

UNIVERSITY OF SWAZILAND
DEPARTMENT OF BUSINESS ADMINISTRATION
MAIN EXAMINATION PAPER
MAY, 2014

TITLE OF PAPER : ELECTRONIC COMMERCE

COURSE CODE : BA 431 FULL TIME

TIME ALLOWED : THREE (3) HOURS

- INSTRUCTIONS:**
- 1. THE NUMBER OF QUESTIONS IN THIS PAPER SIX (6)**
 - 2. SECTION A IS COMPULSORY.**
 - 3. ANSWER ANY THREE (3) QUESTIONS IN SECTION B**
 - 4. THE MARKS TO BE AWARDED FOR EACH QUESTION ARE INDICATED ALONGSIDE THE QUESTION.**

NOTE: MARKS WILL BE AWARDED FOR GOOD COMMUNICATION IN ENGLISH, AS WELL AS FOR ORDERLY AND NEAT PRESENTATION OF WORK. FURTHER MARKS WILL BE AWARDED FOR USE OF RELEVANT EXAMPLES.

SPECIAL REQUIREMENTS: NONE

THIS PAPER IS NOT TO BE OPENED UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR.

American Packaging Machinery

American packaging Machinery (APM) is a company that provides repair and maintenance services to companies that operate large packaging systems. Packaging systems are arrangements to machinery that place items in containers such as boxes or bags and apply plastic shrinks wrap to the containers. These machines must be adjusted regularly, and they have hundreds of parts that can wear out or fail. APM offers services contracts on most major packaging systems. A typical service contract provides for an APM technician to make regular visits to the customer site to perform preventive maintenance. The service contract includes a certain number of emergency repair visits per year. APM also sends technicians to perform repairs for companies that do not have service contracts.

APM technicians are paid by the hour, with additional pay for overtime hours and time they work outside of standard working hours, such as weekends and holidays. APM technicians are members of a labor union, the international Brotherhood of Electrical Workers (IBEW) which negotiates pay rates and working conditions for the technicians. APM technicians are covered by a regional office. The union contract currently provides that APM technicians are covered by a medical insurance plan underwritten by the Prudential Trust Insurance Company. Although APM pays most of the insurance premium, technicians do pay a part of the premium cost. This contribution to the premium is withheld from their paychecks each week.

You are the director of electronic commerce for APM and you report to Laura Adams, APM's chief information officer. Laura asks for your help in outlining a new automated system she wants to install, which would use EDI and EFT to handle APM's technician payroll and related transactions. She has provided the following narrative that describes how the system will work.

1. Technicians will record their time worked by entering the start and stop times for each job into a program that runs on their handheld computers to look up wiring and mechanical diagrams for the machinery on which they work and to receive their job assignments. The time worked information will be transmitted from the handheld computer to APM's Payroll Department.
2. The Payroll Department will summarize the time worked information and send it to supervisors desktop computers. Each supervisor will indicate an authorization for each technician's time worked, overtime, and holiday/weekend hours. That authorization will be returned by the system each day to the Payroll Department.
3. The Payroll Department will summarize the time worked information each week and calculate gross pay, deductions, and net pay for each employee. The deductions include the federal and state taxes that must be withheld by law, the contribution to the medical insurance premium, and the union dues that are withheld under IBEW union contract.

- 4. The Payroll Department will send an electronic summary of the payroll information, including deductions to the Accounting Department which will prepare payroll tax returns and make the necessary entries in the APM accounting system to record payroll and the related tax expenses.
- 5. The payroll department will send electronic authorizations to APMs bank to make the necessary EFT's to deposit the amount of each technicians net pay to the technicians bank account, the amount of each tax withheld to the account of the appropriate government agency, the amount of the total contributions to the medical insurance premium to the insurance company's account, and the amount of the union dues withheld to the IBEWs account. Most of these accounts are at other banks.
- 6. The Payroll Department will send electronic notifications to Prudential Trust and the IBEW regional office notifying them of the transferred amounts each week.
- 7. The Payroll Department will send an electronic summary of the hours worked by each technician and the amount of gross pay including overtime and holiday/weekend pay, to the APM union stewards desktop computer. The union steward is an APM technician who is elected by the technicians to monitor the terms of the union contract and handle any grievances that arise between the technicians and APM management.

Questions

- 1. Draw a diagram of the proposed payroll EDI and EFT system. 20 marks
- 2. Provide a rationale and recommendation as to which, if any, elements of this system you wish APM to hire an outside company to implement.

20 marks

SECTION B

ANSWER ANY THREE

Question 1

Discuss the different types of revenue models 20 marks

Question 2

Discuss each of the following

- | | | |
|-----|----------------------|---------|
| I | pop - up adverts | 4 marks |
| II | Pop - behind adverts | 4 marks |
| III | Interstitial adverts | 4 marks |
| IV | Site sponsorship | 4 marks |
| V | Viral marketing | 4 marks |

Question 3

Discuss how companies can use EC to improve its purchasing process 20 marks

Question 4

Discuss how Web Technology can enhance the effectiveness of Supply Chain Management

20 marks

Question 5

A parent wants to provide her teenage son with the ability to make purchases online without giving him access to a credit card. Discuss each of the available alternatives that can be used. 20 marks