

UNIVERSITI TEKNOLOGI MALAYSIA
WORK STANDARDIZATION (FRSB 2403)

PMA

17 April 2016

1. What is the principal objective of methods engineering?
2. List the eight steps in applying methods engineering.
3. Where were time studies originally made and who conducted them?
4. Explain Frederick W. Taylor's principles of scientific management.
5. In terms of human participation, what are the three basic categories of work systems?
6. What is the general characteristic that is common to nearly all pure manual work?
7. What are the three main categories of powered machinery in worker-machine systems?
8. Why is work design an important element of methods study?
9. What important events have contributed to the need for ergonomics?
10. What is the principal purpose of the flow process chart?
11. What symbols are used in constructing the flow process chart?
12. Why is it necessary to construct process charts from direct observation, as opposed to information obtained from the foreman?
13. In the construction of the flow process chart, what method can be used to estimate distances moved?
14. How can delay times be determined in the construction of the flow process chart? Storage times?
15. When would you advocate using the flow diagram?
16. How can the flow of several different products be shown on the flow diagram?
17. What two flowchart symbols are used exclusively in the study of paperwork?
18. Explain how design simplification can be applied to the manufacturing process.
19. How is operation analysis related to methods engineering?
20. How do unnecessary operations develop in an industry?
21. Compare and contrast operations analysis with the lean manufacturing approach. What are the seven mudas?
22. What are the 5S pillars?
23. What is meant by "tight" tolerances?
24. Explain why it may be desirable to "tighten up" tolerances and specifications. What is meant by lot-by-lot inspection?
25. When is an elaborate quality control procedure not justified?