

B.E. Instrumentation Engineering Eighth Semester
IN803 - Project Planning Estimation and Assessment

P. Pages : 2

Time : Three Hours



GUG/W/18/2062

Max. Marks : 80

- Notes :
1. Same Answer book must be used for each section.
 2. All questions carry marks as indicated.
 3. Due credit will be given to neat ness and adequate dimensions.
 4. Diagrams and Chemical equation should be given wherever necessary.
 5. Illustrate your answers wherever necessary with the help of neat sketches.

1. a) Elaborate the Features of Management in detail. 8
- b) List and explain different categories of projects. 8

OR

2. a) Differentiate in between CPM and PERT. 8
- b) Discuss in detail project planning and scheduling techniques. 8
3. a) Elaborate the hook up diagram. 8
- b) Define instrument specification. Explain the need of instrument specification sheet with suitable example. 8

OR

4. a) Sketch and develop a P & ID for any known process indicate all aspects of P & ID. 12
- b) Discuss the need of project documentation. 4
5. a) Justify the importance of purchase order of an instrument item in project engineering. Prepare detailed specimen purchase order of any instrument. 12
- b) List the types of estimates. 4

OR

6. a) Discuss in detail: 12
- i) FAT ii) SAT
- iii) CAT
- b) Explain in detail Bid evaluation process for any known system. 4

7. a) Enlist different cables used for plant instrumentation services. Explain which type of cables are recommended for transmission of: **10**
i) Analog Signal ii) Discrete Signal
iii) Data signal
- b) Discuss the pre-commissioning activities be carried out in project. **6**

OR

8. a) Elaborate the concept of 'Erection and Commissioning'. **8**
b) Draw instrument installation diagram and bill of material for DPT. **8**
9. a) List types of panels used in process plant. Explain any one in detail. **10**
b) Discuss control room layout in short. **6**

OR

10. a) Draw and discuss the design objectives of control center. **8**
b) Prepare typical inspection report for control panel. **8**
