P	Hours of Exam	Full Marks of Subject	Final Exam / committee marks	Internal Assessment	Pass Marks Final / Ext. Exam	Pass Marks in Subjects
1.	Communication Skill – I	101	Theory	3	-	-	3	100	80	20	26	40
2.	Engineering Math – I	102	Theory	3	1	-	3	100	80	20	26	40
3.	Engineering Physics - I	103	Theory	3	-	-	3	100	80	20	26	40
4.	Engineering Chemistry – I	104	Theory	3	-	-	3	100	80	20	26	40
5.	Engineering Graphics – I Th	105	Theory	2	-	-	4	50	40	10	13	20
6.	Fundamental of Computer	106	Theory	2	-	-	3	50	40	10	13	20
7.	Engineering Physics Lab – I	107	Practical	-	-	2	4	50	40	10	13	20
8.	Engineering Chemistry Lab- I	108	Practical	-	-	2	4	50	40	10	13	20
9	Engineering Graphics – I SS	109	Sessional	-	-	4	-	50	30	20	-	25
10	Communication Skill I	110	Sessional	-	-	2	-	50	30	20	-	25
11.	Fundamental of Computer - I	111	Sessional	-	-	2	-	50	30	20	-	25
12.	Workshop - I	112	Sessional	-	-	4	-	50	30	20	-	25
	Total Hours of Teaching per week :			16	1	16						

Total Marks :   Theory :   Practical :   Sessional :

L : Lecture,   T : Tutorial   P : Practical

Note:
1. Period of Class hours should be of 1 hrs duration as per AICTE norms.
2. Remaining Hrs every week has been marked for students Library and Student Centered Activities.
3. Drawing / Graphics / Practical / Sessional examinations will be held at parent institution.
4. Board will depute examiner for Practical examination.
5. Regarding sessional examination the parent institution will form a three member committee will examine the sessional records and hold viva of the examinee for 60 % marks allotted to the subject. Marks for remaining 40 % will be provided by the Faculty concerned on the basis of evaluation of each job / work throughout the semester.

Semster : 1st
Subject : Engg. Graphics-1
Marks distribution scheme

Subject code : 105.

(100 Marks)
Engineering Graphics.

Theory (50 Marks)

Internal marks (10 Marks)

External marks (40 Marks)

Pass Marks 13

Pass Marks in Subject
20

Sessional (50 Marks)

Internal Marks (20 Marks)

Committee marks (30 Marks)

Pass marks in subject
25
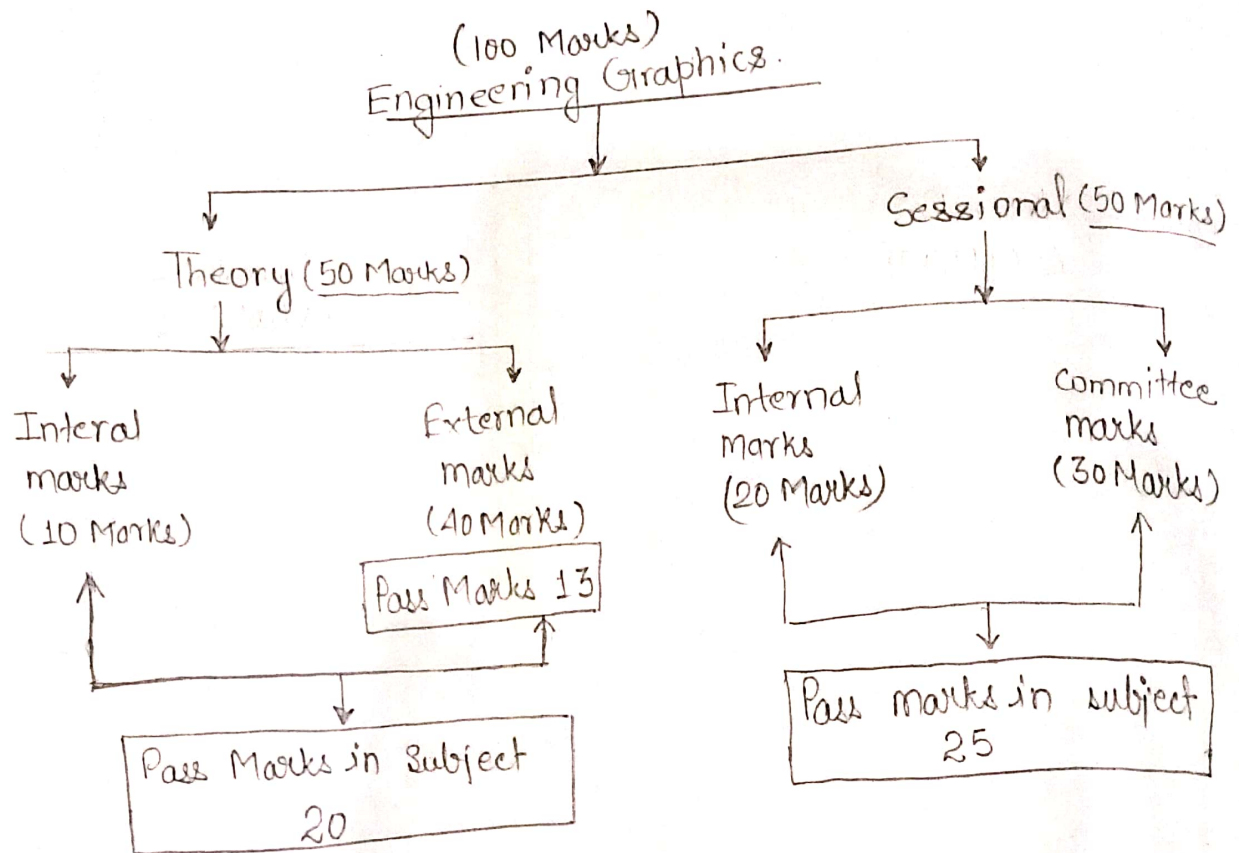
Theory
↓
Internal (10 Marks)
→ Snap test I & II (5 marks)
→ Assignment I & II (5 marks)

Sessional
↓
Internal (20 Marks)
→ Sheets (10 Marks)
→ Attendance (10 Marks)

Sessional
→ ViVa (5 marks)
→ Sheet (5 marks)
→ Attendance (5 marks)
→ Assignment (5 marks)
→ Snaptest (5 marks)

Course Name : 03 Years Diploma in Engineering

Semester   : First

Subject Title : Engineering Graphics-I

Subject Code : 105

Teaching and Examination Scheme:

Teaching Scheme			Examination Scheme						
L	T	P	Full Marks.	External Exam Marks	Internal Exam Marks	External Pas Marks	Total Pass Marks	Duration of External Exams	
02	0	4	50+50	40+30	10+20	13 TH	20+25	4 Hrs (TH)	

NOTE:

<u>Internal marks for theory will be allotted on the basis of two snap tests and 2 assignment of equal marks to be conducted by the faculty teaching the subject.</u>

RATIONALE:

Normally Graphical representation are used for expressing intents and contents. Engineering Graphics is the language of engineers. The concepts of Engineering Graphics are used to develop, express the ideas, and conveying the instructions which are used to carry out jobs in the field Engineering. The course illustrates the techniques of graphics in actual practice. This preliminary course aims at building a foundation for the further course in drawing and other allied subjects.

OBJECTIVES:

The student should be able to:-

1) Draw different engineering curves and know their applications.

2) Draw orthographic projections of different objects.

3) Visualize three dimensional objects and draw Isometric Projections.

4) Use the techniques and able to interpret the drawing in Engineering field.

5) Use computer aided drafting packages.

Chapter		Name of Topic	No. of Sheet	No. of Hr.	
				Theory	Practical
01.	1.1- 1.2- 1.3-	Drawing Instruments and sheet layout Letters and Numbers as per BIS: SP46-2003 Scale (Plane and diagonal scale)	02	01	04

02	2.1- 2.2- 2.3-	Curves and Conic Section To draw ellipse by directrix and arc of circle method To draw parabola by directrix and rectangle method To draw hyperbola by rectangle and directrix method.	01	02	04
03	3.1- 3.2-	Introduction to orthographic projection. Projection of point on principal, auxiliary and profile planes. Idea of shortest distance.	01	01	04
04	4.1- 4.2- 4.3-	Projection of straight line on principal plane in the following cases. Parallel to both H.P and V.P Inclined to one plane and parallel to other plane. Inclined to both plane.	01	02	04
05	5.1-	Projection of different simple shapes eg. Circle, Triangle, Rectangle, Pentagon, & Hexagon on principal plane (Inclined to one plane and to both planes)	01	02	04
06	6.1-	Projection of simple solid. Projection of Prism, Pyramid, Cone, Cylinder, and Cube with their axis inclined to one reference plane and parallel to other.	01	02	04
07	7.1- 7.2-	Section of simple solids with true shape of sectioned portion. Development of solid surfaces eg. Prism, Cylinder, Cone, Pyramid and Cubes.	01	02	04
08	8.1-	Isometric Scale and their use in drawing isometric views of single and compound solids. (Simple case only)	01	02	04

09	9.1-	Intersection of solids.
		Curves of intersection of the surfaces of the solids in the following case;
		   a. Prism with Prism
		   b. Cylinder with cylinder
		   c. Prism with cylinder
		   d. Cylinder with cone
		with different axis.
			01	02	04

Isometric : Box, cylinder, cone, prism, pyramid, frustum (Prizm, Pyramid)

10	10.1-	Prospective Projection	01	02	04
11	11.1-	AutoCAD Basics, Layers, multi-layer images, graphic interfaces, different views to be drawn.	03	10	16
		Total-	14	28	56

Learning Resources:

a. Book-

Sl. No.	Author	Title	Publication
1.	N.D.Bhatt	Engineering Drawing	Charotkar Publishing House
2.	R.K.Dhawan	Engineering Drawing	S.Chand Co.
3.	K.R.Mohan	Engineering Graphics	Dhanpat Rai & Publication Co.
4.	P.J.Shah	Engineering Drawing	----
5.	P.S.Gill	Engineering Drawing	----
6.		Mastering AutoCAD	BPB Publication