



KIBABII UNIVERSITY COLLEGE (KIBUCO)

MAIN CAMPUS

**UNIVERSITY EXAMINATIONS
2014 /2015 ACADEMIC YEAR**

FOURTH YEAR FIRST SEMESTER EXAMINATIONS

MAIN EXAMINATION

FOR THE DEGREE

OF

BACHELOR OF COMMERCE

COURSE CODE: BCP 451E

COURSE TITLE: OPERATIONS MANAGEMENT IN SCM

DATE:

TIME:

INSTRUCTIONS TO CANDIDATES:

Answer Question ONE and any other Two Questions

SECTION A (COMPULSORY) 30 marks

Q1. You are strongly advised to read carefully and analyze the information in the case study before attempting to answer questions a and b

Questions a and b relate to the case study and should be answered in the context of the information provided.

CHASEBRIDGE HOSPITAL TRUST

Chasebridge Hospital is a general NHS hospital within the Chasebridge Hospital Trust serving a mixed rural and urban area. It is by no means one of the biggest in the area but is important because it has around 600 beds and caters for accident and emergency. It also has the normal range of general in-patient and out-patient care. It has an X-ray department serving the hospital and referrals from six local general practitioner (GP) clinics in the area.

Chasebridge Hospital's pathology laboratory is also an important facility, as this serves a number of other medical institutions in the area, the most important being a cancer hospital within the trust. This cancer hospital has had some major funding problems and so some of its internal departments have had to be closed. A more serious issue is that any requests to the pathology laboratory from this cancer hospital have to be prioritized because of the nature of its business. Hence, there is concern that whilst Chasebridge Hospital funds the laboratory itself, it is unable to provide an efficient and effective service to its own staff. This is having a detrimental impact on internal operations as it slows down the whole patient cycle.

Waiting Lists and Bed Allocation. The main activities of Chasebridge Hospital comprise a number of closely linked activities which can be summarized as:

Consultant appointment bed admission operating theatre ward

Once a patient is on the ward they could remain there from one to ten days, depending on their state of health. There is now a backlog of patients waiting for their surgical treatment and this appears to be getting worse.

Whilst each of these elements has a finite capacity, one key problem is maximizing the efficiency and effectiveness of the process from beginning to end.

Although coronary conditions, burns, and cancer are catered for, specialist treatment for these conditions is also carried out at regional centres and other neighbouring hospitals.

Within the trust, there is also a small ten-bed maternity unit for emergencies only. This is located close to the Chasebridge Hospital site. It is staffed by four midwives working on rotating shifts with only a single midwife being on leave or away from work at any one time. Sometimes the midwives are overworked because the unit is full, but at other times they have nothing to do because there are no emergencies. As a result there have been many calls to shut down the maternity unit. This is unlikely because beds are also being used for the overflow from the main hospital wards. There are major disagreements about bed allocation and quite often patients are being moved backwards and forwards

between the sites, which are very time consuming. This means that sometimes midwives are being made responsible for caring patients for whom they do not have the training; hence, there are many arguments over who will be responsible if mistakes are made.

The X-ray department at Chasebridge Hospital is also experiencing some major issues.

It has two machines; one that is run for local doctor's requirements and another for in-house requirements. They are both run on day shifts from 8am until 4pm. They are operated by one skilled member of staff with help from two porter personnel, who move patients in and out and get them in the correct position before the X-rays are taken. Because the rest of the hospital works on two shifts from 6am until 10pm, there is always a very large backlog of X-ray work. It has been suggested that Chasebridge Hospital buys a new, more efficient machine that would substitute for the existing two machines but this is considered to be too expensive.

Neither of the X-ray machines is very reliable, as little maintenance has taken place over the last two years. When one of the X-ray machines breaks down, the other machine has to be used for all patients. Whilst this can add further delays to the process of carrying out an X-ray, senior staff views this as using assets to the full and saving on servicing costs. There have been numerous suggestions about putting in a regular servicing contract, but again the approach is that it is easier to repair as necessary, irrespective of the fact that spare parts are becoming difficult to source and the costs of repair are becoming prohibitive.

Ian Holmes is the newly appointed operations director for the hospitals within the trust.

He would like them to be running efficiently and effectively ready for the next budget review. He desperately needs to reduce the current waiting list problem which should have been resolved last year but still persists. Previous efforts to invest money have resulted in no real improvements and Ian feels that unless the trust can show improvements at the next review further cuts will become inevitable. This will lead to reduced services as well as a loss of jobs.

Ian has been in the position for nearly three months and some interesting ideas about how to review the capacity planning in three hospitals within the trust and how they might deal with variable demand.

Questions

- a) Assume the role of the operations director and apply an appropriate technique that might be used to analyse the current waiting list problem. (15 marks)
- b) Develop an action plan to resolve the capacity issues within the X-ray department at Chasebridge Hospital. Your plan should address short- and long-term considerations. (15 marks)

SECTION B

Answer TWO questions from section B

You are strongly advised to carefully read all the questions in section B before selecting TWO questions to answer.

Q2. Explain how THREE technology developments have had a significant influence on the global sourcing of goods and services. (20 marks)

Q3. (a) Explain the transformation model of operations by using examples from an organization with which you are familiar. (8 marks)

(b) Identify FOUR main differences between goods and services and explain the implications for operations management in each case. (12 marks)

Q4. Assess the potential areas of conflict between the purchasing and design functions, using examples to illustrate your answer. (20 marks)

Q5. (a) Define the term 'benchmarking' and outline the different forms it can take. (5 marks)

(b) Explain the benefits and limitations of best practice benchmarking. (15 marks)