



FIJI NATIONAL UNIVERSITY

**COLLEGE OF ENGINEERING, SCIENCE AND TECHNOLOGY
SCHOOL OF ELECTRICAL AND ELECTRONICS ENGINEERING
BACHELOR OF ENGINEERING PROGRAMME, YEAR 2 (BENG
EEE 706 ENGINEERING AND SOCIETY**

FINAL EXAMINATION (SEMESTER 2, 2016)

DATE/TIME/ROOM – Refer to Timetable

INSTRUCTIONS TO CANDIDATES

1. You are allowed 10 minutes extra reading time during which you are NOT allowed to write.
2. Begin each answer on a fresh new page and use both sides of the sheets.
3. Write your candidate number on the top of each attached sheet.
4. The paper contains two sections, Sec A & Sec B.
5. For all sheets of paper in which rough work has to be done, cross it through and you must attach to your answer script.
6. Write clearly the number(s) of the question(s) attempted on the top of each sheet.
7. Good handwriting and way of representation of answers has weight with respect to marks.
8. **Draw diagrams if any with pencil only and label it and show all working where necessary.**
9. Always check your work before you leave the exam room.
10. **The paper is of 100 marks.**

Section A: Short Answers Questions (Each carry 5 marks)

1. What is Henry Fayol principle of management? Explain the six functions.
2. What do you mean by JUST-IN-TIME principle? Explain its benefits.
3. What are the six different types of powers that a good leader should own?
4. What does Maslow's hierarchy of needs mean?
5. What is two- factor theory of Herzberg?
6. From the following financial statement calculate (i) Current Ratio (ii) Acid test Ratio (iii) Inventory Turnover (iv) Average Debt Collection Period (v) Average Creditors' payment period.

Sales	Current Assets	Current Liabilities
Cost of sales : 1000	Inventories : 125	Trade Creditors : 200
Gross Profit : 500	Debtors : 250	
	Cash : 225	

Section B: Attempt any 7 questions (Each contains 10 marks)

1. With respect to Ethical theories answer the questions below:
 - a) What is Kohlberg and Gilligan's theory of engineering ethics?
 - b) What are the three features of virtue ethics?
 - c) Show the classification of ethical theories with the help of diagram.
2.
 - a) What are the three basic ethical obligations for the engineers?
 - b) What do you mean by ISO 26000?
 - c) What are the seven principles of social responsibility?
3. With respect to HRM answer the question below:
 - a) What do you mean by HRM? Name its three important areas of functions.
 - b) Write seven function of HR department.
 - c) What are the advantages and disadvantages of the internal recruitment?

4. Briefly explain the analytical techniques below.
 - a) Linear programming
 - b) Probability decision theory

5.
 - a) What are the five different types of business organizations?
 - b) Explain advantages and disadvantages of Sole trader.
 - c) Name four different types of organization structures.
 - d) Write advantages and disadvantages of matrix structure.

6. With respect to OCTAVE answer the questions below:
 - a) What do you mean by OCTAVE?
 - b) Name its three phases.
 - c) What are the basic tasks of the team with respect to OCTAVE?

7. With respect to financial economics answer below:
 - a) What do you mean by Balance sheets and Income sheet?
 - b) What are three different kinds of financial ratios?
 - c) Explain Liquidity ratio, Leverage ratio, activity ratio & Profitability ratio?

8.
 - a) What are the three different kinds of leadership style as per IOWA studies ?
 - b) Explain Ohio state 2 dimensional models of leader behaviors.
 - c) What do you mean by social learning theory?

9. Who was Edward Deming? Mention its 14 principles.

10. What are the four strategies of risk control? In how many groups can controls be categorized?

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