

8. The rational way to conceptualize, analyze and solve problems in situations involving limited or partial information about the decision environment is referred to as _____.
- a. Sampling theory
 - b. Linear programming
 - c. Decision theory
 - d. Simulation
9. When structuring an organization, the engineer must be concerned with the grouping of related jobs, activities, or processes into major organizational subunits. This is referred to as:
- a. Division of labor
 - b. Delegation of authority
 - c. Departmentalization
 - d. Span of control
10. Three common types of financial budgets include:
- a. Cash budget; Operating budget; Balance sheet budget.
 - b. Cash budget; Capital expenditure budget; Balance sheet budget
 - c. Cash budget; Capital expenditure budget; Income statement budget
 - d. Balance sheet budget, Income statement budget, Capital expenditure budget.
11. Which type of authority does a consultant or specialist uses when he/she gives advice to his superior?
- a. Top authority
 - b. Line authority
 - c. Staff authority
 - d. Functional authority
12. Which of the following is **NOT** the acidity ratio?
- a. Costs of goods sold/Inventory
 - b. Gross sales/Total assets
 - c. Net sales/Account receivables
 - d. Net sales/Total assets
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.
- a. Tradeseecret
 - b. Copyright
 - c. Patent
 - d. Trademark
14. A set of specifications for parts, materials or processes intended to achieve uniformity, efficiency and a specified quality is defined as _____.
- a. Producibility
 - b. Standard
 - c. Ergonomics
 - d. Availability
15. Scope Creep is likely to happen when
- a. Scope and Requirement documents are unclear
 - b. User's expectation is different from what we plan
 - c. Project stakeholders are uninvolved in project
 - d. All of the above
16. Which one of the following statement defines maintainability?
- a. It is the probability that a system will demonstrate specified performance for a stated period of time when operated under specified conditions.
 - b. It is the probability that a system will demonstrate fault-free performance for a stated period of time when operated under specified conditions.
 - c. 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.
 - d. It is the probability that a safety critical system will demonstrate it can be restored to specific performance for within a stated period of time when operated under specified conditions.

17. PERT stands for _____
- a. Project Evaluation Review Technique.
 - b. Project Evaluation Redesign Technique.
 - c. Program Evaluation Review Technique.
 - d. Program Evaluation Redesign Technique.
18. Which of the following is **NOT** the source of conflict as defined by Thamhain?
- a. Conflict over schedules
 - b. Conflict over project priorities
 - c. Conflict over work place
 - d. Conflict over costs
19. _____ is a theory of morality, which advocates actions that foster happiness or pleasure and opposes actions that cause unhappiness or harm.
- a. Utilitarianism
 - b. Egoism
 - c. Deontology
 - d. Virtue Ethics
20. Identify the correct order of career stages:
- a. Growth, Establishment, Exploration, Maintenance, Disengagement
 - b. Growth, Exploration, Establishment, Maintenance, Disengagement
 - c. Exploration, Establishment, Growth, Maintenance, Disengagement
 - d. Exploration, Growth, Establishment, Maintenance, Disengagement



KATHMANDU UNIVERSITY
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Level : B.E.
Year : III
Time : 2 hrs. 30 mins.

Course : MGTS 303
Semester : II
F. M. : 40

SECTION "B"
[6Q. × 5 = 30 marks]

Attempt *ANY SIX* questions.

1. Identify the skills needed by an effective manager, as conceived by Robert L. Katz, and describe how the relative need for them might vary with the level of management
2. Discuss Frederick W. Taylor's 4 principles of scientific management by providing examples.
3. Decide must whether you to buy new machinery to produce product X or to modify existing machinery. The applicable payoff table of profits (+) and losses (-) is:

	N1: Prosperity (\$)	N2: Recession (\$)
A1 (Buy new)	+950,000	-200,000
A2 (Modify)	+700,000	+300,000

4. Explain about the various sources of power. Give an example of the candidates that have been part of recently held local election of Nepal in terms of power they exhibited.
5. The sales of a particular product for the years 2018 through 2021 have been Rs 48,000, Rs 64,000, Rs 67,000 and Rs 83,000, respectively. Predict the sales for 2022 (i) using a simple four-year moving average; (ii) using a weighted moving average with weights of 0.50 for the immediate preceding year and 0.3, 0.15, and 0.05 for the three years before that.
6. For the project outlined in the following table, determine critical path and its duration.

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

7. Discuss the ways in which the matrix management structure tends to reduce the problems of project management under a fully projectized organization. Compare it to a normal functional organization structure.
8. Write short notes on (*ANY TWO*):
 - a. Theory X and Theory Y
 - b. Cost of Quality
 - c. Lean Manufacturing

SECTION "C"
[1Q. × 10 = 10 marks]

Attempt *ANY ONE* question.

9. Hytek Corporation ended 2012 with cash of \$50,000, accounts receivable of \$100,000, and inventory of \$300,000. Property, plant, and equipment were valued at their original cost of \$470,000, less accumulated depreciation of \$170,000. Current liabilities other than income taxes owed (see details that follow) were \$120,000, and long-term debt was \$250,000. Stockholders' equity consisted of (a) \$90,000 capital stock investment and (b) accumulated retained earnings, which had totaled \$130,000 at the end of 2011. Net sales for 2012 were \$900,000. Expenses included \$500,000 as cost of goods sold, \$50,000 as allowance for depreciation, \$85,000 as selling expense, and \$65,000 as G&A expense. Interest income and expense were \$5,000 and \$25,000, respectively, and income taxes for the year (unpaid at year's end) were \$80,000. Dividends of \$20,000 were paid.
- a. Prepare a balance sheet and an income statement reflecting these figures.
 - b. Use the output to calculate the current ratio, acid test ratio, leverage ratio, and profit margin.
10. Why do you think engineers switch to management in their latter part of the career? Why do you think that having engineers in the management role is beneficial to the organization? If you think of getting into the managerial role, what skills do you think you need to acquire? Describe some of the differences in roles between engineers and engineering managers.