1.(a) Differentiate between Computer Aided Design (CAD) and Computer Aided Process Design (CAPD) 06

OR

What is the role of Computer Aided Process Design in the life cycle of chemical plant?

(b) Explain briefly about software components of CAD. 08

OR

Discuss the criteria for the suitability of a language for CAD.

(c) List various software used for CAPD/Process Simulation. 04

OR


2.(a) What is meant by Interactive Computer Graphic (ICG)? What is the role of Computer Graphics in CAPD? 05

(b) Explain any two of the following terminology used in ICG: 08
   (i) Scan conversion
   (ii) Vector Drawing
   (iii) Raster scan drawing
   (iv) Scaling

(c) Discuss a suitable algorithm for line drawing. 06

OR

What is GKS? List various input/output primitives of GKS.

3.(a) What are the advantages and disadvantages of DBMS? 06

(b) What are the requirements of engineering DBMS? 06

(c) What is SQL? Explain with the help of examples, different operators used by SQL. 07

4.(a) Briefly explain different components of Expert System. 08

(b) List various ways of representing knowledge. Write down the production rule and draw AND/OR node to represent the criteria of fluid allocation on Tube/Shell side. 14