



FACULTY/COLLEGE	College of Business and Economics
SCHOOL	Johannesburg Business School
DEPARTMENT	Transport and Supply Chain Management
CAMPUS(ES)	APB
MODULE NAME	Purchasing 3B
MODULE CODE	BIC33B3/PUR03B3
SEMESTER	Second
ASSESSMENT OPPORTUNITY, MONTH AND YEAR	Final Summative Assessment Opportunity 12 November 2019

ASSESSMENT DATE	12 November 2019	SESSION	12:30 – 15:30
ASSESSOR(S)	Dr C Chakamera		
MODERATOR(S)	Mr M E Moshidi (External Moderator)		
DURATION	3 hours (180 min)	TOTAL MARKS	120

NUMBER OF PAGES OF QUESTION PAPER (Including cover page)	9
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INFORMATION/INSTRUCTIONS:

- This is a closed-book assessment.
 - There are 5 questions. **Answer questions 1 & 2 (compulsory) in Section A plus 2 other questions in Section B. (In total you must answer 4 questions)**
 - Answer each question on a different page.
 - Read the questions carefully and answer only what is required.
 - Number your answers clearly and correctly as per the question paper.
 - Write neatly and legibly on both sides of the paper in the answer book, starting on the first page.
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SECTION A

[40 MARKS]

QUESTION 1 (COMPULSORY)

[25 MARKS]

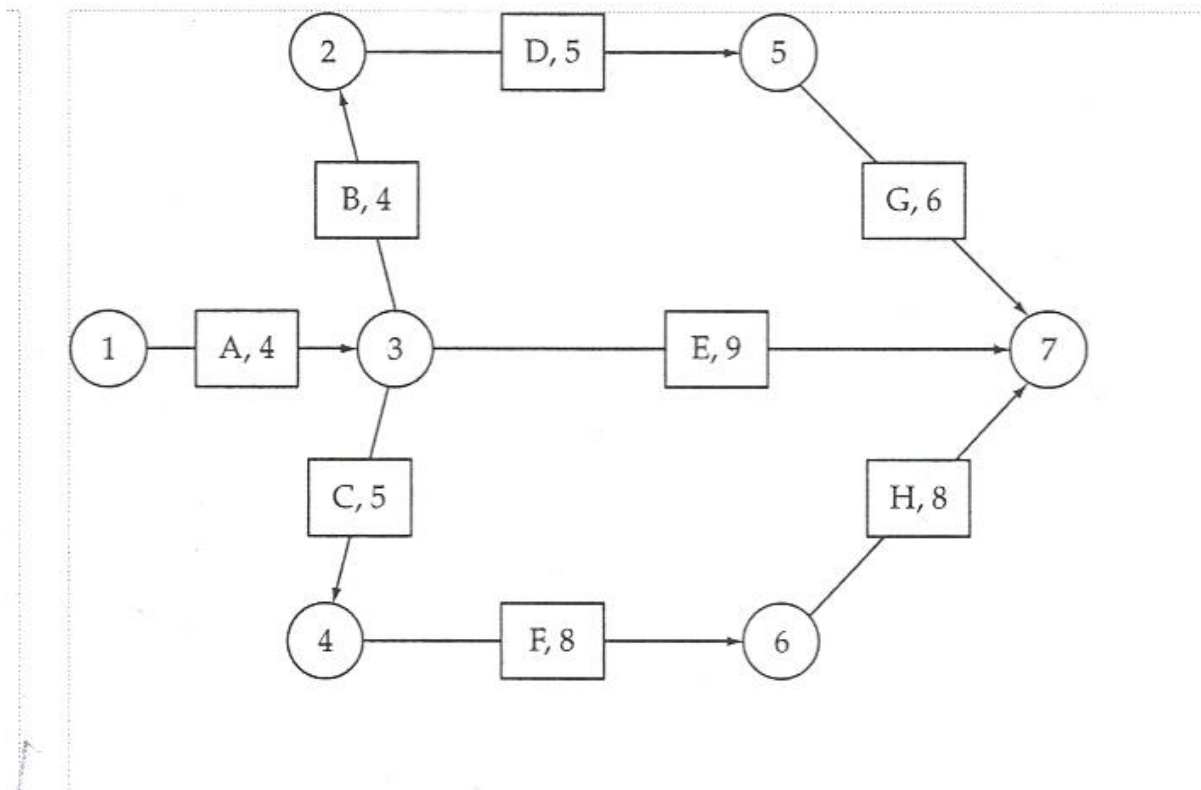
1. What is the major role of supply chain partnerships?
 - a. Bridge the barrier between sellers of a similar item
 - b. Bridge the barrier between seller and buyer
 - c. Bridge the barrier between sellers of different items
 - d. Bridge the barrier between buyers of different items
 - e. Bridge the barrier between buyers of similar items
2. The primary root of the success of the _____ concept lies with the Pacific Rim?
 - a. Just-in-time
 - b. Partnership
 - c. Supply chain management
 - d. Dual purchasing
 - e. Joint venture
3. Which of the following concepts is critical to the essence of the partnership definition?
 - a. Independent
 - b. Joint venture
 - c. Vertical integration
 - d. Special influence
 - e. Synergy
4. You are told that firm A incurs R1000 direct labour cost to produce the 50th unit. Using the concept of the learning curve, what is the labour cost required to produce the 200th under the 85 percent learning curve assumption?
 - a. R850.00
 - b. R722.50
 - c. R720.00
 - d. R700.50
 - e. None of the above
5. In discounts, what is the meaning of 3/8, net 30?
 - a. 8% discount for a payment made within 3 days of a 30-day payment agreement
 - b. 3/8% discount for a payment made within 8 days of a 30-day payment agreement
 - c. 3/8% discount for a payment made within 4 days of a 30-day payment agreement
 - d. 3% discount for a payment made within 8 days of a 30-day payment agreement
 - e. None of the above

The following information is reported by ABC company: Total sales = R25000, Total overhead = R2000, Total job costs = R15000.

6. What is the breakeven of the company?
 - a. R8000
 - b. R5000
 - c. R17000
 - d. R10000
 - e. R4000
7. What best describes a situation whereby a buyer has fallen into a competitive bidding trap?
 - a. When the bidding price is not competitive due to limited suppliers
 - b. When the selling price includes transportation costs
 - c. When the selling price is higher than that of the seller's competitors
 - d. When the selling price includes various tooling and setup costs each time the product is bought
 - e. When the selling price includes various transaction costs
8. Which of the following best describes the diagnosis-related groups (DRG) system?
 - a. The hospital is reimbursed a fluctuating rate based on a patient's diagnosis taking into account the associated costs
 - b. The hospital is reimbursed a flat rate based on a patient's diagnosis plus an additional fee for associated costs
 - c. The use of the diagnosis-related groups (DRG) system causes hospitals to have little incentive to operate efficiently or cost-effectively
 - d. The hospital is reimbursed a flat rate based on a patient's diagnosis regardless of the associated costs
 - e. None of the above
9. Which of the following are the two trends emerging in the health care supply management?
 - a. Application of automation technology and inventory management by group purchasing organisations (GPOs) or middlemen
 - b. Application of automation technology and inventory management by the primary supplier
 - c. Application of automation technology and inventory management by primary buyer
 - d. Application of automation technology and inventory management by both the buyer and supplier
 - e. None of the above
10. What are the two complicating factors unique to health care for inventory management?
 - a. Demand estimations and Quality control
 - b. Safety stock and Demand estimations
 - c. Safety stock and Ordering costs
 - d. Safety stock and Quality control
 - e. Demand estimation and Ordering costs

11. Which of the following is not a manufacturing characteristic?
- Product or service may be produced ahead of time
 - Employees have high contact with customers
 - Products are physical and durable
 - Operations are centralised
 - Operations are capital intensive
12. _____ theory asserts that complexity enhances the risk of opportunism and the need for more costly formal control mechanisms.
- Control cost
 - Complexity
 - Information processing
 - Transaction cost
 - Coordination cost
13. The first step in the sourcing of a bridge design professional services contract for the governmental owner is a request for
- The cost structure of the contractor
 - The price charged by the contractor
 - Experience of the contractor
 - A letter of interest from prequalified bidders
 - Financial information of the contractor
14. What are the two important factors of project management when you are outsourcing professional services?
- Adequacy of site management
 - Price of the outsourced service
 - Relationship between the owner and the contractor
 - Duration of the project
- I and II
 - I and III
 - I and III
 - II and III
 - None of the

The image below is a simple network diagram that illustrates the Critical Path Method (CPM). Use the diagram to answer questions 15 & 16.



15. Which one is the critical path in the diagram?
- A-E
 - A-C-F-H
 - A-B-D-G
 - D. G-D-B-A
 - H-F-C-A
16. How many days does it take to complete the project?
- 25
 - 19
 - 18
 - 13
 - None of the above
17. What best describes the term "protectionism" as applied in offshore sourcing?
- When a country maintains high tariff rates
 - When a country decreases tariff rates
 - Protectionism improves trade among countries
 - Protectionism and free trade are the same
 - None of the above

18. Two-party bargaining can be divided into two types which are
- Distributive and varying-sum
 - Distributive and integrative
 - Integrative and varying-sum
 - Varying-sum and zero-sum
 - Distributive and zero-sum
19. Which of the following does not describe distributive bargaining?
- The parties in distributive bargaining are in basic conflict and competition because of a clash of goals
 - Typically occur when the parties in a bargain have mutual or complementary interests
 - A two-party, varying-sum, or zero-sum schedule is suitable depending upon the payoff schedule involved
 - Distributive bargaining can be modeled and examined by using "game theory"
 - It is often that the more one party gets, the lesser the other gets
20. Which of the following is not true about the zero-sum bargaining situation?
- The profits (and/or losses) of the respective bargainers always sum to the same fixed amount
 - The term zero-sum stands for the fact that what one bargainer gains, the other loses
 - The zero-sum schedule is usually found in retail situations where the merchant's costs are relatively fixed
 - Zero-sum schedule is often the situation in integrative bargaining
 - All of the above
21. Which of the following is not true about integrative bargaining?
- Exists where there are areas of mutual concern and complementary interests
 - The situation is a varying-sum schedule such that, by working together, both parties can increase the total profits available to be divided between them
 - This is often the case between manufacturers and distributors (supply chain members) because of the existence of an ultimate consumer
 - Does not lead to mutual gains (or losses) by both parties
 - All of the above
22. Which of the following is not one of the various names used to describe the amount that must be exceeded in the bargaining interaction in order to obtain a profit?
- Maximum concession point
 - Gross margin
 - Breakeven point
 - Zero-profit point
 - Minimum disposition
23. In traditional systems, inventory management is a _____ activity.
- Manufacturing
 - Customer
 - Distributor
 - Purchasing professional
 - None of the above

24. A car cannot be used to transport
- a. Fresh meat
 - b. Beverages
 - c. Baked goods
 - d. Dairy products
 - e. None of the above
25. The following are included in the rate determination of a particular commodity except
- a. Status of the shipper
 - b. Shipping weight per cubic foot
 - c. Perishability
 - d. Liability to damage
 - e. Excessive length

READ THE CASE STUDY BELOW AND COMPLETE QUESTION 2.

VOLKSWAGEN (VW):

In 1997, Volkswagen (VW) implemented the modular consortium concept of supply chain management at its new assembly complex in their Brazilian plant. In order for this concept to be successful, VW first had to drastically reduce its number of suppliers from 400 to only 8. Then, these 8 suppliers were invited to locate their bases of operations at the VW Brazil plant where they were provided with their own offices and staffs. In addition, VW asked them to each invest an additional \$50 million in their respective modules. For agreeing to this investment and sharing of risk, the partners were guaranteed long-term contracts from 5 to 15 years.

At the facility, seven modules are sequentially integrated with each partner occupying a section of the plant and taking full responsibility for the quality control and mounting of complete assemblies. VW approves the final vehicle and the partners only receive payment on this completely finished product, and not on the individual parts as is the normal industry custom. By basically outsourcing the assembly operation, VW not only reduces its assembly labor costs, but is able to focus on logistics, engineering, quality assurance, and customer service.

This type of partnership has presented unique challenges for VW and the supplier partners to overcome. A plan of daily meetings, constant communication of all the partners, and the integration of 52 information systems providing immediate data access is used to coordinate their many activities. In order to prevent conflicts between the different staffs, wages and benefits are the same and all employees wear identical uniforms featuring a VW logo and their firm's logo. Finally, a master craftsman that takes personal responsibility for the vehicles performs final tests and conduct a pre-delivery functional audit to ensure quality standards and maintain conformity within the production process.

Although implementing the modular consortium has produced many challenges, the benefits are noteworthy. By introducing the modular concept, VW's overall costs are down 15 – 25% and flexibility has increased due to the small number of suppliers. Also, individual customization of orders is made quicker through increased communication and easier decision making. Most importantly, gain sharing rewards of reductions in product defects and order fulfillment times, and improvements in on-time delivery and product performance have been seen throughout the plant. The success of this venture was made possible through planning, communication, and hard work to ensure quality standards – now VW and its supplier partners are reaping rewards through increased revenues.

Source: <https://scm.ncsu.edu/>

QUESTION 2 (COMPULSORY)

[15 MARKS]

- 2.1 What is the supply chain management technique for VW? (1)
- 2.2 What were the benefits of this supply chain management technique to VW? (5)
- 2.3 What were the critical steps taken by VW to successfully achieve the above supply chain management technique? (3)
- 2.4 Identify the measures taken by VW and its partners to overcome the challenges encountered, including avoiding conflicts. (6)

SECTION B (ANSWER ANY TWO OF THE FOLLOWING THREE QUESTIONS)

QUESTION 3

[40 MARKS]

- 3.1 It is important to understand the costs associated with global sourcing, some of which are also found in domestic sourcing. Distinguish between administrative costs, foreign costs and common costs. (6)
- 3.2 There are two germane forms of opportunism associated with outsourcing. Discuss these forms of opportunism. (6)
- 3.3 Traditionally, most manufacturers have formulated a supply strategy around the benefits of a large competitive supplier base. List four (4) benefits of purchasing from many suppliers. (4)
- 3.4 Discuss supplier partnership implementation steps. (12)
- 3.5 Briefly explain the learning curve concept. (3)
- 3.6 Name and discuss three popular discounts the buyer may get from the supplier. (9)

QUESTION 4

[40 MARKS]

- 4.1 The Fixed Order Quantity System, Fixed Order Interval method and Stockless Inventory system can be used to manage inventory in a hospital setting. Discuss these three approaches. (12)
- 4.2 In health care there is a classification of the stockout tolerances. Reisman categorised these stock tolerances as urgency requirements. Discuss these classifications. (11)
- 4.3 Explain the term "explosion-type approach" which can be used in a hospital when producing an item. (3)
- 4.4 The two broad categories of factors that contribute to the overall complexity of the outsourcing engagement are task-specific complexity and location-specific complexity. Discuss these two broad categories of factors. (12)
- 4.5 What is critical path method (CPM) crashing? (2)

QUESTION 5

[40 MARKS]

- 5.1 Use a diagram to show how the Pareto optimal (or Nash) solution to the bargaining problem suggest a method of fair division. N/B Discuss the Pareto optimal diagram and show how the payoff can be distributed between two parties. (12)
- 5.2 Identify five (5) transportation modes and provide two advantages and two disadvantages of each mode. (25)
- 5.3 Describe an operating lease (3)

The End!