

Questionnaire Industrial Engineering ITTM 1 WS 2003/2004

- 1. Definition Industrial Engineering (IE)**
- 2. IE influences which functions in a company?**
- 3. Define and describe the different phases in the product development process**
- 4. In the product development process the marketing function is in contact with special customers to evaluate the market needs of the new product. Alpha-test and Beta- test samples are presented to customers. Are these samples with full function? In which phase of the product development process are these samples available?**
- 5. Which documents describe a product?**
- 6. Describe the different types of drawings in the industry.**
- 7. For the administration of drawings which technologies are available?**
- 8. Definition bill of material (BOM)**
- 9. Different types of BOM`s**
- 10. Methods to define and describe the structure of a BOM**
- 11. Content of BOM**
- 12. Definition routing sheet**
- 13. Types of routings**
- 14. Content of routing**
- 15. Process of creating a routing sheet**
- 16. Definition working hours**
- 17. Different types of working hours**
- 18. Definition compensation/wages**
- 19. Describe the methods to determine a compensation for a worker**
- 20. Process of job evaluation, description**
- 21. Which types of compensation in the industry are in place?**
- 22. Formula for time wage, piece work wage**
- 23. List the types of incentives and their preferred field of application**
- 24. The monthly wage incl. incentive consists of which components?**
- 25. Which are the methods to find standard times?**
- 26. Standard times are very important data. Which functions in a company use these standard times?**
- 27. Definition standard time**
- 28. Define the methods of setting work standards**
- 29. Predetermined time systems (PTS). Which methods are in use?**
- 30. Collect data for ratios for the following functions: Human resources (HR),production,purchase department**
- 31. Which problems you can have with ratios?**
- 32. Define the principles of a standard cost calculation**
- 33. Which cost elements are part of the labor burden, material burden?**
- 34. The cost elements for variable costs are?**
- 35. Define list price, sales price.**
- 36. Method/factor to calculate a list price, if the standard costs are available**
- 37. Define the difference between a product program and a production program**
- 38. Scheme of a supply chain management**
- 39. Steps for a outsourcing/make or buy analysis**
- 40. Which information are needed for a skill matrix?**
- 41. Definition team**

42. Which forms of work organization in direct departments are preferred?
43. Explain the measures in work structuring job enlargement, job enrichment, job rotation
44. Describe the forms of work organization in direct departments quality circle, learning room, shop floor circle, lean production
45. Define production cell. What are the advantages/disadvantages?
46. With the organization of team work the following functions are important: group, group speaker, process companion. What are the tasks of these functions?
47. Definition Production Planning and Control (PPC)
48. Tasks of PPC.
49. Which information are necessary for sales planning?
50. Describe the forecast methods for sales planning.
51. Define primary, secondary and tertiary requirements in the PPC.
52. Describe the tool ABC-analysis and where this tool can be used.
53. Describe the difference between order point and order rhythm method.
54. Which formula calculates the optimal lot size? Which are the variables?
55. What are the different ways to generate a primary requirement of saleable items?
56. What are the principles of a KANBAN concept and why this concept can use inventories?
57. What are the intentions of a Continuous Improvement Program (CIP)?
58. Improvement program (VV-Wesen) and patent proposals are part of a strategy to improve the results of a company. What are differences between this 3 tools?
59. Which are the potential weak spots in a production department? Describe these points in organization, technique, personnel and costs.
60. What are ratios to monitor the improvements in a reengineering process of the production department.