

KATHMANDU UNIVERSITY
End Semester Examination
June/July, 2023

Marks Scored:

Level : B.E.

Year : III

Exam Roll No. :

Time: 30 mins.

Registration No.:

Course : MGTS 303

Semester : II

F. M. : 10

Date :

07 JUL 2023

SECTION "A"

[20 Q. × 0.5 = 10 marks]

Select the most appropriate answers for the following:

1. Which one of the following statements is **NOT CORRECT** about a manager?
 - a. A manager is someone who works with or through other people by coordinating their work activities in order to accomplish organizational goals.
 - b. A manager is someone who coordinates and oversees the work of other people so that organizational goals can be accomplished.
 - c. A manager's job is not about personal achievement—it's about helping others do their work.
 - d. A manager's job could involve coordinating the work activities of a team with people from different departments or even people outside the organization, such as temporary employees or individuals who work for the organization's suppliers.

2. Middle managers manage the work of first-line managers and can be found between the lowest and top levels of the organization. They may have titles such as:
 - a. supervisors, shift managers, district managers, department managers, or office managers.
 - b. regional manager, project leader, store manager, or division manager.
 - c. executive vice president, president, managing director, chief operating officer, or chief executive officer.
 - d. departmental managers, project leader, store manager, or executive vice president.

3. Which one of the following roles does a manager assume when he/she performs ceremonial and symbolic duties such as greeting visitors, signing legal documents?
 - a. Figurehead
 - b. Negotiator
 - c. Liaison
 - d. Entrepreneur

4. Which level of management is primarily concerned with allocation of resources?
 - a. Top level
 - b. Middle level
 - c. Low level
 - d. First line

5. Which one of the following statements is **NOT CORRECT** about the management skills?
 - a. Technical skills tend to be more important for first-line managers because they typically are managing employees who use tools and techniques to produce the organization's products or service the organization's customers.
 - b. Human skills which involve the ability to work well with other people both individually and in a group and these skills are equally important to all levels of management.
 - c. Using conceptual skills top-level managers see the organization as a whole, understand the relationships among various subunits, and visualize how the organization fits into its broader environment.
 - d. As a manager moves from the supervisory to top-level management, conceptual skills become more important than human skills, but technical skills remain equally important.

6. A bureaucracy is a form of organization characterized by:
- division of labor, a clearly defined hierarchy, detailed rules and policies, and interpersonal relationships
 - division of labor, a clearly defined hierarchy, detailed rules and regulations, and impersonal relationships
 - division of labor, delegation of authority, detailed policies and procedures, and impersonal relationships
 - division of labor, delegation of authority, detailed policies and procedures, and interpersonal relationships
7. Which of these is **NOT** decision making under certainty?
- Engineering Economic Analysis
 - Linear Programming
 - Non-Linear Programming
 - Laplace Criterion
8. When structuring an organization, the engineer must be concerned with the grouping of related jobs, activities, or processes into major organizational subunits. This refers to:
- division of labor
 - delegation of authority
 - departmentalization
 - span of control
9. Tannenbaum and Schmidt proposed that a manager should consider three types of forces before deciding, which of these is **NOT** considered one of these forces?
- Force in situation
 - Force in manager
 - Force in educational background
 - Force in non-manager
10. Which one of the following conditions affect the number of people a manager can effectively supervise the most?
- Subordinate training; nature of job supervised; clarity of instruction and delegation
 - Number of subordinates; delegation of authority; staff assistance
 - Technical skills; staff assistance; nature of job supervised
 - Clarity of instruction and delegation; staff assistance; conceptual skills
11. What is Assets Turnover Ratio?
- Current Assets/Total Assets
 - $(\text{Current Assets} - \text{Inventory})/\text{Total Assets}$
 - Net Sales/Total Assets
 - $(\text{Current Assets} + \text{Inventory} - \text{Net Sales})/\text{Total Assets}$
12. Which one of the following new product strategies suggested by Ansoff and Stewart does not require a massive research effort, but demands strong development engineering?
- First-to-market
 - Follow-the-leader
 - Me-too
 - Application engineering
13. A _____ is a bundle of rights to reproduce, derive, distribute, perform, and display an original creative work in a tangible form for the life of author, plus 70 more years thereafter.
- copyright
 - trade secret
 - patent
 - trademark

14. Which one of the following statement defines maintainability?
- It is the probability that a system will demonstrate specified performance for a stated period of time when operated under specified conditions.
 - It is the probability that a system will demonstrate fault-free performance for a stated period of time when operated under specified conditions.
 - It is the probability that a failed system will demonstrate it can be restored to specified performance for within a stated period of time when operated under specified conditions.
 - It is the probability that a safety critical system will demonstrate it can be restored to specified performance for within a stated period of time when operated under specified conditions.
15. Who defined quality as fitness for use?
- Joseph M Juran
 - Philip B Crossby
 - Kaoru Ishikawa
 - W Edwards Deming
16. BCWP (Budgeted Cost of Work Performed) is also known as
- Planned value
 - Earned value
 - Actual cost
 - Standard cost
17. CPM/PERT stands for:
- Critical Path Model/Project Evaluation Review Technique
 - Critical Path Method/Program Evaluation Review Technique
 - Critical Path Method/Process Evaluation Review Technique
 - Critical Path Model/Precedence Evaluation Review Technique
18. Which one of the following is **NOT** an advantage of projectized organization?
- Good project schedule and cost control
 - Career continuity and growth for technical personnel
 - Simpler project communication
 - Single point for customer contact
19. _____ measures the extent to which customer satisfaction is incorporated into the product design through the specification of proper materials, tolerances, and other precautions.
- Quality of conformance
 - Quality of service
 - Quality of production
 - Quality of design
20. _____ is a theory of morality, which advocates actions that foster happiness or pleasure and opposes actions that cause unhappiness or harm.
- Utilitarianism
 - Ethical egoism
 - Deontology
 - Virtue ethic

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Time : 2 hrs. 30 mins.

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F. M. : 40

SECTION "B"
[6Q. × 4 = 24 marks]

Attempt *ANY SIX* questions.

1. A commercial orchard grows, picks, and packs apples and pears. A peck (quarter bushel) of apples takes four minutes to pick and five minutes to pack; a peck of pears takes five minutes to pick and four minutes to pack. Only one picker and one packer are available. How many pecks each of apples and pears should be picked and packed every hour (60 minutes) if the profit is Rs 3.00 per peck for apples and Rs 2.00 per peck for pears? Solve graphically as a linear program and confirm analytically.
2. Compare and contrast content theories of motivation and process theories of motivation.
3. Discuss the ways in which the matrix management structure tends to reduce the problems of project management under a fully projectized organization.
4. An engineered system has a hazard rate of 0.01 failure per hour. Determine MTBF of this system. If the same system has an MTBM of 60 hours, an MDT of 20 hours, and an MTTR of six hours, what are its inherent availability and operational availability?
5. An engineer proposes to buy a machine for Rs 100,000 today that will save Rs 60,000 in labor costs at the end of each of the next two years. If the company demands a 15 percent return on investments such as this, what is the net present worth (NPW) of the proposal? Should it be funded?
6. Describe Total Quality Management. Describe Ishikawa's cause and effect (fishbone) diagram with an example.
7. Write short notes on *ANY TWO*.
 - a. Vision and mission
 - b. Technology S-curve
 - c. Hersey and Blanchard's life-cycle theory

SECTION "C"
[2 Q × 8 = 16 marks]

Attempt *ANY TWO* questions.

8. List and describe the fourteen principles of management developed by Henri Fayol.

9. Sterling B. Chemicals ended 2012 with cash of \$150,000, securities of \$100,000 and account receivable of \$400,000. The Inventories had Raw materials worth \$200,000, work in progress of \$180,000 and finished goods of \$300,000. The company made some prepaid expenses of \$30,000. Property, plant, and equipment were valued at their original cost of \$4,500,000, less accumulated depreciation of \$2,400,000.

For liabilities, the company had accounts payable of \$100,000, Installments due within a year for debt as \$30,000, federal income and other taxes as \$250,000 and other accrued liabilities as \$120,000. Long term debt was \$1,000,000. Stockholders' equity consisted of \$500,000 capital stock investment and accumulated retained earnings, which had totaled \$1,460,000 at the end of 2012.

For Income statement, Sterling B. Chemicals had net sales of about \$3.05 million for 2012. Production costs (materials, labor, and production overhead costs) were \$2 million, and the depreciation and depletion related to 2008 production were \$250,000. Selling, advertising, and shipping cost \$100,000, and "general and administrative" expenses ("G&A," the cost of general management, R&D, and miscellaneous activities not chargeable elsewhere) were \$200,000. Subtracting the total expense of about \$2.55 million from net sales leaves an operating profit of \$500,000. After adjusting for interest and other nonoperating income and expense, the pretax income is found to be \$540,000, and the net income (after taxes) is \$280,000.

The board of directors decided to return part of net income (\$320,000) to the stockholders-owners as dividends and to reinvest the rest on their behalf as an addition to retained earnings.

Prepare a balance sheet and an income statement reflecting these figures.

10. Consider the details of tasks of a project mentioned below and perform the following:
- Construct the network diagram.
 - Find the duration of each possible path.
 - Determine the critical path.

Task	Follows Task(s)	Duration (Weeks)
A	Start	3
B	Start	7
C	A	2
D	B	7
E	B, C	5
F	D, E	1