

Questions for the state final exam

**Bachelor study programme N0715A270012 – Engineering,
Specialization S03 – Industrial Engineering
academic year 2023/2024**

BASICS OF DESIGNING

1. Phases of technological project.
2. Method of material flow analysis.
3. The production process and its structure, the production procedure, determining the order of operations and the number.
4. Technology base, its importance and the right choice.
5. Facility layout, objectives, types of layouts – characteristics, pros cons, example.
6. Methods of deployments of workplaces
7. Capacity calculations, basic concepts and methodology.
8. Meaning and tasks of standards, labour consumption standards, their classification and short characteristics.
9. Inter-operation and operation handling, principles of material handling.
10. Inter-object material handling, plant transport, communication systems.
11. Fire safety principles in design.
12. Workplace lighting, basic concepts in lighting, types of light, principles of proper lighting.
13. Warehouse management, palletization, containerization.
14. Technical gases, storage conditions, gas types.
15. Water management system, schema of industrial plant connection.

16. The aim and objective of quality management, ISO 9000 series standards.
17. General product safety, manufacturer's obligations when placing products on the market, conformity assessment under Act No. 22/1997 Coll., EC Declaration of Conformity.
18. Product certification, activities of the certification organisation for product certification.
19. Other trends in operation management, smart factory.
20. Progressive approaches, methods, techniques and tools in production management.