**سوالات فصل اول کتاب دگارمو**

**ترتیب پاسخگویی به سوالات: هر دانشجو باید به سه سوال، به­شرح مندرج در جدول زیر پاسخ دهد:**

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| **شماره فولدر** | **نام و نام خانوادگي** | **شماره سوال** |
| 1 | امیری­علی بلاغی- محمد | 1 و 9 و 17 |
| 2 | ایمانی- محمد حسین | 2 10 و 18 |
| 3 | برزگر- رضا | 3 و 11 و 19 |
| 4 | پورمحمد- فاطمه | 4 و 12 و 20 |
| 5 | رضایی پورالماسی- خشایار | 5 و 13 و 21 |
| 6 | کربلایی اسدی فرشبافی- مجتبی | 6 و 14 و 22 |
| 7 | نبردآور- علی | 7 و 15 و 23 |
| 8 | سلطانعلی­نژاد- روزبه | 8 و 16 و 24 |

1. Give examples of a job shop, flow shop, and project shop.
2. How does a system differ from a process? From a machine tool? From a job? From an operation?
3. Is a cutting tool the same thing as a machine tool?
4. What are the major classifications of basic manufacturing processes?
5. Could casting be used to produce a complex-shaped part to be made from a hard-to-machine metal? How else could the part be made?
6. Since no work is being done on a part when it is in storage, it does not cost you anything.True or false? Explain.
7. What forming processes are used to make a paper clip?
8. It is acknowledged that chip-type machining is basically an inefficient process.Yet it is probably used more than any other to produce desired shapes.Why?
9. List three purposes of packaging operations.
10. Assembly is defined as “the putting together of all the different parts to make a complete machine.” Think of (and describe) an assembly process. Is making a club sandwich an assembly process? What about carving a turkey? Is this an assembly process?
11. What are the physical elements in a manufacturing system?
12. In the production system, who usually figures out how to make the product?
13. What are the major process steps in the assembly of an automobile?
14. It has been said that low-cost products are more likely to be more carefully designed than high-priced items. Do you think this is true? Why or why not?
15. Proprietary processes are closely held or guarded company secrets. The chemical makeup of a lubricant for an extrusion process is a good example. Give another example of a proprietary process.
16. If the rolls for the cold-rolling mill that produces the sheet metal used in your car cost $300,000 to $400,000, how is it that your car can still cost less than $20,000?
17. Make a list of service production systems, giving an example of each.
18. What is the fundamental difference between an SPS and an MPS?
19. In the process of buying a calf, raising it to a cow, and disassembling it into “cuts” of meat for sale, where is the “value added”?
20. What kind of process is powder metallurgy: casting or forming?
21. What costs make up manufacturing cost (sometimes called factory cost)?
22. What are major phases of a product life cycle?
23. How many different manufacturing systems might be used to make a component with annual projected sales of 16,000 parts per year with 10 to 12 different models (varieties)?
24. In general, as the annual volume for a product increases, the unit cost decreases. Explain.