



UNIVERSITI
TEKNOLOGI
PETRONAS

FINAL EXAMINATION MAY 2023 SEMESTER

COURSE : TEB1073/TFB1123 - ENTERPRISE RESOURCE
PLANNING
DATE : 10 AUGUST 2023 (THURSDAY)
TIME : 2:30 PM - 5:30 PM (3 HOURS)

INSTRUCTIONS TO CANDIDATES

- SECTION A :**
1. Answer **ALL** questions in the **OMR** sheet.
 2. Use **2B pencil** only.
- SECTION B :**
1. Answer **ALL** questions in the Answer Booklet.
 2. Begin **EACH** answer on a new page in the Answer Booklet given.
 3. Indicate clearly answers that are cancelled, if any.
 4. Where applicable, show clearly steps taken in arriving at the solutions and indicate **ALL** assumptions, if any.
 5. **DO NOT** open this Question Booklet until instructed.

Note :

- i. There are **FIFTEEN (15)** pages in this Question Booklet including the cover page .
- ii. **DOUBLE-SIDED** Question Booklet.

SECTION A

[40 marks]

1. Sales forecast is needed by the _____ functional area so that they can plan their production better.
 - A. Supply Chain Management
 - B. Finance and Accounting
 - C. Sales and Marketing
 - D. Human Resource

2. The following are the information that Sales and Marketing needs except
 - A. Sales orders from customers
 - B. Hiring needs and personnel information from Human Resource
 - C. Cost/Profit analysis from Finance
 - D. Product availability from Supply Chain Management

3. Which of the following that the Supply Chain Management exchange information on production plans, material, and inventory with?
 - A. Supplier
 - B. Finance and Accounting
 - C. Sales and Marketing
 - D. Human Resource

4. What information does Finance and Accounting provide to Sales and Marketing?
 - A. Sales orders from customers
 - B. Hiring needs and personnel information
 - C. Cost/Profit analysis
 - D. Product availability

5. Which of the following functional area that recruits, conduct training, compensates and overseas the evaluation of employees.
- A. Sales and Marketing
 - B. Finance and Accounting
 - C. Supply Chain Management
 - D. Human Resource
6. What is the primary purpose of Enterprise Resource Planning (ERP) system?
- A. Managing human resources within an organization
 - B. Automating financial transactions
 - C. Integrating and streamlining business processes
 - D. Optimizing supply chain operations
7. Which of the following is a key feature of an ERP system?
- A. Real-time data analysis
 - B. Email marketing capabilities
 - C. Social media integration
 - D. Gaming applications
8. Which of the following is a potential benefit of implementing an ERP system?
- A. Increased operational costs
 - B. Improved decision-making capabilities
 - C. Reduced need for employee training
 - D. Enhanced customer service
9. What do the term modules refer to in an ERP system?
- A. Functional areas of the ERP software
 - B. Physical hardware devices used to run the ERP system
 - C. Different versions or editions of the ERP software
 - D. External applications integrated with the ERP system

10. What is the purpose of a centralized database in an ERP system?
- A. Storing and organizing all relevant business data in one location
 - B. Facilitating communication between different departments
 - C. Automating routine administrative tasks
 - D. Providing real-time updates on sales and revenue
11. What is the significance of ERP implementation in business process improvement?
- A. It ensures compliance with industry regulations.
 - B. It reduces the need for employee training.
 - C. It streamlines and standardizes business processes.
 - D. It eliminates the need for financial reporting.
12. The implementation of an ERP system requires a team to be formed. Who are the members of the team?
- i) consultants
 - ii) business users
 - iii) business analysts
 - iv) user interface designers
- A. i, ii, iii
 - B. ii, iii, iv
 - C. i, ii, iv
 - D. i, ii, iii, iv
13. Which of the following is not an ERP product of SAP?
- A. SAP R/3.
 - B. SAP ERP.
 - C. SAP S/4 HANA.
 - D. SAP HANA.

14. The latest version of ERP product of SAP that uses _____ database.
- A. S/4
 - B. HANA
 - C. MySQL
 - D. Microsoft Access
15. Which functional area is responsible for the processing of sales orders?
- A. Supply Chain Management
 - B. Sales and Marketing
 - C. Human Resource
 - D. Finance and Accounting
16. What document is created after a sales order is processed?
- A. Purchase order
 - B. Sales forecast
 - C. Sales invoice
 - D. Credit memo
17. Which of the following steps comes first in the sales order process?
- A. Order placement
 - B. Order delivery
 - C. Order invoicing
 - D. Order forecast.
18. What information is typically included in a sales order?
- A. Vendor payment details.
 - B. Supplier's contact information
 - C. Product description and quantity
 - D. Procurement representative commission rate

19. Which of the following is a potential consequence of not properly managing the sales order process?
- A. Decreased customer satisfaction.
 - B. Increased profit margin
 - C. Improved inventory management
 - D. Enhanced brand reputation
20. How does a sales order differ from a purchase order?
- A. A sales order is issued by the supplier, while a purchase order is issued by the customer.
 - B. A sales order is a request to buy goods, while a purchase order is a request to sell goods.
 - C. A sales order is issued by the customer, while a purchase order is issued by the supplier.
 - D. A sales order is a request to sell goods, while a purchase order is a request to buy goods.
21. Which of the following is not a part of production planning?
- A. Demand forecasting
 - B. Inventory management
 - C. Capacity planning
 - D. Accounting
22. What is the primary goal of production planning?
- A. Maximizing production costs
 - B. Minimizing customer satisfaction
 - C. Optimizing resource utilization
 - D. Increasing lead times

23. Which of the following is a key benefit of effective production planning?
- A. Increased raw material costs
 - B. Reduced inventory holding costs
 - C. Longer order processing times
 - D. Higher defect rates
24. What is the purpose of a production plan?
- A. To track employee attendance
 - B. To schedule maintenance activities
 - C. To forecast sales and demand
 - D. To allocate production resources
25. Which functional area is typically responsible for production planning?
- A. Finance
 - B. Marketing
 - C. Human Resources
 - D. Supply Chain Management
26. What is the input of sales and operation planning phase of the production planning process?
- A. Sales forecast provided by Sales and Marketing
 - B. Production plan
 - C. Sales order plan
 - D. master production schedule
27. What is the output of sales and operations planning phase of the production planning process?
- A. Sales forecast provided by Sales and Marketing
 - B. Production plan
 - C. Sales order plan
 - D. master production schedule

28. What is the difference between make-to-order and assemble-to-order production approaches?
- A. Assemble-to-order combines different general production approaches, but the Make-to-order approach is about fulfilling customer specifications.
 - B. Assemble-to-order approach produces products based on demand, but the Make-to-order approach is about fulfilling customer specifications.
 - C. Assemble-to-order combines different general production approaches, but the Make-to-order approach is to produce products based on sales forecast.
 - D. Assemble-to-order approach produces products based on sales forecast, but the Make-to-order approach produces products to fill specific customer orders.
29. What is the difference between sales and operations planning and demand management phases of the production planning process?
- A. Sales and operations planning is a process to determine what the company should produce whereas demand management is the process of breaking the production plan into daily and weekly.
 - B. Sales and operations input is the production plan whereas the demand management input is the master production schedule.
 - C. Sales and operations output is the sales forecast whereas the output for demand management is the master production schedule.
 - D. Sales and operations planning is a process that takes orders from customers whereas demand management is about handling the demands from the customers.
30. What is the output of the demand management phase of the production planning process?
- A. Sales forecast provided by Sales and Marketing
 - B. Production plan
 - C. Sales order plan
 - D. master production schedule

31. What is a Bill of Material (BOM) in the context of production planning?
- A. A document outlining the production cost of a product
 - B. A list of raw materials, components, and subassemblies required to manufacture a product
 - C. A schedule indicating when production activities should take place
 - D. A report detailing the sales forecast for a specific product
32. Which of the following is the purpose of a BOM?
- A. To track the materials and components used in a product
 - B. To calculate the cost of a product
 - C. To plan the production of a product
 - D. To schedule the production of a product
33. Which of the following is typically included in a BOM?
- A. Sales price of the finished product
 - B. Labor cost for production
 - C. Suppliers contact information
 - D. Quantity of each component required
34. What is Materials Requirement Planning (MRP)?
- A. A process for managing sales forecasting
 - B. A technique for determining optimal inventory levels
 - C. A method for planning and scheduling production activities
 - D. A strategy for outsourcing production to external suppliers
35. What is a key benefit of using MRP in production planning?
- A. Increased lead times for customers
 - B. Reduced inventory holding costs
 - C. Higher defect rates in finished products
 - D. Lower employee productivity

36. What is the role of MRP in production planning?
- A. Identifying potential bottlenecks in the production process
 - B. Determining the optimal production schedule
 - C. Calculating the sales forecast for a specific product
 - D. Monitoring the performance of production workers
37. Which of the following is the defines supply chain management?
- i. The process of planning, organizing, and controlling the flow of goods, services, and information from suppliers to customers.
 - ii. The process of managing the flow of materials, information, and finances through the supply chain.
 - iii. The process of managing the relationships between suppliers, manufacturers, distributors, and retailers.
- A. i, ii
 - B. ii, iii
 - C. i, iii
 - D. i, ii, iii
38. Which of the following is not a key component of supply chain management?
- A. Inventory management
 - B. Demand forecasting
 - C. Order fulfillment
 - D. Accounting
39. What does supply chain management involve?
- A. Managing customer relationships
 - B. Controlling employee payroll
 - C. Overseeing manufacturing processes
 - D. Coordinating the flow of goods and services

40. Which of the following is a key benefit of effective supply chain management?
- A. Increased production costs
 - B. Reduced lead times
 - C. Higher defect rates
 - D. Enhanced employee turnover

SECTION B

[60 marks]

1. a. Define business process. [2 marks]
- b. Differentiate between a business process and business functions. [4 marks]
- c. Describe **TWO (2)** benefits of implementing customer relationship management (CRM). [4 marks]
- d. Describe **TWO (2)** features of CRM software that could assist organizations in optimizing their sales performance. [4 marks]
- e. Assuming that you are the Sales and Marketing Head of Department of a bicycle manufacturer. List **ONE (1)** information that you would provide to and **ONE (1)** information that you would receive from the following functional areas.
- Supply Chain Management
 - Human Resource
 - Accounting and Finance
- [6 marks]

2. a. Companies are aware of the features of ERP systems such as shared database, integrated functional areas and others and the values and benefits of enterprise resource planning (ERP) systems particularly in the aspects of efficiency and effectiveness.

i. Describe **TWO (2)** challenges of ERP implementation in an organization.

[4 marks]

ii. Based on your answer in **part (a)(i)**, propose an initiative that an organization could take to address the challenges.

[4 marks]

b. Bringles Sdn Bhd is a potato chips manufacturer that was established 2 months ago. Currently the owner handles everything from sales and marketing, to finance and human resources. The production and supply chain are managed by the owner's business partner. The business recently purchased a factory location and has only 3 employees to fulfill all the orders from the customers. Despite the sales growth being satisfactory, the business has not yet built up a customer base. The owners of Bringles have plans to use ERP software. The owner is well informed about ERP software, its features and functionalities and its benefits. The owner knows all that it is to know about ERP software. The owner thought that by implementing ERP software, it will make the company's business processes more efficient. The owner approaches an ERP consultant to see whether an ERP implementation would be appropriate for the company. The ERP consultant says "Yes". Do you agree with the ERP consultant? Justify your answer.

[4 marks]

- c. During an IT Steering Committee meeting, an Information Systems (IS) Manager proposed implementing ERP systems for the company. The IS Manager presents a benchmarking study of various ERP vendors and its system functionalities. In the meeting the IS manager also proposed the ERP system of choice. The Production Manager, however, is not convinced about the proposed idea. The Production Manager acknowledges that adopting an ERP system is good for the company but quite skeptical about the system's ability in addressing the company's requirement particularly in the production functional area of the company. The Production Manager claims that the proposed ERP system will not be able to cater to the demands of the company's existing business process.

As the IS Manager, explain to the Production Manager how the ERP system addresses inflexibility.

[4 marks]

- d. Describe **ONE (1)** benefit of implementing ERP systems in an organization with an example.

[4 marks]

3. a. Consider the following scenario of a customer placing an order using credit card as the method of payment.

The customer calls the sales department to place an order. The sales representative confirms the order details with the customer which includes the products, quantity, price, and shipping address. The sales representative creates a sales order and sends it to the production department. The production department checks the inventory levels to see if the products ordered are in stock. If the product(s) are not in stock, the sales representative contacts the customer to inform them of the stock availability and cancel the order. If the products are in stock, the finance department will check the validity of the card with the bank. If the card is not valid, the sales representative will inform the customer that the card is not valid, and the order is cancelled. If the card is valid, the finance department will proceed with processing the payment. The production department will then pick the products from the warehouse and prepare them for shipping. The shipping department will schedule the delivery to the customer's address. Finally, the customer will receive the ordered products as scheduled.

Draw a swimlane diagram that depicts the customer online ordering process.

[8 marks]

- b. Differentiate between the Make-to-stock and Make-to-order by giving an example.

[4 marks]

- c. List the steps in a production planning process.

[4 marks]

- d. Differentiate between customer relationship management and supply chain management.

[4 marks]

-END OF PAPER-

