



(University of Choice)

**MASINDE MULIRO UNIVERSITY OF SCIENCE AND
TECHNOLOGY
(MMUST)**

**UNIVERSITY MAIN EXAMINATIONS
2021/2022 ACADEMIC YEAR
FOURTH YEAR FIRST SEMESTER EXAMINATIONS
FOR THE DEGREE
OF
BACHELOR OF COMMERCE**

COURSE CODE: BCB 402

COURSE TITLE: ELECTRONIC COMMERCE

DATE: MONDAY, 25TH JULY 2022 TIME: 11:00 – 1:00PM

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTION ONE AND ANY OTHER TWO QUESTIONS

TIME: 2 HOURS

MMUST observes ZERO tolerance to examination cheating

INSTRUCTIONS

1. Answer Question **ONE** and any other **TWO** questions.
2. Read carefully the case provided below and use it to answer the given questions.
3. The length of the answers should be guided by the marks allocated to each question.
4. Clearly articulate practical illustrations where required.

QUESTION ONE

SCHOOLKIDZ CASE STUDY

Based in the industrial area of Nairobi, the SchoolKidz Company – a subsidiary of the world-renowned office products supply company, Staples - provides pre-made school supply kits to thousands of schools across the nation. SchoolKidz believes in providing the highest quality materials and educational tools to children through three different online ordering programs – Teacher Tailored Kits, Build-A-Kit, and Kits for Kidz – with each of the programs operating as its own business function. With three different online stores needing to be overseen, SchoolKidz wants a one-stop solution that could run all of their school supply programs on a single platform, fully integrated with their Microsoft Dynamics GP system, that could provide their customers with a rich user experience.

SchoolKidz's three separate online programs all primarily revolve around school supplies, but each provides services that cater to slightly different audiences. Through the Teacher Tailored Kits program, the core program of the company, SchoolKidz takes the school supply list that the teacher sends home every year and then creates a custom quote for the school. If the school agrees to participate, they print up order forms to give to parents, who then decide to purchase a kit or go out to a retail store to get the supplies. "We find that approximately 30 percent of parent units end up participating," said Jim Mulder, CEO of SchoolKidz. "They return the order form to the school, the school consolidates the orders, and then they send them to us." Build-A-Kit was founded to work alongside the Teacher Tailored Program, allowing parents who miss the Teacher Tailored order deadlines to go to the site and build their own kits. Kits for Kidz is a program that caters to low-income families and communities, offering kits containing a pre-established assortment of items that are sold primarily through relief organizations and care agencies.

SchoolKidz recognizes the trend of schools pushing parents toward an online path, but the software they chose to help them keep up with this trend is problematic. "SchoolKidz chose the most affordable solution, but we have been experiencing many problems," says Mulder. "Joe Grlica [the IT/IS manager] spends a lot of time troubleshooting- trying to find out why the site is down, why the data that comes through is inaccurate. It has forced us to act."

Their software program also is not integrated with the Microsoft Dynamics ERP and back office system, causing business operations to run with less efficiency. "We are doing a lot of manual entry with regards to orders coming into our ERP and Microsoft Dynamics GP system," says Joe Grlica. SchoolKidz desires a system that will allow them the ability to run all of their school supply programs on one platform; richer functionality with their online product catalogs and stores; seamless integration with their Microsoft Dynamics GP system; and an online credit card transaction solution that is secure and trusted by the customer.

After a tendering process, SchoolKidz has chosen PowerTech Solutions (an ICT solutions provider where you work as an intern) to design a system that will solve the above problem. You have been drafted on the team to work on this project.

QUESTION ONE (30 MARKS)

- a) Explain how the proposed system will utilize the various wireless technologies available in the market today. (8 marks)
- b) Describe the business model of SchoolKidz and explain how the proposed system will support that model. (8 marks)
- c) Document the different software programs that will be included in the system during the detailed design phase of the development process. (6 marks)

- d) Discuss the payment component of the proposed solution, highlighting the major challenges of this aspect of the system.(8 marks)

QUESTION TWO (20 MARKS)

- a) What do you think should be included in the proposed system to enhance its usability? (10 marks)
- b) Discuss the various emerging Internet and WWW technologies and how they will be applied in the proposed system. (10 marks)

QUESTION THREE (20 MARKS)

Explain how the proposed system may be designed based on the following E-Commerce models. For each, illustrate using local website examples the value, revenue and market propositions of the model.

- a) B-2-B models
- b) E-government models
- c) Infomediary models
- d) Subscription models
- e) Community models

QUESTION FOUR (20 MARKS)

- a) How will you determine if the proposed system is feasible or not? (10 marks)
- b) Discuss the various applications that should be incorporated into the system to support the procurement management activities of the above organization. (10 marks)

QUESTION FIVE (20 MARKS)

- a) Explain how the different digital marketing tools may be used to support the activities of SchoolKidz. (10 marks)
- b) E-security is considered one of the most if not the most important aspect of E-system design. Document using commercially available applications as illustrations the challenges a system designer faces in this regard and how those challenges can be overcome. (10 marks)

