

**TRIBHUVAN UNIVERSITY**  
**FACULTY OF MANAGEMENT**

Office of the Dean  
March - April 2018

Full Marks: 60  
Time: 3 Hrs.

**BIM / Seventh Semester / MGT 205: Operations Management**

*Candidates are required to answer all the questions in their own words as far as practicable.*

**Group "A"**

**Brief Answer Questions:**

[10 × 1 = 10]

1. What is Operations Management?
2. What is productivity?
3. Define capacity planning.
4. Write down any four factors affecting the plant location decision.
5. Define degeneracy in linear programming.
6. What is waiting line management?
7. What is duality?
8. Define supply chain management.
9. What is Total Quality Management?
10. What is competitive strategy?

**Group "B"**

**Short Answer Questions:**

[6 × 5 = 30]

11. What are the new trends and challenges in Operations Management?
12. ~~Briefly explain the aggregate planning strategies~~
13. Discuss the benefits of good product design.
14. Describe the critical success factors that are important to run a dairy industry in Kathmandu Valley.
15. A Construction company wants cement at three of its project sites  $P_1$ ,  $P_2$  and  $P_3$ . It procures cement from four plants  $C_1$ ,  $C_2$ ,  $C_3$  and  $C_4$ . Transportation costs per ton, capacities and requirements are as follows:

	$P_1$	$P_2$	$P_3$	Capacity (tons)
$C_1$	5	8	12	300
$C_2$	7	6	10	500
$C_3$	13	4	9	700
$C_4$	10	13	1	300
Requirement	600	400	800	

Determine optimal allocation of requirements.

16. Yearly demand for the materials = 10000 units

Ordering cost = Rs 50

Cost per unit of materials = Rs 2

Carrying cost per unit per year = Rs 0.16

Required:

- a. Optimum number of order.
- b. If yearly operating days are 250 days, lead time is 10 days and safety stock is 300 units, find the reordering level.



**Comprehensive Answer Questions:**

[4 × 5 = 20]

17. Read the following case analytically and answer the following questions.

Oxfam International is a confederation of 13 like-minded organizations based around the world that, together with partners and allies, work directly with communities seeking to ensure that poor people can improve their lives and livelihoods and have a say in decisions that affect them. With an annual expenditure that exceeds US\$700 million, Oxfam International focuses its efforts in several areas, including development work, long-term programs to eradicate poverty and combat injustice, emergency relief delivering immediate life-saving assistance to people affected by natural disasters or conflict, helping to build their resilience to future disasters, campaigning and raising public awareness of the causes of poverty, encouraging ordinary people to take action for a fairer world, and advocacy and research that pressures decision-makers to change policies and practices that reinforce poverty and injustice.

All of Oxfam International's activities depend on effective and professional operations management. For example, Oxfam's network of charity shops, run by volunteers, is a key source of income. The shops sell donated items and handicrafts from around the world giving small-scale producers fair prices, training, advice and funding. Supply chain management and development is just as central to the running of these shops as it is to the biggest commercial chain of stores.

The operations challenges involved in Oxfam's ongoing 'Clean Water' exercise are different but certainly no less important. Around 80 per cent of diseases and over one-third of deaths in the developing world are caused by contaminated water and Oxfam has a particular expertise in providing clean water and sanitation facilities. The better their coordinated efforts of identifying potential projects, working with local communities, providing help and education, and helping to providing civil engineering expertise, the more effective Oxfam is at fulfilling its objectives.

More dramatically, Oxfam International's response to emergency situations, providing humanitarian aid where it is needed, must be fast, appropriate and efficient. Whether the disasters are natural or political, they become emergencies when the people involved can no longer cope. In such situations, Oxfam, through its network of staff in local offices, is able to advise on what and where help is needed. Indeed, local teams are often able to provide warnings of impending disasters, giving more time to assess needs and coordinate a multi-agency response. The organization's headquarters in Oxford in the UK provides advice, materials and staff, often deploying emergency support staff on short-term assignments. Shelters, blankets and clothing can be flown out at short notice from the Emergencies Warehouse. Engineers and sanitation equipment can also be provided, including water tanks, latrines, hygiene kits and containers. When an emergency is over, Oxfam continues to work with the affected communities through their local offices to help people rebuild their lives and livelihoods. In an effort to improve the timeliness, effectiveness and appropriateness of its response to emergencies, Oxfam recently adopted a more systematic approach to evaluating the successes and failures of its humanitarian work. Real-time evaluations, which seek to assess and influence emergency response programs in their early stages, were implemented during the response to floods in Mozambique and South Asia, the earthquake in Peru, Hurricane Felix in Nicaragua and the conflicts in Uganda. These exercises provided Oxfam's humanitarian teams with the opportunity to gauge the effectiveness of their response, and make crucial adjustments at an early stage if necessary. The evaluations highlighted several potential improvements.

For example, it became evident that there was a need to improve preparation ahead of emergencies, as well as the need to develop more effective coordination planning tools. It was also decided that adopting a common working approach with shared standards would improve the effectiveness of their response to emergencies.

Oxfam also emphasizes the importance of the role played by local partners in emergencies. They are often closer to, and more in tune with, affected communities, but may require additional support and empowerment to scale up their response and comply with the international humanitarian standards.

**Questions:**

- Relate the principles of supply chain management with the given case.
- Examine the various primary activities and plans of Oxfam.
- How Oxfam has measured the success and failure of the organization?
- How can Oxfam scale up its response?

