MURANG'A UNIVERSITY COLLEGE

(A Constituent College of Jomo Kenyatta University of Agriculture and Technology)

University Examinations 2014/2015 2014/2015 Academic Year

SCHOOL OF BUSINESS AND ECONOMICS

THIRD YEAR 1ST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF BUSINESS INFORMATION TECHNOLOGY

HBT 2301: MANAGEMENT INFORMATION SYSTEMS

MAIN CAMPUS

SPECIAL/SUPPLEMENTARY EXAMINATIONS - TIME 2 HOURS

Instructions: Answer Question 1 and Any Other Two.

Question ONE: (30 marks) - Compulsory

Read the Case study below and answer the questions that follow

IT management in Raja Boeing Company.

With over 150,000 employees, the Raja Boeing India company India company India company is a giant producer of passenger airplanes, business jets, military aircraft, helicopters, flight instruments, and satellites. Until recently it was the India's number one commercial jet aircraft producer.

It is now in a head-to-head struggle with Rani Airbus for this position. Rani Airbus decided to challenge Raja Boeing India company India Company for the jumbo jet market. Rani Airbus management predicts air travel will expand rapidly, requiring many giant jumbo jets to carry the increased mass of passengers without hiking up operational costs. Raja Boeing India company India company management has a very different vision. It believes that most travelers prefer to fly from their own city nonstop to their destination.

All in all, Raja Boeing India company India company foresees a strong expansion of smaller jet sales rather than of jumbo jet sales. Both companies' business and product development strategies are based on these differing visions. In addition to Rani Airbus competition, Raja Boeing India company India company faced difficult conditions because the market for commercial airplanes has been shrinking due to airline mergers and the downturn in air travel recently. Raja Boeing India designers long ago realized they would save much production time if they reused existing designs rather than designing each aircraft from scratch.

However, the process of design customization was manual and took more than 1,000 engineers a year of fulltime work to complete. Another problem with manual design was

that the staff needed to create life-size mock-ups in plywood and plastic to ensure that everything fit and that the pipes and wires that run through the plane are placed properly and do not interfere with other necessary equipment.

Raja Boeing India company assembled a single parts list that can be used by every division without modification. In addition, management established design-production teams that brought together designers and fabricators from a range of specialties throughout the whole process. Ultimately, the airplane was designed entirely on the computer screen and was initially assembled without expensive mock-ups.

Raja Boeing India company, in the meantime, innovated again and designed plane to fly long distances economically while keeping passengers comfortable and economizing on fuel. About half of each plane will be made from carbon-fibre composite materials, which are lighter than aluminium and can be built in larger sections.. So far it has had little success, with a number of airlines stating that the operating economies and comfort did not match. Raja Boeing India company and its key suppliers are using software that lets designers around the world electronically collaborate in designing components and manufacturing processes.

Raja Boeing leadership also examined and reshaped how everyone, from executives to factory workers, did their job. For example, manufacturing engineer Mike Sweeney complained that the queries about existing orders generated standardized responses, and he wanted something more precise. Planning for demand was new and difficult to get used to because it required more rigor than in the past. The team learned it had to do very careful training so employees would know how to obtain just the information they needed.

Questions

a) Analyze Raja Boeing Company and its business strategy using competitive forces models. (10 marks)

b) How successful were Raja Boeing Company's systems projects? Explain your answer. (6 marks)

c) Discuss the importance of training in Information Systems projects. (8 marks).

d) Evaluate the role of information systems in the way Raja Boeing Company's undertook its largest reorganization. (6 marks)

Question TWO

a) Differentiate between file management systems and database management systems. (4 marks)

b) Use relevant examples to distinguish between; data, information and knowledge. (6 marks)

c) Explain the key components of an information system. (10 marks)

Question **THREE**

a) The System development life cycle (SDLC) is a model of how systems should be developed and has been adopted by many organizations. Discuss any four strengths of this model over other models. (6 marks)

b) Explain THREE advantages of prototyping while developing a new information system. (6 marks)

c) Explain how enterprise applications and intranets promote business process integration and improve organizational performance. (8 marks)

Question FOUR

a) Explain any **Five** common reasons for losing data in computer-based information systems and how they may be controlled. (10 Marks)

a) Identify and describe the THREE dimensions of information systems. (6 marks)

b) Distiguish between Management Information Systems (MIS), Transaction Processing Systems (TPS) and Decision Support Systems (DSS). (4 marks)

Question FIVE

a) Describe the information systems supporting the major business functions: sales and marketing, manufacturing and production, finance and accounting, and human resources. (10 marks)

b) Explain how the information systems function supports a business and highlight roles played by programmers, systems analysts, and the chief information officer (CIO). (10 marks)