TRL308C

October/November 2010

LOGISTICS SYSTEMS (TRANSPORT ECONOMICS 308)

Duration 2 Hours

70 Marks

EXAMINERS
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This paper consists of 12 pages

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INSTRUCTIONS:

(1) THIS IS A <u>FILL IN</u> EXAMINATION PAPER -- WRITE YOUR ANSWERS IN THIS BOOK AND HAND IT TO THE INVIGILATOR WHEN YOU ARE DONE

(2) DRAW A CIRCLE ON THE FRONT COVER INDICATING WHICH TWO (2) LONG QUESTIONS YOU HAVE ANSWERED

(3) READ THROUGH ALL THE QUESTIONS CAREFULLY.

THIS EXAMINATION PAPER CONSISTS OF:

SECTION A: COMPULSORY MULTIPLE CHOICE QUESTIONS
(20 MARKS)

SECTION B. COMPLETE ANY TWO (2) OF THE THREE (3) LONG QUESTIONS
(50 MARKS)

PLEASE NOTE: ONLY THE FIRST TWO (2) QUESTIONS THAT YOU HAVE COMPLETED WILL BE MARKED - YOU WILL NOT BE BENEFITTED IN ANY WAY IF YOU COMPLETE ALL THREE (3) LONG QUESTIONS
TOTAL OF 70 MARKS

SECTION A

ANSWER ALL THE QUESTIONS IN THIS SECTION
TOTAL OF 20 MARKS

1 1   Supply chain information systems integrate logistics activities on different levels Which one of the following represents these levels?

[A]   transaction systems
[B]   manufacturing systems
[C]   decision analysis
[D]   only [A] and [C] are correct

1 2   Which one of the following are steps in the process for customer order fulfillment and to coordinate receipt of purchase order?

[A]   order processing
[B]   transport
[C]   purchasing
[D]   [A], [B] en [C] are correct

1 3   The process of planning implementing and controlling the efficient, cost effective flow and storage of materials, in process inventory, finished goods and related information from the point of origin through the point of consumption for the purpose of conforming to customer requirements is the definition of logistics

[A]   from a integrated logistics perspective
[B]   from an information management perspective
[C]   from the Council of Logistics Management
[D]   from the Council of Supply Chain Management

1 4   Which one of the following is NOT a focus point of management control?

[A]   quality measurement
[B]   customer service measurement
[C]   capability measurement
[D]   asset measurement

1 5   Which one of the following is a reason why timely and accurate information is so important for logistics management?

[A]   customers demand real-time information
[B]   could be used to reduce inventory and human resource requirements
[C]   increases flexibility in the utilization of resources
[D]   [A], [B] and [C] are correct

1 6   Which one of the following focuses on cost, customer service, productivity, quality and asset management measures?

[A]   strategic planning
[B]   decision analysis
[C]   management control
[D]   transaction system

1 7   Which of the following are major system modules for the comprehensive supply chain information system?

(i)   enterprise resource planning
(ii)   communication systems
(iii) planning systems
(iv)   transport management systems

[A]   (i), (ii) en (iv)
[B]   (i), (iii) en (iv)
[C]   (i), (ii) en (iii)
[D]   (i), (ii), (iii) en (iv)

1 8   The _____ includes in formation storage capability for both operations (i e product and activity based) en financial (i e monetary based) transactions

[A]   ERP system
[B]   SCIS system
[C]   CRM system
[D]   MRP system

1 9   Which of the following are execution systems that could be integrated with the ERP system?

(i)   yard management system
(ii)   warehouse management system
(iii) transport management system
(iv)   customer relationship management system

[A]   (i), (ii) and (iii)
[B]   (i), (ii) and (iv)
[C]   (i), (iii) and (iv)
[D]   (ii), (iii) and (iv)

1 10 The application orientated modules of the SCIS information framework includes which of the following

    (i)   enterprise integration and administration
    (ii)   enterprise planning and monitoring
    (iii)   communication technology
    (iv)   financial and operations reporting

    [A]   (i), and (ii)
    [B]   (ii) and (iii)
    [C]   (ii), (iii) and (iv)
    [D]   (i), (ii), (iii) and (iv)

1 11 Which one of the following is NOT an advanced ERP system capability?

    [A]   customer relationships management
    [B]   project requirements planning
    [C]   supply chain event management
    [D]   planning and scheduling

1 12   includes the following major components

    (i)   human resources
    (ii)   financial inventory accounting
    (iii)   general administration
    (iv)   general ledger

    [A]   ERP data warehouse
    [B]   enterprise integration and administration
    [C]   enterprise operation
    [D]   enterprise planning and monitoring

1 13 The . .   contains information about raw material to support product or for maintenance repair and operation to support the administration or operations of the enterprise

    [A]   central database
    [B]   supplier file
    [C]   order file
    [D]   purchase order file

1 14 Which of the following are capabilities of the supply chain visibility and event management module?

    (i)   track and trace
    (ii)   notification
    (iii)   classification
    (iv)   reporting

[A]   (i), and (ii)
[B]   (i), (ii) and (iii)
[C]   (i), (ii) and (iv)
[D]   (i), (ii), (iii) and (iv)

1 15   Which of the following are components of information sharing technology?

(i)   bar code and scanning
(ii)   global data synchronization
(iii)   internet
(iv)   image processing

[A]   (i), and (iii)
[B]   (ii) and (iii)
[C]   (i), (ii) and (iii)
[D]   (i), (ii), (iii) and (iv)

1 16   Which one of the following is NOT a benefit of automatic identification technologies (bar codes)?

[A]   improved order preparation
[B]   linkage to individual stock keeping unit
[C]   shipment traceability
[D]   reduced labor costs

1 17   Which of the following are steps in the process to finalize a company's strategy?

(i)   conducting a sensitivity analysis
(ii)   measuring service availability and capability
(iii)   determine the lowest-total-cost network
(iv)   determine the location of warehouses

[A]   (i) and (ii)
[B]   (ii) and (iii)
[C]   (i), (ii) and (iii)
[D]   (i), (ii), (iii) and (iv)

1 18   The _____ focuses on the application and capabilities of key logistics techniques, including transportation, storage, material handling, packaging and information processing

[A]   internal review
[B]   market assessment
[C]   technology assessment
[D]   supplier assessment

1 19   Which step in the planning of a logistics system projects the potential benefits and risks
       associated with performing a logistical analysis and implementing the recommendation?

       [A]   situation analysis
       [B]   supporting logic
       [C]   cost usefulness analysis
       [D]   project work plan

1 20   The   phase in the planning of a logistics system contains

       [A]   defining the implementation plan
       [B]   project planning
       [C]   development of recommendations
       [D]   design implementation

                                                      SECTION A: [20]

SECTION B

ANSWER ANY TWO (2) OF THE THREE (3) QUESTIONS IN THIS SECTION
TOTAL OF 50 MARKS

PLEASE NOTE: ONLY THE FIRST TWO (2) QUESTIONS WILL BE MARKED
IF YOU ANSWERED ALL THREE (3) QUESTIONS IN THIS SECTION

Question 2

Discuss five logistics communication systems that can facilitate information sharing in the supply chain   (25)

Question 3

Explain the Advanced Planning and Scheduling System (APS) by illustrating the process with a figure and by discussing the four components of the process (25)

Question 4

Discuss the trade-off between service and cost by referring to the threshold service level and the service level sensitivity Explain further the finalizing of the strategy, by illustrating with a figure, how logistics cost and the number of warehouses are weighed against each other (25)

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SECTION   B: [50]

TOTAL: 70