



Uva Wellassa University of Sri Lanka
Faculty of Science and Technology
Department of Science and Technology
300 level 2nd Semester Examination – Dec. 2018/Jan. 2019
SCT311-1 Enterprise Resource Planning



Instructions to candidates

Duration: One (01) hour

Number of questions: Three (03)

Answer any two (02) questions

Mark allocation: 100

- 1.
- a. Explain what is meant by “job shop scheduling”. (5 mark)
 - b. Explain how “job shop scheduling” could be used to benefit a manufacturing company. (10 mark)
 - c. Critically evaluate the Electronic Data Interchange (EDI) system. (15 mark)
 - d. Table – 01 shows three (03) different jobs(1,2 and 3) their duration in days and due date for each and every job. At a specific time only one job could be done.
 - i. Using “branch and bound” method schedule the jobs in Table – 01 to minimize the delay. (8 mark)
 - ii. Calculate the minimum delay. (2 mark)

Job	Duration (Days)	Due Date
1	6	Day 8
2	4	Day 4
3	5	Day 12

Table – 01

- e. List the four (04) main functional areas in the operation of a business. (4 mark)
- f. List any four (04) factors that are critical for the successful implementation of the Enterprise Resource Planning (ERP) system and briefly describe any two (02). (6 mark)

- 2.
- "An ERP system is an Information System". Do you agree with the above statement? Explain your answer. (5 mark)
 - "ERP systems allow simultaneous access to the same data for planning and control". Discuss the above statement. (5 mark)
 - Explain how the Internet can be integrated with the ERP system. (10 mark)
 - Describe any five (05) major functional modules in any ERP system. (15 mark)
 - Briefly explain the concept of open source ERP and benefits of it. (15 mark)
- 3.
- Describe any two (02) functions in marketing and sales. (6 mark)
 - What is a Manufacturing Execution System (MES)? (4 mark)
 - What is the goal of production planning? (4 mark)
 - Explain the three (03) general approaches for production. (6 mark)
 - Briefly explain what is Material Requirements Planning (MRP). (4 mark)
 - Explain the importance of MRP for an organization. (6 mark)
 - What is meant by Master Production Schedule (MPS)? (4 mark)
 - Describe three (03) main Customer Relationship Management (CRM) activities. (6 mark)
 - According to the table given below (Table – 02) determine the weekly demand for Product – A.

	Week 01	Week 02	Week 03
Demand Management	18/12 – 22/12	25/12 – 29/12	1/1 – 5/1
Monthly Demand Product - A	3500	1800	2632
Working Days in Week	5	5	5
Working Days in Month	21	21	21
Product – A Weekly Demand			

Table – 02

(10 mark)

