**Section: Question 1**

Question 1 (5 Marks)

Read each question carefully and then select the most suitable answer.

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| **Q1:** | Which of the following about channel intermediaries is false? | **Mark (1)** |
|  | Retailers price the final product | |
|  | Retailers hold and promote products | |
|  | Wholesalers buy from producers and sell small quantities to retailers | |
|  | Agents buy from producers and sell small quantities to retailers | |

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| **Q2:** | Company A engages Company X to transport some machine parts from China to Singapore. Company X then engages Company Y for sea transport and Company Z for land transport.  From Company A’s perspective, this is known as \_\_\_ transport. | **Mark (1)** |
|  | combined | |
|  | multimodal | |
|  | unimodal | |
|  | intermodal | |

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| **Q3:** | Figure 1a below shows a hub-and-spoke model setup by Company S. Given that the total cost of the setup is $2,500.00, and the hub costs $1,300.00.  C:\Users\17046589\AppData\Roaming\Republic Poly\eQuest\_assessmentimages\_assessmentimg_-1164229972_-1080318810.jpeg Figure 1a  Determine the cost of each route for Company S in Figure 1a. | **Mark (1)** |
|  | $150.00 | |
|  | $300.00 | |
|  | $1,200.00 | |
|  | $600.00 | |

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| **Q4:** | \_\_\_\_\_ is the company that is engaged to transport the goods from the seller to the buyer. | **Mark (1)** |
|  | Shipper | |
|  | Notify party | |
|  | Consignee | |
|  | Carrier | |

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| **Q5:** | Which of the following is NOT a reason for packaging?  I. Protection of the product II. Protection of the environment III. Logistics efficiency | **Mark (1)** |
|  | II only | |
|  | None of the answers | |
|  | I only | |
|  | III only | |

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**Section: Question 2**

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| **Q6:** | Question 2 [5 marks]  Figure 2a below shows a sample Bill of Lading (B/L).  C:\Users\17046589\AppData\Roaming\Republic Poly\eQuest\_assessmentimages\_assessmentimg_1330308082_-1676608018.jpeg   Figure 2a: Sample Bill of Lading (B/L) (Source: <https://www.slideshare.net/RealMayer/bill-of-landing>)  a) Identify the following information below. Label all your answers clearly. [3 marks] (i) Shipper name (ii) Vessel name (iii) Port of discharge  (i) ()  (ii) ()  (iii) () | **Mark (3)** |

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| **Q7:** | b) Name TWO (2) other documents that may be required during shipping of the documents. [2 marks] | **Mark (2)** |
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|  | Word Count: 5 | Max Words: 1000 |

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**Section: Question 3**

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| **Q8:** | Question 3 [15 marks]  ABC Computer Ltd is an international distributor of computer components and accessories. Currently, the company has two retail outlets in Singapore, with the location and delivery information given in Table 3a below:  Table 3a: Information regarding Retail Outlet P and Q   |  |  |  | | --- | --- | --- | | **Retail Outlets** |  |  | |  | **Outlet P** | **Outlet Q** | | **X** | 11.00 | 42.00 | | **Y** | 27.00 | 30.00 | | **No. of deliveries per week** | 3 | 2 |   After the recent board meeting, ABC Computer Ltd decides to relocate its regional headquarter to Singapore. The company has sourced two sites, Site A and Site B, with the coordinates given in Table 3b below:  Table 3b: Coordinates of Retail Outlet P and Q   |  |  |  | | --- | --- | --- | | **Potential Sites** |  |  | |  | **Site A** | **Site B** | | **X** | 24.00 | 35.00 | | **Y** | 25.00 | 22.00 |   a) Calculate the load-distance value (i) to (iii) in Table 3c. Round all your answers to two decimal places. [3 marks]  Table 3c: Summary table   |  |  |  | | --- | --- | --- | |  | **Site A** | **Site B** | | **Outlet P** | (i) |  | | **Outlet Q** | (ii) |  | | **Total** |  | (iii) |   (i) ()  (ii) ()  (iii) () | **Mark (3)** |

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| **Q9:** | b) Name one disadvantage of using the load-distance method. [1 mark] | **Mark (1)** |
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|  | Word Count: 16 | Max Words: 1000 |

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| **Q10:** | Given two more potential sites, Potential Site C and Potential Site D, are sourced and the result is given in Table 3d below.  Table 3d: Information regarding Potential Site C and D   |  |  |  | | --- | --- | --- | |  | **Site C** | **Site D** | | **Total** | 83.12 | 90.36 |   c) Between Potential Site C and Potential Site D, which site is “better”? Explain your answer clearly. [2 marks] | **Mark (2)** |
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|  | Word Count: 27 | Max Words: 1000 |

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| **Q11:** | d) Name and explain clearly TWO (2) functions of freight terminals. [2 marks] | **Mark (2)** |
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|  | Word Count: 62 | Max Words: 1000 |

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| **Q12:** | One of the products carried by ABC Computer Ltd is computer hard disk, which weights 0.25kg (or 250g) each. It is shipped from USA to Singapore using 20-Ft GP container (gross weight of 24,000kg and tare of 2,330kg).  e) Based on the statement above, which transportation mode (**air transportation** or **sea transportation**) is likely to be used for the shipping of computer hard disk from USA to Singapore? Explain your answer clearly. [1 mark]  Answer: () | **Mark (1)** |

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| **Q13:** | f) Based on the weight alone, determine the number of hard disk that ABC Computer Ltd can ship with a 20-Ft GP container. Show all your answers clearly. [2 marks] | **Mark (2)** |
|  |  | |
|  | Word Count: 19 | Max Words: 1000 |

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| **Q14:** | g) List THREE (3) reasons why air carriers prefer containerized shipments. [3 marks] | **Mark (3)** |
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|  | Word Count: 39 | Max Words: 1000 |

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| **Q15:** | h) Identify ONE (1) difference between refrigerated container and insulated container. [1 mark] | **Mark (1)** |
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|  | Word Count: 32 | Max Words: 1000 |

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**Section: Question 4**

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| **Q16:** | Question 4 [15 marks]  XYZ Health Pte Ltd is a company that imports and distributes health products from Japan. The company has a period contract with Flash Transport, which allows Flash Transport to transport the products from Tokyo Airport / Seaport, to XYZ Health Pte Ltd warehouse in Singapore. Table 4a and 4b below shows the transportation cost and transit time that Flash Transport operates.  Table 4a: Transportation cost and Transit time from Tokyo Airport / Seaport to Singapore Airport / Seaport   |  |  |  | | --- | --- | --- | | **From Tokyo Seaport / Airport to Singapore Seaport / Airport** |  |  | | **Mode** | **Air** | **Sea** | | **Transportation cost per bottle ($)** | $1.00 | $0.35 | | **Transit time (days)** | 3 | 6 |   Table 4b: Transportation cost and Transit time from Singapore Airport / Seaport to Warehouse   |  |  |  | | --- | --- | --- | | **From Singapore Airport / Seaport to Warehouse** |  |  | | **Mode** | **Small Truck** | **Big Truck** | | **Transportation cost per bottle ($)** | $0.25 | $0.35 | | **Transit time (days)** | 3 | 3 |   Other than the transportation cost, Flash Transport also charges XYZ Health Pte Ltd a miscellaneous charge, depending on the mode of transport used, as shown in Table 4c below. There is also an inventory carrying cost of 20% of price per item per month.  Table 4c: Miscellaneous charge by Flash Transport   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | **Air - Small Truck** | **Air - Big Truck** | **Sea - Small Truck** | **Sea - Big Truck** | | **Total Miscellaneous Charge** | $300.00 | $300.00 | $250.00 | $250.00 |   For a particular month, XYZ Health Pte Ltd wants to bring in 1,500 bottles of health products from Japan, and the price of $4.00 per bottle.  a) Calculate (i) to (v) in Table 4d. Round all your answers to two decimal places. [6 marks]  Table 4d: Summary Table   |  |  |  |  | | --- | --- | --- | --- | |  |  | **Air - Small Truck** | **Sea - Big Truck** | | **Transportation Cost from Singapore Airport / Seaport to Warehouse** | **Small Truck** |  | (ii) | | **Transportation Cost from Singapore Airport / Seaport to Warehouse** | **Big Truck** |  | (iii) | | **Transportation Cost from Tokyo Airport / Seaport to Singapore Airport / Seaport** | **Air** |  |  | | **Transportation Cost from Tokyo Airport / Seaport to Singapore Airport / Seaport** | **Sea** |  | (iv) | | **Inventory Holding Cost** |  |  | (v) | | **Miscellaneous Cost** |  |  |  | | **Total Cost** |  | (i) |  |   (i) () (ii) () (iii) () (iv) () (v) () | **Mark (6)** |

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| **Q17:** | b) Comparing between Air–Big Truck and Sea–Small Truck, which combined transportation mode is faster? Explain your answer clearly. [2 marks] | **Mark (2)** |
|  |  | |
|  | Word Count: 33 | Max Words: 1000 |

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| **Q18:** | c) Given that XYZ Health Pte Ltd purchases from five independent health product suppliers in Japan and has eight retail customers in Singapore. Calculate the differences in the number of transactions with and without XYZ Health Pte Ltd as intermediary between the five independent health product suppliers and the eight retail customres. Show all your workings clearly and round your answer to the nearest whole number.  Assume only one type of health product is supplied by a supplier to one retail customer. [3 marks] | **Mark (3)** |
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|  | Word Count: 19 | Max Words: 1000 |

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| **Q19:** | d) Based on Figure 4a below, identify the entire distribution channel configuration for XYZ Health Pte Ltd, from the Japanese suppliers to consumers. [2 marks]  C:\Users\17046589\AppData\Roaming\Republic Poly\eQuest\_assessmentimages\_assessmentimg_-1948391204_481855171.jpeg Figure 4a: Different types of distribution channel configurations  Answer: () | **Mark (2)** |

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| **Q20:** | e) Name 2 services provided by freight forwarders. [2 marks] | **Mark (2)** |
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|  | Word Count: 18 | Max Words: 1000 |

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**Section: Question 5**

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| **Q21:** | Question 5 [10 marks]  Jacky is planning to ship a box of dimension 45cm (H) x 60cm (B) x 70cm (L) and weighted 40kg to his friend in USA using air freight.  a) Given that the volumetric divisor to be 5000, which weight (actual or volumetric) will the airline company be considering? Explain your answer clearly and show all your workings where necessary. [2 marks] | **Mark (2)** |
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|  | Word Count: 9 | Max Words: 1000 |

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| **Q22:** | Table 5a below shows a summary of costs that Jacky must pay if he is planning to ship another box to his friend in UK, of volume 0.14m3 and weight 0.05 ton.  Table 5a: Summary of costs shipping by sea   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  | **No of Cartons** | **No of Cartons** | **1** | **2** | **3** | | **Ocean Freight** | SGD($) | UOM |  |  |  | | **Ocean freight** | 80 | per RT | (i) |  |  | | **B/L fee (Fixed fee)** | 60 |  |  |  |  | | **Transport fee (minimum 50)** | 100 | per cbm |  |  | (ii) | | **Forklift fee (no minimum charge)** | 70 | per 2 cbm |  | (iii) |  | | **Documentation (Fixed fee)** | 120 |  |  |  |  | | **Custom examination** | 60 |  |  | (iv) |  | | **Terminal Handling Charges (THC)** | 50 | per RT |  | (v) |  | | P**ermit / Tradenet fee** | 70 |  |  |  |  | | **Express B/L fees** | 40 |  |  |  |  |   b) Calculate (i) to (v) shown in Table 5a. Round all your answers to 2 decimal places. [5 marks]  (i) ()  (ii) () (iii) ()  (iv) ()  (v) () | **Mark (5)** |

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| **Q23:** | Table 5b below shows some handling marks that Jacky found on the box he is shipping to his friend in UK  Table 5b: Handling marks   |  |  | | --- | --- | | Handling Marks | Name | | C:\Users\17046589\AppData\Roaming\Republic Poly\eQuest\_assessmentimages\_assessmentimg_1639053618_1722511717.jpeg | (a) | | C:\Users\17046589\AppData\Roaming\Republic Poly\eQuest\_assessmentimages\_assessmentimg_1639053618_-1665316512.jpeg | (b) | | C:\Users\17046589\AppData\Roaming\Republic Poly\eQuest\_assessmentimages\_assessmentimg_1639053618_770636854.jpeg | (c) |   c) Identify the marks shown in Table 5b. Label your answers clearly. [3 marks]  (a) ()  (b) ()  (c) () | **Mark (3)** |

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