



NATIONAL INSTITUTE OF TECHNOLOGY GOA

Farmagudi, Ponda, Goa-403401

Programme Name: B.Tech.

Mid-Semester Examinations, October 2022

Course Name: Management

Date: 17-10-2022

Duration: 1 Hour 30 Minutes

Course Code: HS 400

Time: 9.30: 11.00 AM

Max. Marks: 50

ANSWER ALL QUESTIONS

1. A firm borrows \$1,000, and the loan is to be repaid in three equal payments at the end of the next three years. The lender charges a 6 percent interest rate on the outstanding loan balance at the beginning of each year. (a) Calculate the EMI amount, and (b) prepare a loan amortization schedule [4]
2. Differentiate between the following: [5]
 - a. Principles of conservatism and matching principle
 - b. Drawing account and capital account
 - c. Mutually exclusive and contingent investment
 - d. Ordinary annuity and annuity due
 - e. Nominal interest rate and effective rate of interest
3. John Roberts has \$42,180.53 in a brokerage account and plans to contribute an additional \$5,000 to the account at the end of every year. The brokerage account has an expected annual return of 12 percent. If John's goal is to accumulate \$250,000 in the account, how many years will it take for John to reach his goal? [5]
4. Explain the salient features of Single, double, and triple columns cash books [6]
5. (a) Is your course instructor a manager? Discuss in terms of managerial functions, managerial roles, and skills.

(b) How these functions, roles, and skills vary when the manager is an (i) first-line manager, (ii) Middle manager, (iii) and top level manager [3+3=6]

6.

[6+6=12]

(a) Construct a CPM network diagram (AON) of the 12 activities given in Table (1) and identify its Critical Path.

Activity	Immediate Predecessors	Estimated Duration	Activity	Immediate Predecessors	Estimated Duration
1	----	2 hours	7	1,5	4 hours
2	----	1 hour	8	2	4 hours
3	2	2 hours	9	4,6	3 hours
4	1,3	4 hours	10	6	1 hour
5	2	1 hour	11	7,8	2 hours
6	1,5	3 hours	12	9,10,11	6 hours

(b) Another project consists of 16 activities having their predecessor relationship as follows:

- (i) *A* is the first activity of the project
- (ii) *B*, *C*, and *D* follow *A* and can be done concurrently
- (iii) *E* and *G* can not begin until *C* is completed and can be performed simultaneously
- (iv) *F* is the immediate successor to activities *B* and *E*
- (v) *H* and *K* run parallel, and both succeed *G*.
- (vi) *L* succeeds *F* and *H*
- (vii) *I* and *J* are immediate successor activities to activities *D*.
- (viii) *M* and *N* are immediate successors to *I* and *K*. However, both *M* and *N* can be performed concurrently
- (ix) Activities *O* and *P* are the last activities. Activity *O* is the immediate successor to *N*, and *L*. Activity *P* is the immediate successor to *M* and *J*.

Draw a neat network diagram.

7. The following questions (b to d) are based on the answer in section (a) of this question. Therefore, take a minute before writing the name of any institution. [1+2+3+6=12]

- a. Suggest the name of any entity that does business transactions
 - b. What are the various books of accounts maintained by the entity mentioned in section (a)
 - c. Distinguish between a Journal Entry and Ledger Posting.
 - d. Bring your own examples to showcase the entry of transactions mentioned in section 'c.'
- Provide at least five transactions in a journal entry with due format (each transaction should have different nature), and three instances of ledger posting

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