

B.E. Instrumentation Engineering (Model Curriculum) Semester-VIII
IN802M - Project Planning Estimation and Assessment

P. Pages : 2

Time : Three Hours



GUG/S/25/14364

Max. Marks : 80

- Notes :
1. All questions carry marks as indicated.
 2. Due credit will be given to neatness and adequate dimensions.
 3. Illustrate your answers wherever necessary with the help of neat sketches.

1. a) The time estimate (in weeks) for the activities of a PERT network are given below- **10**

Activity	t_o	t_m	t_p
1-2	1	1	7
1-3	1	4	7
1-4	2	2	8
2-5	1	1	1
3-5	2	5	14
4-6	2	5	8
5-6	3	6	15

Draw the project network and find a) PERT critical path b) Expected project length
c) Probability that project will be completed at least 4 weeks earlier than expected time.

- b) Discuss the different factors influencing the selection of product. **6**

OR

2. a) With the help of tree diagram explain the suitable organization chart of suitable enterprise. **8**

- b) State and describe the functions in project planning **8**

3. a) Draw & explain the process flow diagram for water cycle used in Thermal Power Plant. **8**

- b) Enlist the various documents required to be generated during the course of complete project engineering. Explain the use of each in short. **8**

OR

4. a) What is meant by a specification sheet? And what kind of information such sheet provides. **8**

- b) Write neat sketch, develop a P & ID for any of your known process and indicate all aspects of P & ID.. **8**

5. a) Discuss the generalized site selection and layout criteria of a factory. **8**

- b) What are the key points to be considered while issuing PO to vendor suppliers? **8**

OR

6. a) List the various activities involved in the procurement of field instruments for the project. Give the brief description and importance for the same. 8
- b) What is the need of inspection? Give general guidelines of inspection. 8
7. a) What are the different types of cables used for plant Instrumentation services? Explain which type of cable is recommended for transmission of analog signals, digital signals and data transmission signals. 8
- b) Write short note on installation of Temperature instruments. 8

OR

8. a) Write note on Site Acceptance Test (SAT). 8
- b) Explain the term networking with respect to intelligent operator interface. 8
9. a) Discuss the concept of control room engineering along with typical control room layout. 8
- b) What are the types of control panels? Compare its types. 8

OR

10. a) Explain the key considerations in the design of panel layout. 8
- b) Write a short note on control room lighting. 8
