

I B. Tech II Semester Regular Examinations, April/May - 2017
ENGINEERING DRAWING
 (Com. to ME, CHEM, AE, AME, MM, PE, PCE, MET)

Time: 3 hours

Max. Marks: 70

-
- Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)
 2. Answering the question in **Part-A** is Compulsory
 3. Answer any **FOUR** Questions from **Part-B**
- ~~~~~

PART -A

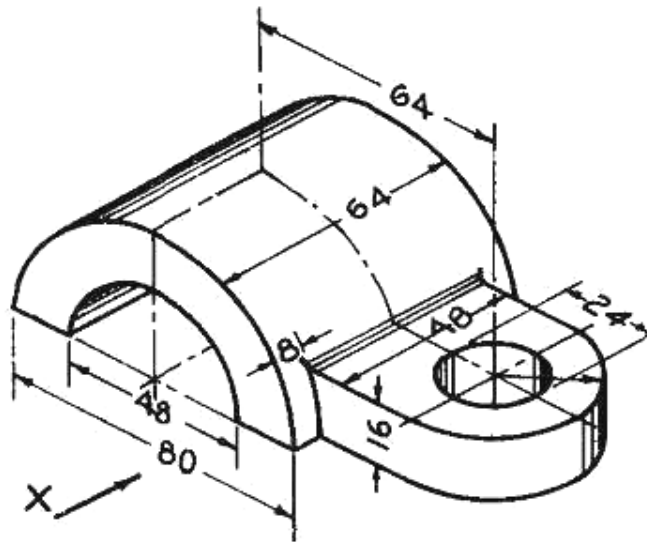
1. a) Draw an ellipse having the major axis of 70 mm and the minor axis of 40 mm. (6M)
- b) Draw the projections of the following points on the same ground line, keeping the Projectors 20 mm apart. (4M)
 - (i) Point A, 25 mm above the H.P. and 50 mm in front of V.P.
 - (ii) Point B, on the H.P. and 30 mm below the V.P.
- c) An equilateral triangle plane ABC of side 40 mm has its plane parallel to VP and 20 mm away from it. Draw the projections of the plane when one of its side is perpendicular to HP. (4M)

PART -B

2. a) Construct an ellipse with its major axis is 90 mm and minor axis is 55 mm using arc and circles method. (7M)
- b) Construct a plain scale of R.F. 1:50000 to show kilometers and hectometers and long enough to measure up to 10 kilometers. Measure a distance of 84 hectometers on your scale. (7M)
3. a) A point at 35 mm above the reference line XY is the front view of two points P and Q. The top view of P is 35 mm behind VP and the top view of Q is 40 mm in front of VP. Draw the projections of the points and state their positions relative to the planes of projection and the quadrants in which they lie. (7M)
- b) A line of 80 mm long is parallel to and 40 mm above HP. Its two ends are 35 mm and 50 mm in front of VP respectively. Find its inclination with VP. (7M)



4. A line AB 90 mm long is inclined 45° to the HP and 30° to the VP. Its end A is in HP and 40 mm in front of the VP. Draw its projections and determine the traces. (14M)
5. Draw the projections of a circle of 40 mm diameter resting in the HP on a point A on the circumference, its plane inclined at 45° to the HP and
 a) The top view of the diameter AB making 30° angle with the VP.
 b) The diameter AB making 30° angle with the VP. (14M)
6. A square pyramid base 35 mm side and axis 80 mm long has a triangular face in the HP and the vertical plane containing the axis makes an angle of 45° with the VP. Draw its projections. (14M)
7. Draw the Front View, Top view & both side views of the figure shown below. All dimensions are in mm. (14M)



I B. Tech II Semester Regular Examinations, April/May - 2017**ENGINEERING DRAWING**

(Com. to ME, CHEM, AE, AME, MM, PE, PCE, MET)

Time: 3 hours

Max. Marks: 70

- Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)
 2. Answering the question in **Part-A** is Compulsory
 3. Answer any **FOUR** Questions from **Part-B**
- ~~~~~

PART -A

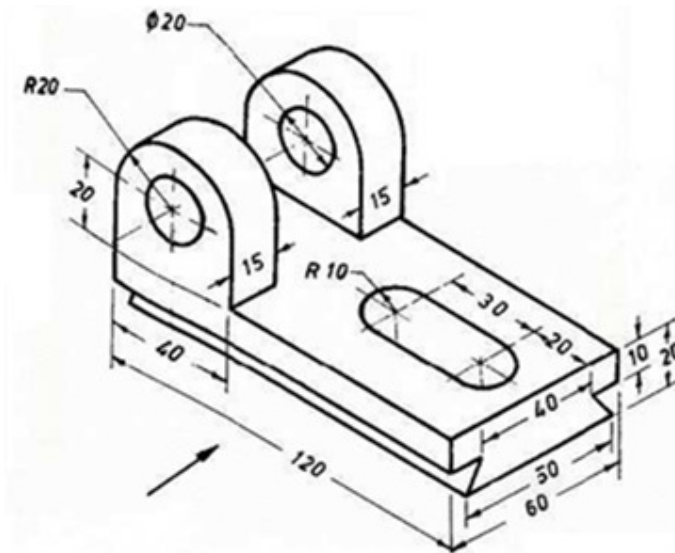
1. a) Draw the projections of a 70 mm long straight line, in the following positions (4M)
 - (i) Inclined at 30^0 to VP, in HP and one end on VP.
 - (ii) Perpendicular to the H.P, 35 mm in front of the V.P and its one end 25 mm above the H.P.
- b) Draw the projections of the following points on the same ground line, keeping the Projectors 30 mm apart. (4M)
 - (i) Point A, 30 mm above the H.P. and in the V.P.
 - (ii) Point B, 45 mm above the H.P. and 50 mm behind the V.P.
- c) Draw the isometric view of a square prism, with side of base 45 mm and length of axis 90 mm, when its axis is horizontal. (6M)

PART -B

2. a) The R.F of the scale is 1/400. Construct a scale to measure a maximum distance of 50 m and show a distance of 37.6 m on it. (7M)
- b) Construct a scale to be used with a map, the scale of which is 1cm = 500 m. The maximum length to be read is 7 km. Mark on the scale a distance of 5.35 km (7M)
3. a) A point A is 25 mm above HP and 50 mm in front of VP. Another point B is 30 mm below the HP and 25 mm behind the VP. The distance between the projectors of the points measured parallel to XY is 75mm. Draw the projections of the points. Draw the lines joining their front views and top views. (7M)
- b) A line of 80 mm long is parallel to and 20 mm in front of VP. Its one end is in HP while the other end is 30mm above HP. Find its inclination with HP. (7M)



4. A line AB, 100 mm long, is inclined at 45° to the HP and its top view makes an angle of 60° with the VP. The end A is in the HP and 10 mm in front of the VP. Draw its front view and find its true inclination with the VP. (14M)
5. A circular plane of 50 mm diameter rests on V.P. on a point A on its circumference. Its plane is inclined at 45° to V.P. Draw the projections of the plane when
 (a) The front view of the diameter AB makes 35° with H.P. and
 (b) The diameter AB itself makes 45° with H.P. (14M)
6. A pentagonal pyramid of base edge 25mm and altitude 55 mm rests on one of its edges of the base on HP such that this edge is inclined at 40° to VP and the slant face of the pyramid containing that edge is perpendicular to HP. Draw the projections of the solid. (14M)
7. Draw the Front View, Top view & both side views of the figure shown below. All dimensions are in mm. (14M)



I B. Tech II Semester Regular Examinations, April/May - 2017**ENGINEERING DRAWING**

(Com. to ME, CHEM, AE, AME, MM, PE, PCE, MET)

Time: 3 hours

Max. Marks: 70

- Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)
 2. Answering the question in **Part-A** is Compulsory
 3. Answer any **FOUR** Questions from **Part-B**
- ~~~~~

PART -A

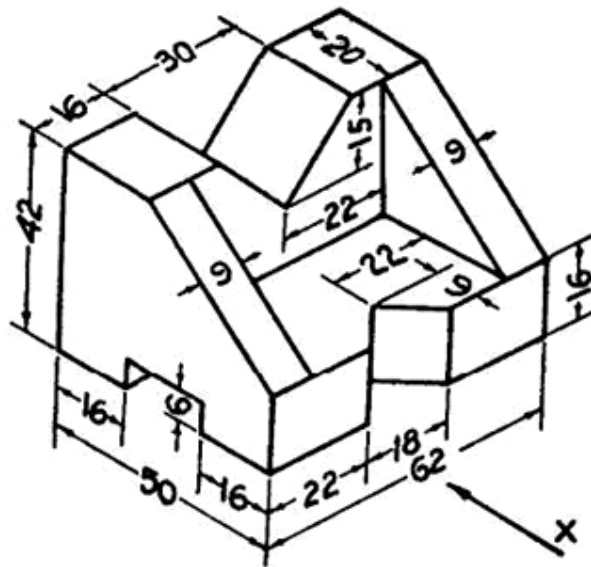
1. a) Draw the projections of a 50 mm long straight line, in the following positions (4M)
 - (i) Perpendicular to HP, 30 mm in front of VP and one end on HP.
 - (ii) Inclined at 45^0 to the V.P, in the H.P. and its one end in the V.P.
- b) Draw the projections of the following points on the same ground line, keeping the Projectors 25 mm apart. (4M)
 - (i) Point A, 50 mm below the H.P. and in the V.P.
 - (ii) Point B, 45 mm below the H.P. and 30 mm in front of the V.P.
- c) Draw the projections of a cone, base 50 mm diameter and axis 75 mm long resting on HP on its base. (6M)

PART -B

2. a) The major axis and minor axis of an ellipse are 70 mm and 45 mm long respectively. Construct an ellipse by Arc and circles method. (7M)
- b) The distance between two points on a map is 15 cm. The real distance between them is 20 km. Draw a diagonal scale to measure up to 25 km and show a distance of 13.6 km on it. (7M)
3. a) A point P is 25 mm above the H.P. and 20 mm in front of the V.P. Another point Q is 20 mm behind the V.P. and 30 mm below the H.P. Draw projections of P and Q keeping the distance between their projectors equal to 80 mm. Draw straight lines joining (i) their top views and (ii) their front views. (7M)
- b) The front view of a line which is inclined at 30^0 to VP is 65 mm long. Draw the projections of the line when it is parallel to and 30 mm above HP; its one end being 30 mm in front of VP. (7M)



4. A line PQ, 90 mm long measures 72 mm in front view and 65 mm in top view. (14M)
Draw the two views of the line if it fully lies in the first quadrant. Find the true inclinations of the line. Point P lies at a distance 20 mm from the reference plane.
5. A regular hexagon of 30 mm has a corner in the HP. Its surface is inclined at 45° (14M)
to the HP and the top view of the diagonal through the corner which is in the HP
makes an angle of 60° with the VP. Draw its projections.
6. A cylinder of 30 mm base diameter and 60 mm axis rests on HP with a point of (14M)
its base such that the axis is inclined at 30° to HP. Draw its projections.
7. Draw the Front View, Top view & side view of the figure shown below. All (14M)
dimensions are in mm.



I B. Tech II Semester Regular Examinations, April/May - 2017**ENGINEERING DRAWING**

(Com. to ME, CHEM, AE, AME, MM, PE, PCE, MET)

Time: 3 hours

Max. Marks: 70

- Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)
 2. Answering the question in **Part-A** is Compulsory
 3. Answer any **FOUR** Questions from **Part-B**
- ~~~~~

PART -A

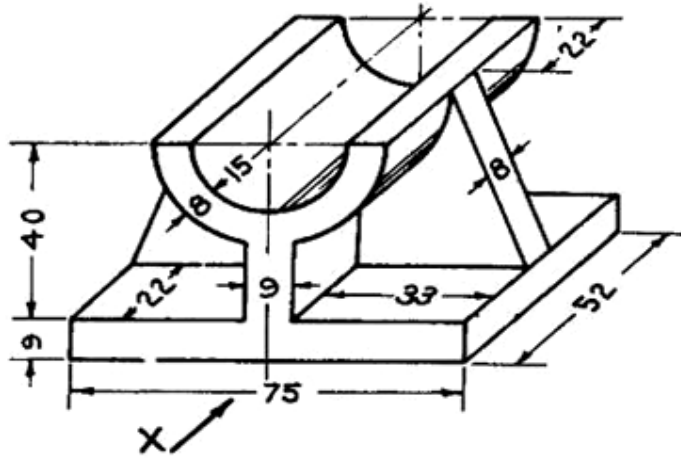
1. a) Divide a Straight line of 150 mm into 9 equal parts. (4M)
- b) Draw the projections of the following points on the same ground line, keeping the Projectors 30 mm apart. (4M)
 - i) Point A, 20 mm below the H.P. and 45 mm behind the V.P.
 - ii) Point B, on the H.P. and 45 mm in front of the V.P.
- c) A cube of 50 mm long edges is resting on the HP with its vertical faces equally inclined to VP. Draw its projections. (6M)

PART -B

2. a) Construct a vernier scale to the read metres, decimetres and long enough to measure up to 6 m, when 1 m is represented by 25 mm. Find R.F. and show a distance of 4.36 m on it. (7M)
- b) On a building plan a line 10 cm long represents a distance of 5 m. Construct a diagonal scale for the plan to read upto 6 m, showing meters, decimeters and centimeters. Indicate on your scale the length of 3.24 m. (7M)
3. a) A point A is 20 mm in front of the V.P. and 40 mm above the H.P. Another point B is 40 mm in front of the V.P. and 20 mm above the H.P. The distance measured between the projectors is 50 mm. Draw the projections and find the distance between A and B. (7M)
- b) Draw the projections of a straight line AB, 70 mm long when inclined at 45° to HP with one end 20 mm above HP and parallel to and 30 mm in front of VP. (7M)



4. A straight line AB of 75 mm long has the end A on VP and the end B on HP. The line is inclined at 30° to VP and its front view makes an angle of 45° with xy. Draw the projections of the line and add the left side view and locate the traces. (14M)
5. A regular hexagon of 30 mm has one of the side in the V.P. and inclined at 45° to H.P. Its surface is inclined at 60° to the V.P. Draw its projections. (14M)
6. A hexagonal prism side of base 30 mm and axis 60 mm long rests with one of its base corners on HP such that its base makes an angle of 50° to HP and its axis is parallel to VP. Draw its projections. (14M)
7. Draw the Front View, Top view & side view of the figure shown below. All dimensions are in mm. (14M)



I B. Tech II Semester Regular Examinations, April/May - 2017
ENVIRONMENTAL STUDIES
(Com. to ECE, CSE, EIE, IT, ECC)

Time: 3 hours

Max. Marks: 70

Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)
2. Answer **ALL** the question in **Part-A**
3. Answer any **FOUR** Questions from **Part-B**

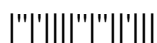
~~~~~

**PART -A**

1. a) Write about ecological succession. (2M)
- b) Explain the concept of food chain. (2M)
- c) What are the methods of conserving water resources? (2M)
- d) Define biodiversity. (2M)
- e) Write the classification of municipal solid waste. (2M)
- f) List out the different types of land pollution. (2M)
- g) Write about EIA. (2M)

**PART -B**

2. a) What are the structure and function of an ecosystem? (7M)
- b) Write about Role of IT in Environment and human health. (7M)
3. a) Describe various renewable sources of energy. (7M)
- b) What are the methods of conservation soil erosion? (7M)
4. a) What is biodiversity at global, national and local levels? (7M)
- b) Write about endangered and endemic species of India. (7M)
5. a) Write about classification and effects of urban and industrial solid waste. (7M)
- b) Write the causes and effects and control methods of Air Pollution. (7M)
6. a) Mention the different environmental acts and write about Water Act. (7M)
- b) Discuss about Environmental ethics and issues connected. (7M)
7. a) Define EIA and describe various stages of EIA along with methodologies. (7M)
- b) Discuss EIA of a major thermal power project, as a case study. (7M)



**I B. Tech II Semester Regular Examinations, April/May - 2017**  
**ENVIRONMENTAL STUDIES**  
 (Com. to ECE, CSE, EIE, IT, ECC)

Time: 3 hours

Max. Marks: 70

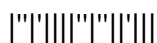
Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)  
 2. Answer **ALL** the question in **Part-A**  
 3. Answer any **FOUR** Questions from **Part-B**

**PART -A**

1. a) Differentiate between primary succession and secondary succession. (2M)
- b) Define food chain and ecological pyramids. (2M)
- c) Write about man induced landslides. (2M)
- d) What is meant by extinction of a species? (2M)
- e) Write about e – waste management. (2M)
- f) List out salient features of forest conservation act. (2M)
- g) Write about environmental audit. (2M)

**PART -B**

2. a) What are the structure and function of an ecosystem? (7M)
- b) Write about ecological succession. (7M)
3. a) What are the effects of dams on forest and tribal people? (7M)
- b) What is role of an individual in conservation of natural resources? (7M)
4. a) What are different threats to bio diversity? (7M)
- b) Discuss RAMSAR convention. (7M)
5. a) Mention about different types of pollution briefly. (7M)
- b) Name different types of air pollutants and sources of air pollution. (7M)
6. a) Write about rain water harvesting. (7M)
- b) Write about Water (Prevention and control of Pollution) Act. (7M)
7. a) Write about Impact Assessment and its significance. (7M)
- b) What are the stages involved in EMP and EIS? (7M)



**I B. Tech II Semester Regular Examinations, April/May - 2017**  
**ENVIRONMENTAL STUDIES**  
 (Com. to ECE, CSE, EIE, IT, ECC)

Time: 3 hours

Max. Marks: 70

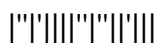
Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)  
 2. Answer **ALL** the question in **Part-A**  
 3. Answer any **FOUR** Questions from **Part-B**

**PART -A**

1. a) What is primary productivity? (2M)
- b) What are the causes of acid rains? (2M)
- c) Discuss about benefits of Dam construction. (2M)
- d) Write about man and wild life conflicts. (2M)
- e) Write about the sources of water pollution. (2M)
- f) Write about Urban problems related to energy. (2M)
- g) Write about environmental audit. (2M)

**PART -B**

2. a) Define environment. Write about global warming and climate changes. (7M)
- b) Write about energy flow in ecosystem. (7M)
3. a) What is deforestation? What are the causes of deforestation? (7M)
- b) Write about use and over utilization of ground water. (7M)
4. a) What is biodiversity at global, national and local levels? (7M)
- b) Write about endangered and endemic species. (7M)
5. a) Name different types of air pollutants and sources of air pollution. (7M)
- b) What are the various methods of safe disposal of hazardous waste management? (7M)  
Discuss.
6. a) Write about rain water harvesting concept and its advantages. (4M)
- b) What are the major issues and problems related to Resettlement and Rehabilitation of displaced people during river valley projects? (10M)
7. a) Define and Discuss ecotourism. (7M)
- b) Write about the – Green business and Green politics. (7M)



**I B. Tech II Semester Regular Examinations, April/May - 2017**  
**ENVIRONMENTAL STUDIES**  
 (Com. to ECE, CSE, EIE, IT, ECC)

Time: 3 hours

Max. Marks: 70

Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)  
 2. Answer **ALL** the question in **Part-A**  
 3. Answer any **FOUR** Questions from **Part-B**

**PART -A**

1. a) Explain the concept of food chain and ecological niche. (2M)
- b) Write about energy flow in ecosystem. (2M)
- c) What are the conflicts over dams? Give an example. (2M)
- d) Write about genetic diversity. (2M)
- e) Write the classification of solid waste. (2M)
- f) Discuss the problems involved in enforcement of Environmental Legislation. (2M)
- g) Write the various stages of EIA. (2M)

**PART -B**

2. a) Write about Global warming and climate change. (7M)
- b) Write in detail about forest ecosystem. (7M)
3. a) Write in detail about energy resources. (7M)
- b) What is Waste land reclamation? (7M)
4. a) India a biodiversity nation-Explain. (7M)
- b) What are the different uses of biodiversity? (7M)
5. a) What are the causes, effects and control measures of noise pollution? (7M)
- b) What are the causes, effects and control measures of water pollution? (7M)
6. a) Write about environmental ethics. (4M)
- b) What are different acts and explain about any one act in detail? (10M)
7. a) What are the stages involved in preparation of EMP and EIS? (7M)
- b) Brief about Environmental audit. (7M)

