

نام درس: زبان تخصصی
رشته تحصیلی و کد درس: مهندسی صنایع - (۱۲۱۲۱۶۲)
تعداد سؤالات: تستی: ۲۶ تشریحی: —
زمان آزمون: تستی: ۷۵ تشریحی: — دقیقه
آزمون نمره منفی دارد ○ ندارد ⊗
کد سری سؤال: یک (۱)
استفاده از: —
مجاز است.

امام علی (ع): برتری مردم به یکدیگر، به دانش‌ها و خردهاست؛ نه به ثروت‌ها و تبارها.

Fill in the blanks with the appropriate form of the words given:

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

- a. attributents b. attributions c. attributings d. attributes

2- A 'turning center' or a '..... center' does not correspond to the definition of 'center' stated in a dictionary.

- a. machine b. machined c. machining d. machinated

3- The engineering drawings..... all the physical and functional characteristics of the product to be utilized.

- a. facility b. facilitate c. facilities d. facile

4- To find solution, means to get the best solution to an IPS problem.

- a. optimazation b. optimized c. optimum d. optimizing

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

- a. erosive b. eroded c. eroding d. erosion

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Read the following text then answer the questions.

The Most permanent contribution of an optimization study may well be qualitative rather than quantitative. These problems may be classified based on the nature of the objective function and the system constraints. Optimization problems on the other hand, are classified on the basis of whether or not they involve constraints on the decision variables. Obviously the unconstrained problems are easier to solve than the constrained ones. The unconstrained problems are further classified based on whether the objective function involves one or several design variables. Basically there are two important classes of methods for solving the unconstrained problems. These methods are the direct search and the gradient-based methods. An important class of constrained optimization problem is linear programming which requires both objective function and the constraints to be linear functions. Although the linear programming models are widely used and accepted in practice, the nonlinear programming models are the most general kinds of the optimization problems.

Now choose a, b, c or d which best completes each item.

6. The most important contribution of an optimization study may be.....
- a. quantitative
 - b. both quantitative and qualitative
 - c. qualitative
 - d. neither quantitative, nor qualitative
7. The classification of optimization problems may be based on the nature of
- a. the direct search method
 - b. the objective function
 - c. the system constraints
 - d. both b and c
8. The most general optimization problems are generally grouped under
- a. the nonlinear programming
 - b. the linear programming
 - c. the analytical forms
 - d. no analytical forms

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آزمون نمره منفی دارد ○ ندارد ⊗

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9.determines the classification of the unconstrained problems.

- a. the amount of the objective functions
- b. the variables of the objective function
- c. the constraints
- d. the linearity or nonlinearity of the objective function

10. In the linear programming

- a. the objective function is linear
- b. there is no constraints
- c. the constraints are linear
- d. Both the objective and constraints are linear.

Choose the Persian equivalents of the following terms and expressions

11. complicated

- a. منسجم
- b. یکپارچه
- c. منطبق
- d. پیچیده

12. conventional

- a. قراردادی
- b. محرمانه
- c. مقدرلی
- d. مقیاسی

13. simultaneous

- a. فصلی
- b. مقطعی
- c. همزمان
- d. موازی

14. logistics

- a. انبارداری
- b. طرح و برنامه
- c. تدارکات
- d. برنامه ریزی

15. intensification

- a. تشدید
- b. تنظیم
- c. کاهش
- d. تغییر

Choose the English equivalents of the following terms and expressions

۱۶- پیش الگو

- a. prototype
- b. supplementary
- c. schedule
- d. plan

۱۷- تعدیل

- a. accomplishment
- b. resolution
- c. modification
- d. conduction

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۱۸-اساسی

- a. synthesis b. substantial c. stochastic d. identical

۱۹- اثربخشی

- a. efficiency b. throughput c. trade off d. effectiveness

۲۰- پایدار

- a. terminated b. transient c. competent d. permanent

Read the following text and the answer the questions. Read the following text and then answer the questions.

An effective industrial engineering organization must be responsive to the specific needs of the organization it serves. As the needs of the client organization change, so must there be corresponding change in the way the industrial engineering function is organized and in the services offered. It should be evident that line management needs specialized help and it should be evident that the nature of this help differs between enterprises. Functions or specialized services effective in one organization may be unsuitable in another. Also, a clear sense of purpose is an essential factor in reviewing or restructuring an industrial reengineering organization. The mission and the functions of the organization should be clear and understood by the general management as well as the client organization. Study teams should define and specify the roles of the organization. It is highly desirable to include in the study team representatives from general management, the client organization as well as senior personnel from the new industrial engineering organization. We need only to look at remarkable improvements on productivity introduced by many companies in Japan and West Germany to test the efficacy of study teams. These study teams spent years visiting industrial engineering organizations in many of the leading American companies during 1950s and 1960s. Many of these companies are today worldwide leaders in their industries.

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21. Which sentence is true?

- The effectiveness of an industrial engineering organization is just determined by achieving its customers' satisfaction.
- The effectiveness of an industrial engineering organization is determined by its responsiveness power to the specific needs of the organization its serves.
- The effectiveness of an industrial engineering organization is determined by specifying the organizational functions.
- The effectiveness of an industrial engineering organization is determined by specifying the organizational goals.

22. Which sentence is true?

- Functions and specialized services effective in one organization may always be suitable in another.
- To restructure an industrial engineering organization, a clear sense of purpose is an essential factor.
- All the organizations need the same nature of managerial help.
- There is no relationship between the changes in the client organization and the organizational functions.

23. Which sentence is true?

- The organizational functions should be understood just by the client organization
- The mission should be understood just by the general management.
- Both the general management and client organization should understand the mission and the organizational functions.
- The old organizations do not need to understand the purpose to do their works.

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24. Which sentence is false?

- According to the text, as the need of a client organization change, so must there be a corresponding change in functions and services of industrial engineering concerned.
- It is clear from the text that there is no belief in learning from the best experiences of industrial engineering which successful companies offer.
- The study teams may include the senior personnel, the general management and the client organizations.
- Any line management needs specialized help.

25. Which sentence is false?

- Looking at remarkable improvements on productivity introduced by many companies in Japan and West Germany can show the efficacy of study teams.
- An effective industrial engineering organization must be responsive to the specific needs of the organization it serves
- Study teams should define and specify the roles of the organization.
- The study teams of American companies spent years visiting the companies in Japan and West Germany.

26. Which is the right order of the following systems to form a paragraph?

- Model builders must decide on the elements of the system to include in their models.
 - A model is a description of a system, so it is not real.
 - Simulation models are important kind of models which ideally suited for problem solving.
 - The stages of these simulation models are rarely performed in a structured sequence beginning with the problem definition and ending with documentation.
- a. I-II- III- IV b. II-I-III-IV c. IV- III-I-II d. II- III-IV-I