

**POKHARA UNIVERSITY
FACULTY OF SCINCE AND
TECHNOLOGY
SCHOOL OF ENGINEERING**

Exam Level Programme Year/Part	B. E. computer III/I	FM PM Time	100 45 3 Hrs
Final Internal Examination 2081			

Subject: Engineering Management

Candidates are required to give answers in their own words as far as practicable.
The figure in the margin indicates full marks.
Attempt all the questions

- 1 a) Explain the basic management functions illustrating the implications of it in Engineering 8
- b) Which type of organizational structure do you think is suitable for an engineering project and why do you think it is suitable? Explain. 7
- 2 a) What are the features of organization? Differentiate between formal, informal and Virtual organization 8
- b) Define planning. Explain the basic steps in any planning process. 7
- 3 a) How strategic planning differs from tactical and operational planning? How do they complement each other? 8
- b) Explain Job Analysis and Job Description along with suitable example 7
- 4 a) What are the functions of Human Resource Management Explain in brief 8
- b) Explain Herzberg's theory of motivation. What are the implications of this theory for motivational practices? 7
- 5 a) Explain different types of control system. How do they differ from each other? 7
- b) Discuss the concept and features of MIS and DSS 8
- 6 a) What is SWOT analysis? what significance does it have for strategy formulation? Perform a situation (SWOT) analysis for the college you attend. 8
- b) Explain different type of Leadership style. Which leadership do you prefer in Nepalese project, if any and why? Explain 7
7. Write short notes on: (Any two) (5*2=10)
 - a) Participative management
 - b) CPM/PERT
 - c) Change management

NEPAL COLLEGE OF INFORMATION TECHNOLOGY
Assessment Fall 2024

Level: Bachelor
Program: BE CE
Course: Engineering Management

Year: 2025
Full Marks: 100
Pass Marks: 45
Time: 3 hrs.

*Candidates are required to answer in their own words as far as practicable.
The figures in the margin indicate full marks.*

Attempt all the questions.

- | | |
|---|---|
| 1. ✓ a) Define Management. Explain the functions and levels of management. | 7 |
| ✓ b) Discuss the importance of engineering management in technology-driven environments. | 8 |
| 2. ✓ a) Define planning and explain its levels. | 7 |
| b) Describe the types of organization structures and their significance in ICT enterprises. | 8 |
| 3. a) Explain Maslow's hierarchy and Herzberg's two-factor theory of motivation. | 7 |
| b) Discuss different leadership styles and their relevance in managing an ICT workforce. | 8 |
| 4. ✓ a) Define human resource management and explain its key functions. | 7 |
| ✓ b) What are the challenges in managing people in an ICT workforce? Explain with examples. | 8 |
| 5. ✓ a) Explain the importance and process of control in engineering management. | 7 |
| b) Discuss ICT tools used for effective control in engineering projects and organizations. | 8 |
| 6. ✓ a) Define change management and its significance in an ICT-driven organization. | 7 |
| b) Explain innovation management and disruption in the context of engineering management. | 8 |

7. Write short notes on: (Any two)

2×5

- a) Participative management.
- b) Conflict resolution.
- c) Quality management.

NEPAL ENGINEERING COLLEGE

Level: Bachelor

Assessment

Year : 2025

Programme: B.E. Computer Science

Full Marks: 100

Course: Engineering Management

Pass Marks: 45

Time : 3hrs.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Attempt all the questions.

1. a. Discuss the primary functions of management and their interrelation in achieving organizational goals. 8
- b. Highlight the roles and responsibilities of an engineering manager in ensuring quality assurance and effective operations. 7
2. a. Explain the levels of planning (strategic, tactical, and operational) with suitable examples highlighting their differences and interconnections. 8

OR

Highlight the importance of planning in an organization. How does it contribute to achieving organizational goals ?

- b. Differentiate between line and functional structures in traditional organizations and their relevance compared to modern structures 7
3. a. Describe various techniques for motivating employees. How can these techniques be tailored for a technical workforce? 8

OR

Compare and contrast on-the-job and off-the-job training methods. Which method is more effective for enhancing the skills of an ICT workforce, and why?

- b. Explain the process of control in an organization. Discuss the importance of ICT tools in ensuring effective control over engineering projects. 7
4. a. Based on Expectancy Theory, outline a plan for improving employee engagement and aligning individual goals with organizational objectives 8
- b. Highlight the key steps involved in the recruitment and selection process. 7
5. InnovTech Solutions, a rapidly growing ICT company, is expanding its operations. As the company scales up, it faces challenges in recruiting skilled professionals, retaining talent, and ensuring employee performance aligns with organizational goals. Despite investing in training programs, employees feel that their growth opportunities are limited. Additionally, the company struggles with project delays and inefficiencies in managing resources across engineering projects. The management team is exploring advanced ICT tools and control

techniques to improve project monitoring and execution

- a. Identify the key functions of human resource management that are relevant to addressing the challenges faced by InnovTech Solutions. 8
- b. Discuss how job analysis, job specification, and job description can streamline the recruitment process for the company. 7
5. a. Explain the concept of participative management. How does it contribute to effective conflict resolution in engineering organizations? 8
- b. Identify and explain recent engineering management concepts that are transforming ICT-based projects and organizations. Highlight their benefits. 7
7. Write short notes on (*Any Two*): 2×5
- a. Formal and Informal Organization
- b. Matrix Organizational Structure
- c. Performance appraisal

NATIONAL ACADEMY OF SCIENCE AND TECHNOLOGY

(Affiliated to Pokhara University)

Dhangadhi, Kailali

Pre-University Examination

Level: Bachelor

Semester: V_Fall

Year : 2024

Programme: B.E., Computer

F.M. : 100

Course: Engineering Management

P.M. : 45

Time : 3hrs.

Candidates are required to give their answer in their own words as far as practicable. The figures in the margin indicate full marks.

Attempt all the Questions.

1. a) Define Management. What are the roles of engineering managers? [7]
b) Define organization. Differentiate between formal and informal organization. [8]

2. a) Explain the two factor theory of motivation. With its contributions.
b) What are the contemporary issues of motivation in Nepalese organizations? [7]

3. a) Define leadership and why do you think that most of the managers nowadays follow MBO approach. Justify. [8]
b) Define job analysis. What are the outcomes of job analysis? Describe. [7]

4. a) What do you mean by planning? Describe about the tools of planning. [7]
b) What do you mean by organizing? Describe about the emerging planning and organizing issues. [8]

5. a) Define HRM. Briefly describe about the emerging challenges of HRM in Nepal. [7]
b) Define control. What are the ICT tools for effective control? [8]

6. a) Define Conflict . What are the sources of conflict? [7]
b) Explain about the recent engineering concepts in detail. [8]

7. Write short notes on: **[Any Two] [2 x 5]**
 - a) Learning organization
 - b) Organization chart
 - c) Change management

**Madan Bhandari College of Engineering
Urlabari-3, Morang
Final Assessment- 2024, Fall**

Level: Bachelor

Full Marks: 100

Programme: Computer Engineering

Pass Marks: 45

Year/Part: III/I

Time: 3 hrs

Subject: - Engineering Management

- ✓ Candidates are required to give their answers in their own words as far as possible.
 - ✓ Attempt all questions
- 1/ a). What is engineering management? Explain the functions of engineering management? List out the role of an engineering manager? [1+5+2]

OR

- a.) Explain the types of organization with their merits and demerits [8]
- b). Discuss different types of organization structure? Which organization structure will be best for an ICT based project? Explain with real life example [3+4]
2. a). Explain why planning is important in an organization? Describe different levels of planning with suitable examples? [2+5]
- b). Explain about different steps in planning in an organization? Also list out some important tools for planning? [6+2]
3. a). What do you mean by motivation? Explain how Maslow's theory explains different principles of Hierarchy of Needs? [2+5]

b). What is human resource management? List out the key sources of recruitment. Explain recruitment and selection process with example? [1+2+5]

4. a). What is training? Explain the methods of 'On The Job Training' & 'Off The Job Training' with suitable example in the scenario of software industry [8]

OR

a.) Explain job analysis and job description along with suitable examples [4+4]

b) What are the emerging trends in engineering management and their application in ICT based organizations? Explain with real life examples [7]

5. a) Briefly explain any two methods to control human resources in an engineering organization? Describe some ICT tools for effective control of engineering projects and organizations. [3+5]

b). What is leadership? Explain different styles of leadership with suitable examples [7]

6. a). What do you mean by learning organization? Explain important characteristics of learning organization with examples [8]

b) Explain some challenges and strategies for motivating and leading technical workforce? [7]

7. Write short notes on: [Any Two] [5+5]

- a. Techniques for motivation
- b. Participative management
- c. HRM functions

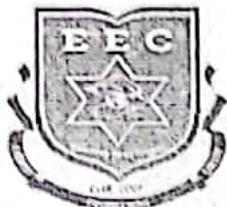
Term Test II

Date:	2081/10/27	Full Marks	100
Level	BE	Time	
Programme	BCE		
Semester	V		3 hrs

Subject: - Engineering Management

- ✓ Candidates are required to give their answers in their own words as far as practicable.
- ✓ Attempt All questions.
- ✓ The figures in the margin indicate **Full Marks**.
- ✓ Assume suitable data if necessary.

1. Explain HRM and describe functions of HRM and changing role of HRM In Nepalese Organizations. [10]
2. Discuss Recruitment, Selection Process and on job and off job trainings. [10]
3. Describe objective of Performance Measurement Tool and explain Traditional and Modern Approaches. Discuss Performance Evaluation in Nepal. [10]
4. Discuss Control Cycle and describe Process and types of Control. "Management has been defined as getting things done through People" Explain. [10]
5. Differentiate between efficiency and effectiveness. Why they are called twin Pillars of managerial success? [10]
6. Discuss about the challenges and strategies for motivating and leading technical workforce. [10]
7. Discuss how modern engineering management concepts, such as participative management, conflict resolution, change management, quality management, innovation management, and disruption, play a crucial role in managing ICT-based projects and organizations. Provide relevant examples to support your answer. [10]
8. Discuss the characteristics of learning organization in the ICT industry with some suitable examples. [10]
9. Explain Maslow's Hierarchy of Needs and Herzberg's Two-Factor Theory of Motivation, highlighting their differences and implications for employee motivation in the workplace. [10]
10. Write short notes on: **(Any two)**
 - a) Transformational Leader [2*5 = 10]
 - b) Roles and responsibilities of an engineering manager
 - c) Emerging planning and organizing issues for ICT enterprises



Pokhara University
Everest Engineering College
Final Internal Assessment
Fall- 2024

Level: Bachelor F.M. 100
Program: BE CMP P.M. 45
Faculty: Science & Technology Time: 3 Hrs
Section: A/B
Subject: Engineering Management (5th Semester)

Attempt all the questions.

- 1 a) What is management? Discuss about the various levels of management? Write down the characteristics of organization.
- b) What are the roles and responsibilities of an Engineering Manager? What are the various skills necessary to be an efficient manager?
- 2 a) What is Planning? What are the various types of planning? Define them. Discuss about the limitation of planning.
- b) What is organizing? Write down the various processes of organizing. Discuss about the merits and demerits of organizing?
- 3 a) What is motivation? What are the various techniques of motivation? Is fear a form of motivation? Discuss.
- b) Describe the concept of leadership. What are its characteristics? What are the different styles of leadership? Explain. How does a leader differ from a boss? Distinguish.
- 4 a) What is human resource management? What are the objectives of HRM? Write down its function with relevant examples?
- b) What is Job? Differentiate between Job Analysis Vs Job Specification Vs Job Description. What is the use of Job Analysis?

- 5 a) What is recruitment? What are the various sources of recruitment? Write about the various methods of recruitment. 7
- b) What is training? Write down the features and benefits of training. Differentiate between on job training Vs off job training. 8
- 6 a) What is quality management? Discuss about the principles of quality management. Write down the benefits of quality management. What is innovation management and disruption? 8
- b) What is conflict? Describe various levels of conflict. What is conflict resolution? What are the various methods you can adopt to settle or resolve a conflict?
- 7 Write short notes on: (*Any Two*) (5*2=10)
- a) Organizational Structure.
 - b) Performance Appraisal
 - c) SWOT Analysis
 - d) Maslow's Hierarchy of needs.
 - e) ISO 9001

Best Wishes

Lumbini Engineering, Management & Science College
First Internal Assessment Exam

Level: Bachelor

Program: BE Computer 5th

Course: Engg. Management

Year: 2024

Full Mark: 100

Pass Mark: 45

- 1.a) Management is the art of getting things done "Do you agree with the statement? Give reasons. (7)
b) What are the roles of manager? Explain. (8)
- OR
- a) Discuss Henri Fayol's 14 principles of management
b) Explain the various functions of management with illustrations
- 2.a) Why is planning a crucial step in management? Explain the importance of planning. (7)
b) Define forecasting. Explain the various forecasting techniques used for decision making process. (3+5)
- 3.a) Define organizing. Distinguish between formal and informal organization. (2+5)
b) Highlight emerging planning and organizing issues for ICT enterprises. (8)
- 4.a) What is motivation? Explain Maslow's Hierarchy Theory in a practical setting. (2+5)
b) What are different leadership styles? Discuss the importance of leadership in IT organizations. (3+5)
- 5.a) Highlight the functions of human resources management. What are the challenges in managing people in ICT workforce? (4+4)
b) Define control. What is the process of control? (2+5)
- 6.a) What is participative management? What are the advantages of participative management? (2+5)
b) What is innovation management and why is it important for organizations? (3+5)
(5+5)
7. Write short notes on Any two
a. Virtual Organization
b. Job Analysis
c. Quality Management

POKHARA ENGINEERING COLLEGE

Level: Bachelor
Programme: BE

Year : 2024
Full Marks : 100
Pass Mark : 45
Time : 3 hrs

Course: Engineering Management

Candidates are required to give their answers in their own words as far as practicable.

*The figures in the margin indicate full marks.
Attempt all the questions.*

7. Write short notes on any two:
- Innovation and disruption
 - Change management
 - Process of control
 - Learning organization in ICT industry

The end

1. a. What do you understand by engineering management? Briefly explain the engineering functions in organizations. 7
- b. What do you understand by organization? Explain formal and informal organization with suitable examples. 8
2. a. What is planning? Explain different levels of planning. 7
- b. What is organizing? Explain line and staff organizational structure with a suitable figure. 8
3. a. Suppose your organization is planning to follow the motivation theory of *need hierarchy of Maslow*. Based on his theory, explain what things are to be considered and how do you motivate your staff? 7
- b. What is meant by human resource management? Briefly explain different functions of human resource management. 8
4. a. What is meant by training? Explain different methods of training. 7
- b. What are the challenges of motivating employees in ICT based organizations. 8
5. a. Explain different steps involved in selection process. 7
- b. What is your opinion regarding conflict in organizations? Are conflicts always bad for organizations? What are the sources of conflict? 8
6. a. Briefly explain the different types of performance appraisal techniques. 8
- b. Explain different methods of conflict resolution techniques. 8

UNITED TECHNICAL COLLEGE

Level: Bachelor

Semester – Fall

Year : 2024

Programme: BE

Full Marks: 100

Course: Engineering Management

Time : 3hrs.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Attempt all the questions.

1. **a)** What is management? Explain the functions of management. 5
 b) Compare and contrast the roles and responsibilities of top-level, middle-level, and lower-level management. 5
 c) What is organization? Identify and describe four core engineering functions in organizations. 5
2. **a)** What are the three levels of planning, and how do they differ in terms of scope and decision-making? 7
 b) What are the emerging planning challenges faced by ICT enterprises in today's fast-changing technology environment? 8
3. a) Compare Masiow's Hierarchy of Needs and Herzberg's Two-Factor Theory. How do these theories differ in explaining workplace motivation? 8
 b) List effective techniques for motivating a remote engineering team. Justify your choices with reasoning. 7
4. a) List and explain core functions of human resource management. 8
 How do these functions contribute to organizational success?
 b) Describe three on-the-job training methods. What are their advantages for skill development in engineering teams? 7
5. a) How can ICT tools enhance decision-making in controlling large-scale technical projects? 8
 b) Differentiate between feedforward, concurrent, and feedback control. 7
6. a) What is participative management? Explain different techniques of participative management. 7
 b) What are some recent engineering management approaches used for managing ICT-based projects? 8

7. Write short notes (Any Two):

- a) Formal and Informal Organization
- b) Matrix Organization
- c) Leadership

2×5