



سری سوال : یک ۱

زمان آزمون (دقیقه): تستی : ۶۰ تشریحی : ۰

تعداد سوالات : تستی : ۳۰ تشریحی : ۰

عنوان درس : زبان تخصصی

رشته تحصیلی / کد درس : مهندسی صنایع، مهندسی صنایع (چندبخشی) ۱۲۱۲۱۶۲

1-Successful administration of a functional department is more difficult ..... than in the case of line department.

- 1. to contribute
- 2. to instal
- 3. to buy
- 4. to achive

2-There are existing organizational rules, ....., and practices that reflect design philosophies of the past.

- 1. procedures
- 2. blocks
- 3. inflations
- 4. innovations

3-In a firm, forecasts indicate ..... of demand for the product.

- 1. the route sheets
- 2. the job descriptions
- 3. the timing and structure
- 4. the plant location

4-Systematic layout planning (SLP) is equally ..... to office, laboratory, service, warehouse, or manufacturing operations.

- 1. applicable
- 2. enable
- 3. durable
- 4. capable

5-Production planning begins with ..... of the future demand for an organization's goods or services.

- 1. a disclosure
- 2. a forecast
- 3. a block
- 4. an opportunity

6-The uncertainty of demand gives ..... to the need for capacity management.

- 1. manpower
- 2. capacity
- 3. inventory
- 4. rise

7-A manual control system implies a system that is controlled .....

- 1. by electrical power
- 2. by machine
- 3. by hand
- 4. automatically

8-A monorail transit system is a system having .....

- 1. only one rail
- 2. dual rails
- 3. two rails
- 4. multiple rails

9-In calculus to determine whether the ..... point is a maximum or minimum, the second derivative is taken.

- 1. Optimized
- 2. determined
- 3. designed
- 4. enclosed





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### Fill in the blanks with the most appropriate word

The applications of computer simulations have grown .....(a)..... in the past 20 years. Surveys by Shannon, Biles, and turban .....(b)..... That simulation and statistics are the quantitative .....(c)..... that are most widely used in government and industry. The continuing .....(d)..... of simulation languages has been an important factor in this growth. Another major factor is the flexibility of simulation modeling when .....(e)....., for example, to the structural restriction imposed by a/an .....(f)..... programming formulation of a problem. Even when an analytic model can be .....(g)..... to a problem, simulation is frequently used to study the practical implications of the assumptions underlying the analytic model.

10-a:

- |            |              |           |           |
|------------|--------------|-----------|-----------|
| 1. rapidly | 2. typically | 3. timely | 4. hardly |
|------------|--------------|-----------|-----------|

11-b:

- |              |             |            |          |
|--------------|-------------|------------|----------|
| 1. directing | 2. indicate | 3. rejecte | 4. apply |
|--------------|-------------|------------|----------|

12-c:

- |             |             |               |                 |
|-------------|-------------|---------------|-----------------|
| 1. programs | 2. diagrams | 3. techniques | 4. deffinitions |
|-------------|-------------|---------------|-----------------|

13-d:

- |               |              |                |        |
|---------------|--------------|----------------|--------|
| 1. enlargment | 2. implement | 3. development | 4. use |
|---------------|--------------|----------------|--------|

14-e:

- |             |             |             |             |
|-------------|-------------|-------------|-------------|
| 1. compared | 2. designed | 3. improved | 4. approved |
|-------------|-------------|-------------|-------------|

15-f:

- |             |            |              |                 |
|-------------|------------|--------------|-----------------|
| 1. external | 2. limited | 3. graduated | 4. mathematical |
|-------------|------------|--------------|-----------------|

16-g:

- |              |            |           |           |
|--------------|------------|-----------|-----------|
| 1. addressed | 2. applied | 3. proved | 4. played |
|--------------|------------|-----------|-----------|

17-In the absence of an effective decision-making policy, an organization may experience an ..... in its role.

- |          |            |             |           |
|----------|------------|-------------|-----------|
| 1. erode | 2. erosion | 3. erodible | 4. eroded |
|----------|------------|-------------|-----------|

18-In system definition, relationships are links between components and .....

- |                 |                |                |               |
|-----------------|----------------|----------------|---------------|
| 1. attributable | 2. attribution | 3. attributive | 4. attributes |
|-----------------|----------------|----------------|---------------|

19-In almost all systems uncertainty often occurs in both the number of inputs and the ..... of these inputs over time.

- |                |                 |                 |                 |
|----------------|-----------------|-----------------|-----------------|
| 1. distributed | 2. distribution | 3. distributive | 4. distributary |
|----------------|-----------------|-----------------|-----------------|



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20- Computer integrated manufacturing(CIM) is the term used to describe the complete ..... of a factory.

1. automation                      2. automate                      3. automatic                      4. automatically

There are various ways to classify flexible manufacturing system. One classification that is sometimes made in FMS terminology is the difference between a flexible manufacturing system and a manufacturing cell. There is no clear dividing line. Generally the term cell can be used to refer to a machine grouping that consist of either manually operated or automated machines, or combinations of the two. The cell may or may not include automated material handling, and it may or may not be computer controlled. The term "flexible manufacturing system" generally means a fully automated system consisting of automated workstations automated materials handling and computer control.

The term "manufacturing cell" is used largely in connection with group technology but both cells and FMS's really on a GT approach in their design. A distinction that is sometimes may between a flexible manufacturing cell and a flexible manufacturing system is in the number of machines in the grouping. A grouping of four or more machines is a system and three or fewer machines constitute a cell. For example, a grouping of several machines served by a robot and capable of processing a family of parts is commonly called a flexible *manufacturing cell*.

21- The text suggests that:

1. manufacturing cell is a flexible manufacturing system
2. flexible manufacturing system is machine grouping that consist of either manually operated or automated machines
3. a cell is a fully automated system
4. a cell is based on a GT approach in its design

22- A random-order FMS is more flexible than a ..... FMS.

1. dedicate                      2. dedicated                      3. dedication                      4. dedicator





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**23-The distinction between a flexible manufacturing cell and a flexible manufacturing system is:**

- |                                |   |
|--------------------------------|---|
| 1. the use of group technology | 2. the number of machines in the grouping |
| 3. the use of computer control | 4. the use of automated workstations      |

**24-According to the text a grouping of ..... machines served by a robot and capable of processing a family of parts is commonly called a flexible manufacturing system.**

- |                  |                     |
|------------------|---------------------|
| 1. only Two      | 2. fewer than Three |
| 3. more than two | 4. more than three  |

Purpose of an optimization study

The primary purpose of all optimization studies not always trying to determine the 'true optimum' operation of the system. In practice, some of the primary benefits are associated with understanding the system under study and describing it quantitatively in terms of tables, graphs, computer programs, or mathematical equations. Such a quantitative description by itself may suggest areas of improved operations and possible bottlenecks in the system. An optimization study may identify important variables in the system, (both controllable and uncontrollable) and suggest ways to handle these variables effectively.

**25-According to the text purpose of an optimization study:**

1. sometimes trying to determine the 'true optimum' operation of the system
2. understanding tables, graphs, computer programs, or mathematical equations
3. identify important Uncontrollable variables
4. suggest ways to handle Uncontrollable variables



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26-The term "primary" in line 1 means:

- 1. beginning
- 2. main
- 3. original
- 4. best

find appropriate Persian equivalents for given English terms

27-unconstrained optimization problems

- 1. مسائل بهینه سازی محدودیت دار
- 2. بهینه سازی مسائل محدودیت دار
- 3. مسائل بهینه سازی بدون محدودیت
- 4. مسائل بدون محدودیت بهینه شده

28-quality assurance

- 1. اطمینان کیفیت
- 2. کیفیت اطمینان
- 3. تضمین کیفیت
- 4. کیفیت تضمینی

29-Iterative process

- 1. تکرار فرایند
- 2. فرایند تکراری
- 3. فرایند تفسیری
- 4. تفسیر فرایند

find appropriate Persian equivalents for given English terms

30-bottleneck

- 1. گلوگاه
- 2. ذخیره
- 3. جریان
- 4. فرایند

سلامتی و تعجیل در فرج آقا امام زمان (عج) صلوات

