

[Manage Quizzes](#) > [View Statistics](#)

View Statistics - Quiz 1 (ch 7 & 8)

☐ Include exempted users in stats

Questions

[Export to CSV](#)[Export to Excel](#)

Chopra ch 7 FCing

forecasting

Question 1 Difficulty: 1

The forecast of demand forms the basis for all strategic and planning decisions in a supply chain.

Average Grade: 0 / 0 (94.4 %)

True

17 (94.44 %)

Standard Deviation: 22.91 %

False

1 (5.56 %)

Point Biserial: 0.09

Discrimination Index: 20.00 %

Question 2 Difficulty: 1

Long-term forecasts have a larger standard deviation of error relative to the mean than short-term forecasts.

Average Grade: 0 / 0 (88.8 %)

True

16 (88.89 %)

Standard Deviation: 31.43 %

False

2 (11.11 %)

Point Biserial: 0.15

Discrimination Index: 0.00 %

Question 3 Difficulty: 1

Forecasts should include both the expected value of the forecast and a measure of forecast error.

Average Grade: 0 / 0 (88.8 %)

True

16 (88.89 %)

Standard Deviation: 31.43 %

False

2 (11.11 %)

Point Biserial: 0.27

Discrimination Index: 40.00 %

Question 4 Difficulty: 1

Aggregate forecasts are usually more accurate than disaggregate forecasts, as they tend to have a smaller standard deviation of error relative to the mean.

Average Grade: 0 / 0 (94.4 %)

True

17 (94.44 %)

Standard Deviation: 22.91 %

False  1 (5.56 %)

Point Biserial: 0.33

Discrimination Index: 20.00 %

Question 5 Difficulty: 1

The *forecast error* measures the difference between the forecast and the estimate.

Average Grade: 0 / 0 (77.7 %)

True  4 (22.22 %)

Standard Deviation: 41.57 %

→ False  14 (77.78 %)

Point Biserial: 0.10

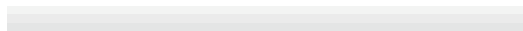
Discrimination Index: 0.00 %

Question 6 Difficulty: 1

The basis for all strategic and planning decisions in a supply chain comes from

→ the forecast of demand  17 (94.44 %)

Average Grade: 0 / 0 (94.4 %)

sales targets  0 (0 %)

Standard Deviation: 22.91 %

profitability projections  1 (5.56 %)

Point Biserial: 0.33

Discrimination Index: 20.00 %

production efficiency goals  0 (0 %)

Question 7 Difficulty: 1

For push processes, a manager must forecast what customer demand will be in order to

plan the service level  0 (0 %)

plan the level of available capacity and inventory  5 (27.78 %)

Average Grade: 0 / 0 (72.2 %)

Standard Deviation: 44.79 %

plan the level of productivity  0 (0 %)

Point Biserial: 0.24

Discrimination Index: 60.00 %

→ plan the level of production  13 (72.22 %)


Question 8 Difficulty: 1

For pull processes, a manager must forecast what customer demand will be in order to plan the level of available capacity and inventory.

Average Grade: 0 / 0 (72.2 %)

→ True  13 (76.47 %)

Standard Deviation: 44.79 %

False  4 (23.53 %)

Point Biserial: 0.05

Discrimination Index: 20.00 %

Question 9 Difficulty: 1

Production can utilize forecasts to make decisions concerning

→ scheduling		17 (94.44 %)
sales-force allocation		0 (0 %)
promotions		0 (0 %)
hiring decisions		1 (5.56 %)

Average Grade: 0 / 0 (94.4 %)
Standard Deviation: 22.91 %
Point Biserial: 0.26
Discrimination Index: 20.00 %

Question 10 Difficulty: 1

One of the characteristics of forecasts is

→ aggregate forecasts are usually more accurate than disaggregate forecasts		15 (83.33 %)
disaggregate forecasts are usually more accurate than aggregate forecasts		2 (11.11 %)
short-term forecasts are usually less accurate than long-term forecasts		0 (0 %)
long-term forecasts are usually more accurate than short-term forecasts		1 (5.56 %)

Average Grade: 0 / 0 (83.3 %)
Standard Deviation: 37.27 %
Point Biserial: 0.36
Discrimination Index: 40.00 %

Question 11 Difficulty: 1

Forecasting methods that use historical demand to make a forecast are known as

qualitative forecasting methods		1 (5.56 %)
→ time series forecasting methods		15 (83.33 %)
causal forecasting methods		2 (11.11 %)

Average Grade: 0 / 0 (83.3 %)
Standard Deviation: 37.27 %
Point Biserial: 0.23
Discrimination Index: 40.00 %

simulation
forecasting methods 0 (0 %)

Question 12 Difficulty: 1

Qualitative forecasting methods are most appropriate when

- there is good historical data available 5 (27.78 %)
- there is little historical data available 11 (61.11 %) Average Grade: 0 / 0 (61.1 %)
- experts do not have critical market intelligence 1 (5.56 %) Standard Deviation: 48.75 %
- forecasting demand into the near future 1 (5.56 %) Point Biserial: 0.04
- Discrimination Index: 0.00 %

Section Average Grade: 0.01 / 0.01 (83.75 %)

Chopra ch 8 agg planning

agg plan

Question 13 Difficulty: 1

The assignment of work to specific machines and people are examples of aggregate planning.

- True 9 (50 %) Average Grade: 0 / 0 (50 %)
- False 9 (50 %) Standard Deviation: 50.00 %
- Point Biserial: 0.32
- Discrimination Index: 60.00 %

Question 14 Difficulty: 1

An advantage of a chase strategy in aggregate planning is that inventories can be kept relatively low.

- True 17 (100 %) Average Grade: 0 / 0 (94.4 %)
- False 0 (0 %) Standard Deviation: 22.91 %
- Point Biserial: 0.26
- Discrimination Index: 20.00 %

Question 15 Difficulty: 1

Which of the following is not an input to the aggregate planning process?

resources 0 (0 %)

available

demand

forecast

0 (0 %)

policies on

workforce

changes

5 (29.41 %)

Average Grade: 0 / 0 (61.1 %)

Standard Deviation: 48.75 %

Point Biserial: 0.42

Discrimination Index: 80.00 %



master

production

schedule

11 (64.71 %)

cost

information

1 (5.88 %)

Question 16 Difficulty: 1

The goal of aggregate planning is to build a plan that satisfies demand while minimizing downtime

Average Grade: 0 / 0 (50 %)

True

9 (50 %)

Standard Deviation: 50.00 %



False

9 (50 %)

Point Biserial: 0.18

Discrimination Index: 60.00 %

Question 17 Difficulty: 1

An aggregate planning horizon is usually between three and five years

Average Grade: 0 / 0 (77.7 %)

True

4 (22.22 %)

Standard Deviation: 41.57 %



False

14 (77.78 %)

Point Biserial: 0.40

Discrimination Index: 60.00 %

Question 18 Difficulty: 1

The aggregate planner must make a trade-off between capacity, inventory, and backlog costs

Average Grade: 0 / 0 (88.8 %)



True

16 (88.89 %)

Standard Deviation: 31.43 %

False

2 (11.11 %)

Point Biserial: 0.21

Discrimination Index: 20.00 %

Question 19 Difficulty: 1

A chase strategy for aggregate planning synchronizes production rate with the demand rate.

Average Grade: 0 / 0 (88.8 %)



True

16 (88.89 %)

Standard Deviation: 31.43 %

False

2 (11.11 %)

Point Biserial: 0.19

Discrimination Index: 20.00 %

Question 20 Difficulty: 1

Aggregate planning is concerned with determining

the production level, sales level, and capacity for each period	<div><div></div></div>	3 (16.67 %)	Average Grade: 0 / 0 (61.1 %) Standard Deviation: 48.75 % Point Biserial: 0.46 Discrimination Index: 100.00 %
the demand level, inventory level, and capacity for each period	<div><div></div></div>	4 (22.22 %)	
→ the production level, inventory level, and capacity for each period	<div><div></div></div>	11 (61.11 %)	
the production level, forecast errors, and capacity for each period	<div><div></div></div>	0 (0 %)	

Question 21 Difficulty: 1

The length of the planning horizon in aggregate planning is usually between

one and three months	<div><div></div></div>	0 (0 %)	Average Grade: 0 / 0 (61.1 %) Standard Deviation: 48.75 % Point Biserial: 0.40 Discrimination Index: 80.00 %
→ three and eighteen months	<div><div></div></div>	11 (68.75 %)	
one and three years	<div><div></div></div>	1 (6.25 %)	
three and five years	<div><div></div></div>	4 (25 %)	

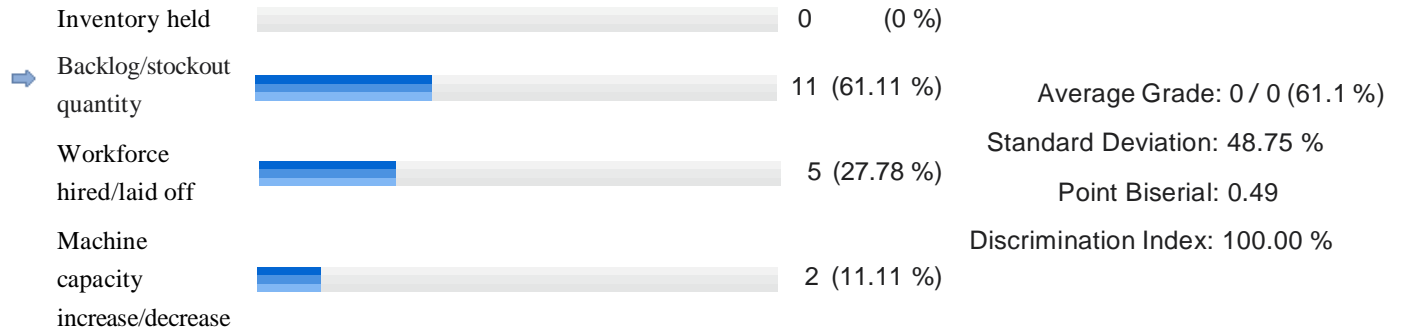
Question 22 Difficulty: 1

An aggregate planner requires information on constraints. Which of the following is one of the typical constraints for an aggregate planner?

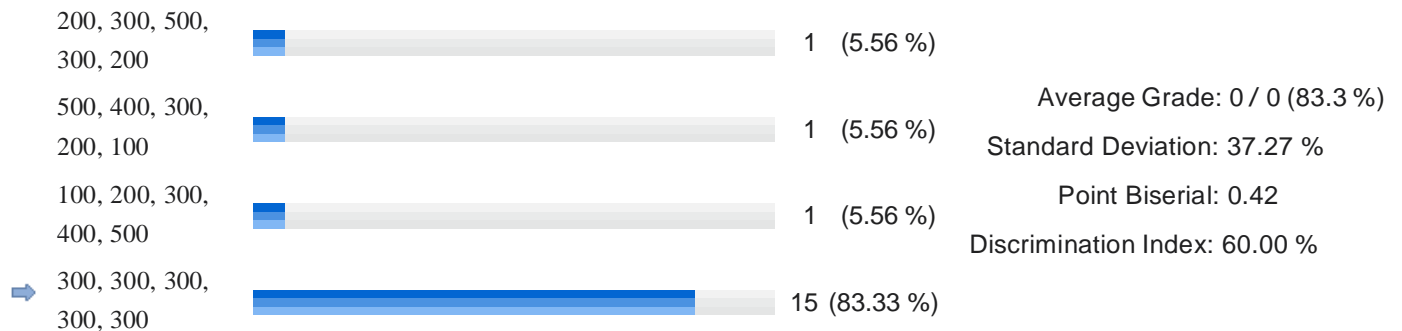
Inventory holding cost	<div><div></div></div>	4 (23.53 %)	Average Grade: 0 / 0 (61.1 %) Standard Deviation: 48.75 % Point Biserial: 0.41 Discrimination Index: 80.00 %
Labor/machine hours required per unit	<div><div></div></div>	2 (11.76 %)	
Stockout or backlog cost	<div><div></div></div>	0 (0 %)	
→ Limits on overtime	<div><div></div></div>	11 (64.71 %)	

Question 23 Difficulty: 1

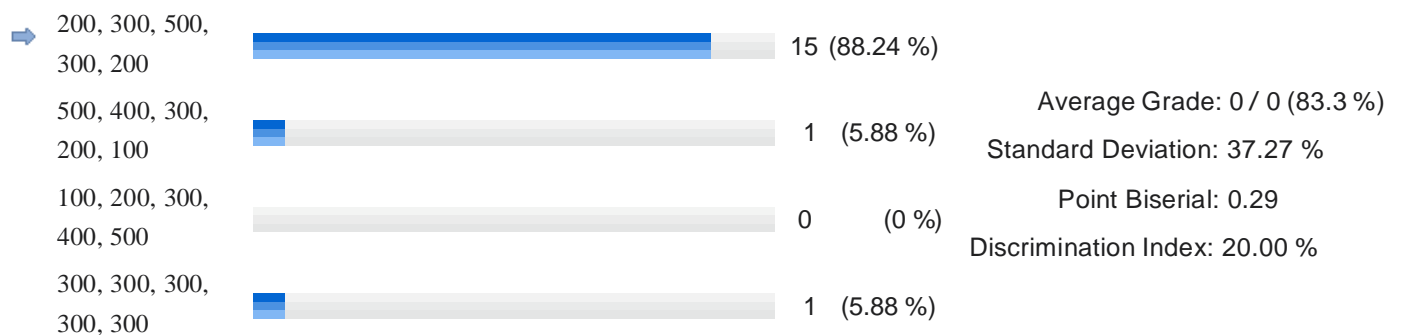
_____ is used to determine customer service levels

**Question 24** Difficulty: 1

Demand is forecast for the next five months as 200, 300, 500, 300, 200. The production planner decides to adopt a level strategy, so over the next five months they should produce

**Question 25** Difficulty: 1

Demand is forecast for the next five months as 200, 300, 500, 300, 200. The production planner decides to adopt a chase strategy, so over the next five months they should produce



Section Average Grade: 0.01 / 0.01 (70.91 %)

Chopra ch 8 LP

LP

Question 26 Difficulty: 1

Non binding constraints in linear programming can have a surplus only if the left-hand side is greater than the right hand side

Average Grade: 0 / 0 (33.3 %)

→ True	<div><div></div></div>	6 (37.5 %)
False	<div><div></div></div>	10 (62.5 %)

Standard Deviation: 47.14 %

Point Biserial: 0.22

Discrimination Index: 40.00 %

Question 27 Difficulty: 1

Which of the following could not be linear programming problem constraint?

$3x + 2y \leq 10$	<div><div></div></div>	1 (5.88 %)
$3x + 2y \geq 10$	<div><div></div></div>	0 (0 %)
$3x + 2y = 10$	<div><div></div></div>	1 (5.88 %)
$3x + 2y + 5z \leq 200$	<div><div></div></div>	0 (0 %)
→ $3x + 2y$	<div><div></div></div>	15 (88.24 %)

Average Grade: 0 / 0 (83.3 %)

Standard Deviation: 37.27 %

Point Biserial: 0.19

Discrimination Index: 40.00 %

Question 28 Difficulty: 1

The operations manager for the Blue Moon Brewing Co. produces two beers: Lite (L) and Dark (D). Two of his resources are constrained: production time, which is limited to 8 hours (480 minutes) per day; and malt extract (one of his ingredients), of which he can get only 675 gallons each day. To produce a keg of Lite beer requires 2 minutes of time and 5 gallons of malt extract, while each keg of Dark beer needs 4 minutes of time and 3 gallons of malt extract. Profits for Lite beer are \$3.00 per keg, and profits for Dark beer are \$2.00 per keg.

What is the objective function?

$Z = 2L + 3D$	<div><div></div></div>	0 (0 %)
→ $Z = 3L + 2D$	<div><div></div></div>	13 (76.47 %)
$Z = 4L + 2D$	<div><div></div></div>	1 (5.88 %)
$Z = 2L + 4D$	<div><div></div></div>	1 (5.88 %)
$Z = 5L + 3D$	<div><div></div></div>	2 (11.76 %)

Average Grade: 0 / 0 (72.2 %)

Standard Deviation: 44.79 %

Point Biserial: 0.31

Discrimination Index: 60.00 %

Question 29 Difficulty: 1

A solution to a linear programming solution (graphical or otherwise) will always be at a corner point.

→ True	<div><div></div></div>	13 (76.47 %)
False	<div><div></div></div>	4 (23.53 %)

Average Grade: 0 / 0 (72.2 %)

Standard Deviation: 44.79 %

Point Biserial: 0.25

Discrimination Index: 40.00 %

Question 30 Difficulty: 1

The simplex method (using Solver) to solving problems can only handle two decision variables.

True	<div><div></div></div>	5 (31.25 %)
→ False	<div><div></div></div>	11 (68.75 %)

Average Grade: 0 / 0 (61.1 %)

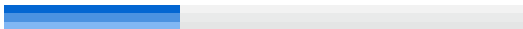
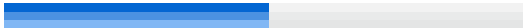


Standard Deviation: 48.75 %

Point Biserial: 0.33

Discrimination Index: 60.00 %

Question 31 Difficulty: 1

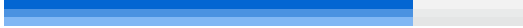




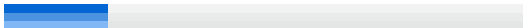
slack is: (more than one answer is possible!)

- when the left-hand side is less than the right hand side  11 (61.11 %)
- can ONLY occur in a \leq constraint  9 (50 %)
- can ONLY occur in a \geq constraint  5 (27.78 %)
- is the same as "surplus"  7 (38.89 %)

Average Grade: 0 / 0 (77.7 %)
 Standard Deviation: 41.57 %
 Point Biserial: n/a
 Discrimination Index: 60.00 %

Question 32 Difficulty: 1


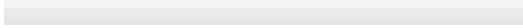
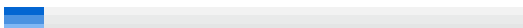
The four components of a linear programming model are: (select all that apply!)

- objective function  16 (88.89 %)
- decision variables  16 (88.89 %)
- constraints  14 (77.78 %)
- parameters  12 (66.67 %)
- feasible solution space  2 (11.11 %)
- nonnegativity  4 (22.22 %)

Average Grade: 0 / 0 (88.8 %)
 Standard Deviation: 31.43 %
 Point Biserial: n/a
 Discrimination Index: 40.00 %

Question 33 Difficulty: 1

A redundant constraint:


- does not form a unique boundary to the feasible solution space  15 (93.75 %)
- is the same as slack  0 (0 %)
- is more restrictive than another constraint  1 (6.25 %)

Average Grade: 0 / 0 (83.3 %)
 Standard Deviation: 37.27 %
 Point Biserial: 0.36
 Discrimination Index: 40.00 %

Section Average Grade: 0.01 / 0.01 (71.49 %)

[View Statistics - Quiz 2 \(ch 15 & 17\)](#)

Question Details

[Export to CSV](#)[Export to Excel](#)☐ Has Start Date 3/30/...☐ Has End Date 4/6/2...[Apply](#)

(Number of First Attempts: 10)


[What do the statistics on this page mean?](#)

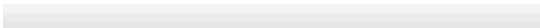
Chopra ch 15 sourcing

Question 1 Difficulty: 1

Sourcing processes include the selection of suppliers, design of supplier contracts, product design collaboration, procurement of material, and evaluation of supplier performance.

Average Grade: 0 / 0 (100 %)

→ True  10 (100 %)

False  0 (0 %)

Standard Deviation: 0.00 %

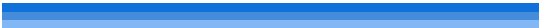
Point Biserial: n/a


Discrimination Index: 0.00 %

Question 2 Difficulty: 1

A reliable supplier has low variability of lead time, whereas an unreliable supplier has high variability.

Average Grade: 0 / 0 (100 %)

→ True  10 (100 %)

False  0 (0 %)

Standard Deviation: 0.00 %


Point Biserial: n/a

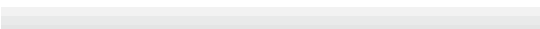
Discrimination Index: 0.00 %

Question 3 Difficulty: 1

As the replenishment lot size decreases, the cycle inventory at the firm grows, thus increasing the cost of holding inventory.

Average Grade: 0 / 0 (30 %)

True  7 (70 %)

→ False  3 (30 %)

Standard Deviation: 45.83 %

Point Biserial: 0.33

Discrimination Index: 50.00 %

Question 4 Difficulty: 1

A production material that lies on the high end of both the value/cost scale and the criticality scale is categorized as a strategic item.

Average Grade: 0 / 0 (80 %)

→ True	<div><div></div></div>	8 (80 %)	Standard Deviation: 40.00 %
False	<div><div></div></div>	2 (20 %)	Point Biserial: 0.22
			Discrimination Index: 50.00 %

Question 5 Difficulty: 1

The process by which companies acquire raw materials, components, products, services, and other resources from suppliers to execute their operations is

→ procurement	<div><div></div></div>	8 (80 %)	Average Grade: 0 / 0 (80 %)
sourcing	<div><div></div></div>	2 (20 %)	Standard Deviation: 40.00 %
supplier scoring and assessment	<div><div></div></div>	0 (0 %)	Point Biserial: -0.10
supplier selection	<div><div></div></div>	0 (0 %)	Discrimination Index: 0.00 %

Question 6 Difficulty: 1

Effective sourcing processes within a firm can

→ improve profits for the firm and total supply chain surplus	<div><div></div></div>	9 (90 %)	Average Grade: 0 / 0 (90 %)
reduce profits for the firm and total supply chain surplus	<div><div></div></div>	1 (10 %)	Standard Deviation: 30.00 %
reduce total supply chain surplus	<div><div></div></div>	0 (0 %)	Point Biserial: 0.74
reduce profits for the firm	<div><div></div></div>	0 (0 %)	Discrimination Index: 50.00 %

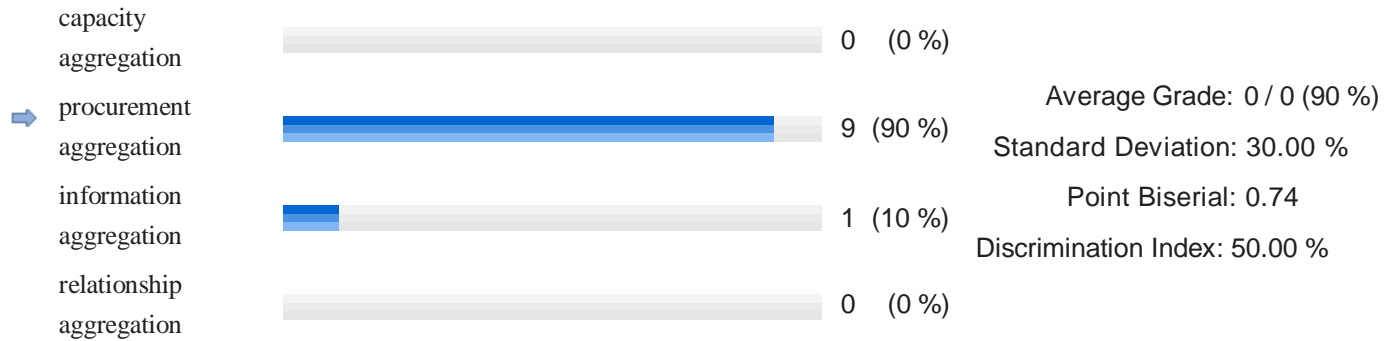
Question 7 Difficulty: 1

A third party can increase the supply chain surplus by aggregating demand across multiple firms and gaining production economies of scale that no single firm can on its own. This is called

→ capacity aggregation	<div><div></div></div>	8 (80 %)	Average Grade: 0 / 0 (80 %)
inventory aggregation	<div><div></div></div>	1 (10 %)	Standard Deviation: 40.00 %
warehouse aggregation	<div><div></div></div>	0 (0 %)	Point Biserial: 0.85
relationship aggregation	<div><div></div></div>	1 (10 %)	Discrimination Index: 100.00 %

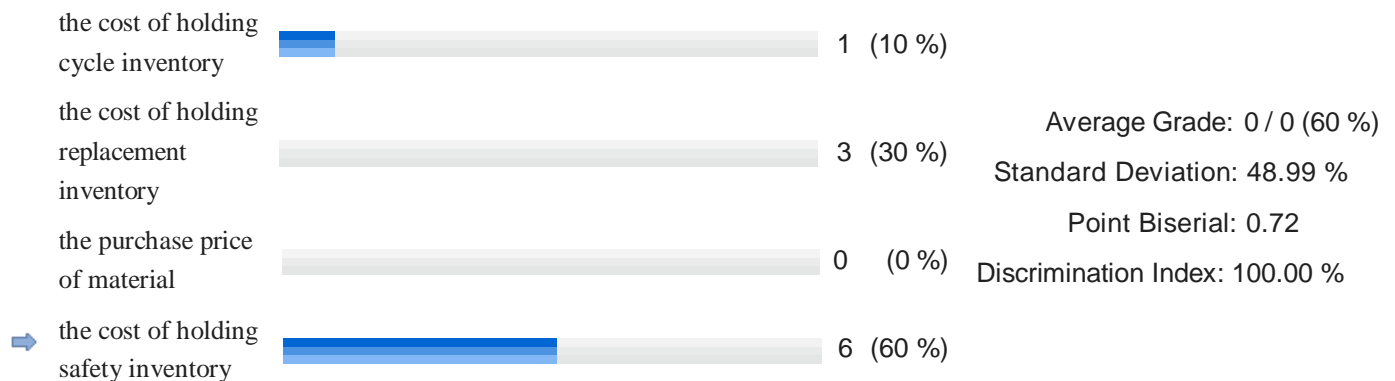
Question 8 Difficulty: 1

A third party increases the supply chain surplus if it aggregates the sourcing for many small players and facilitates economies of scale in ordering, inbound transportation and production. This is called



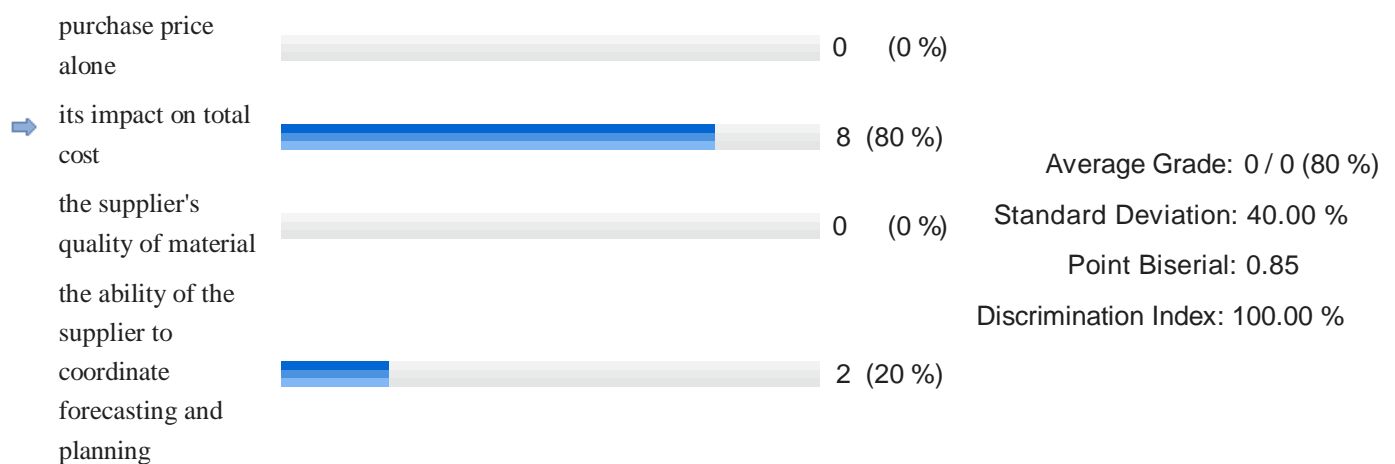
Question 9 Difficulty: 1

Scoring the performance of suppliers in terms of replenishment lead time thus allows the firm to evaluate the impact each supplier has on



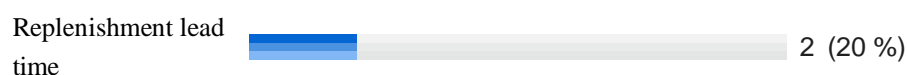
Question 10 Difficulty: 1

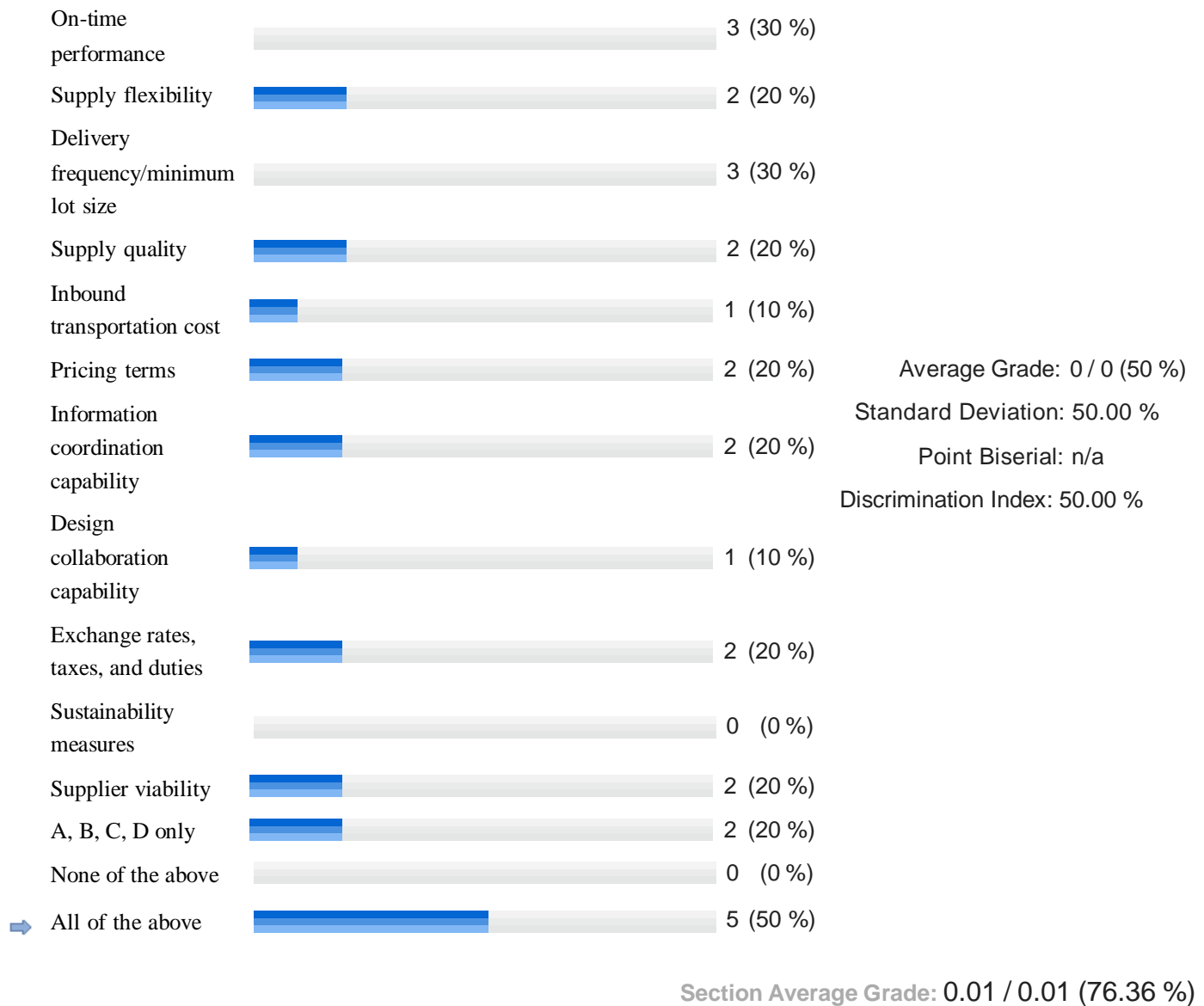
Supplier performance should be compared based on



Question 11 Difficulty: 1

When scoring and assessing suppliers, the following factors other than quoted price must be considered





Chopra ch 17 sustainability

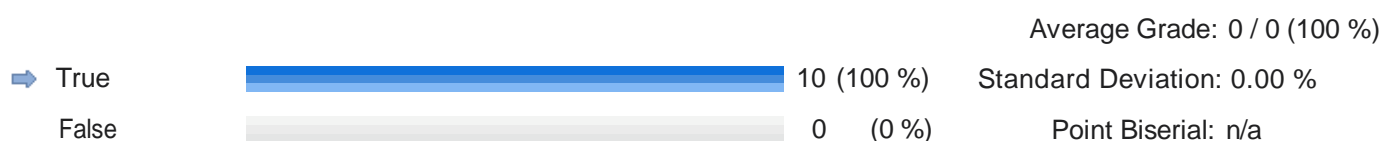
Question 12 Difficulty: 1

A focus on sustainability allows a supply chain to better serve more environmentally conscious customers while often improving supply chain performance



Question 13 Difficulty: 1


A firm's new sustainability improvement initiative is best begun by focusing on resource reduction activities.




Question 14 Difficulty: 1

For most firms, the extent of direct emissions is typically only a small fraction of the extent of indirect emissions in the supply chain.

Average Grade: 0 / 0 (100 %)

→ True  10 (100 %)

False  0 (0 %)

Standard Deviation: 0.00 %


Point Biserial: n/a


Discrimination Index: 0.00 %

Question 15 Difficulty: 1

Most supply chain design innovations that lower transportation costs paradoxically tend to increase fuel consumption and emissions.

Average Grade: 0 / 0 (80 %)

True  2 (20 %)

→ False  8 (80 %)

Standard Deviation: 40.00 %


Point Biserial: 0.54

Discrimination Index: 50.00 %

Question 16 Difficulty: 1

Which of these statements is best?

Benefits and costs
of sustainability
programs fall
equally across all
supply chain
members
throughout most
initiatives.

 0 (0 %)

Customers tend to
be vocal about
sustainability and
back up those
words with their
purchase
decisions.

 2 (20 %)

Average Grade: 0 / 0 (70 %)

Standard Deviation: 45.83 %

Point Biserial: 0.78

Discrimination Index: 100.00 %

→ It is more difficult
to maintain a focus
on sustainability
for a supply chain
than for an
individual firm.

 7 (70 %)

Sustainability
programs typically

offer a clear and substantive ROI figure throughout their development and deployment.

 1 (10 %)

Question 17 Difficulty: 1

Which of these illustrates the tragedy of the commons?

A major automotive manufacturer receives a shipment of faulty air bags and installs them anyway since most drivers don't have accidents.

 0 (0 %)

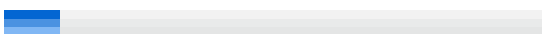
→ Major industrialized nations generate the most pollution but poorer countries near the equator are most affected.

 8 (80 %)

Each apartment dweller has a kitchen trash bag and carries it to a common dumpster in the apartment complex when it is full.

 1 (10 %)

A bachelor has an impressive saltwater tank of tropical fish and feeds all of them from the same dispenser of fish food.

 1 (10 %)

Average Grade: 0 / 0 (80 %)

Standard Deviation: 40.00 %

Point Biserial: 0.85

Discrimination Index: 100.00 %

Question 18 Difficulty: 1

Which of these approaches to solving the tragedy of the commons is considered a market approach?

Command-and-

control		0 (0 %)	Average Grade: 0 / 0 (80 %) Standard Deviation: 40.00 % Point Biserial: 0.85 Discrimination Index: 100.00 %
Mean absolute deviation		0 (0 %)	
→ Cap-and-trade		8 (80 %)	
Mutual coercion		2 (20 %)	

Question 19 Difficulty: 1

_____ can be used to assess the environmental impacts associated with a product's life from cradle to grave.

CRM		3 (30 %)	Average Grade: 0 / 0 (50 %) Standard Deviation: 50.00 % Point Biserial: 0.54 Discrimination Index: 100.00 %
SRM		2 (20 %)	
→ LCA		5 (50 %)	
MRP		0 (0 %)	

Question 20 Difficulty: 1

What are some opportunities for improved sustainability in various supply chain drivers? select all that apply

→ Facilities can be redesigned to reduce both energy use and emissions		9 (90 %)	Average Grade: 0 / 0 (70 %) Standard Deviation: 45.83 % Point Biserial: n/a Discrimination Index: 50.00 %
→ Products should be designed with a "cradle to cradle" philosophy to decrease landfill inventory and increase the reuse of material		10 (100 %)	
→ Designing products to limit packaging		8 (80 %)	
→ Designing products to improve transportation and storage density		9 (90 %)	
Designing products to limit recycling potential		1 (10 %)	

[Manage Quizzes](#) › [View Statistics](#)



View Statistics - Quiz 3 (ch 11 & 12)

☐ Include exempted users in stats

Question Details

Export to CSV

Export to Excel

☐ Has Start Date 4/20/...☐ Has End Date 4/27/...

Apply

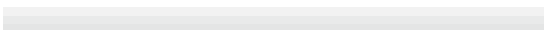
(Number of First Attempts: 7)

What do the statistics on this page mean?

Question 1 Difficulty: 1

EOQ models answer the question of _____ to order, but not the question of when to order (hint: 2 words)

Answers

how much  4 (57.14 %)Other  3 (42.86 %)

Average Grade: 0 / 0 (57.1 %)

Standard Deviation: 49.49 %

Point Biserial: n/a

Discrimination Index: 25.00 %

Question 2 Difficulty: 1

For quantity discounts, the total-cost curve is composed of a portion of single price cost curves

 True  5 (71.43 %)False  2 (28.57 %)

Average Grade: 0 / 0 (71.4 %)


Standard Deviation: 45.18 %

Point Biserial: 1.28

Discrimination Index: 25.00 %

Question 3 Difficulty: 1

The Basic EOQ model assumes demand is variable.

True  1 (14.29 %) False  6 (85.71 %)

Average Grade: 0 / 0 (85.7 %)


Standard Deviation: 34.99 %

Point Biserial: 1.65

Discrimination Index: 25.00 %

Question 4 Difficulty: 1

If ordering costs are = 0, the basic EOQ model is

 a function of carrying cost  4 (57.14 %)equal to average inventory  1 (14.29 %)

Average Grade: 0 / 0 (57.1 %)

cost

tends to

produce

results with

very large

quantities

insensitive

to order size



1 (14.29 %)



1 (14.29 %)

Standard Deviation: 49.49 %

Point Biserial: 2.92

Discrimination Index: 75.00 %

Question 5 Difficulty: 1

A fill rate is the percentage of _____ filled by stock on hand.

shipments



0 (0 %)



demand



5 (71.43 %)

inventory



1 (14.29 %)

safety stock



0 (0 %)

lead time



1 (14.29 %)

Average Grade: 0 / 0 (71.4 %)

Standard Deviation: 45.18 %

Point Biserial: 0.64

Discrimination Index: 0.00 %

Question 6 Difficulty: 1

Aggregating across products, retailers, or suppliers in a single order allows for a reduction in lot size for individual products because fixed ordering and transportation costs are now spread across multiple products, retailers, or suppliers.

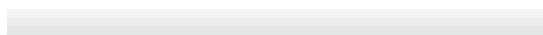


True



7 (100 %)

False



0 (0 %)

Average Grade: 0 / 0 (100 %)

Standard Deviation: 0.00 %

Point Biserial: n/a

Discrimination Index: 0.00 %

Question 7 Difficulty: 1

The average inventory in the supply chain due to either production or purchases in lot sizes that are larger than those demanded by the customer is

annual



0 (0 %)

inventory



0 (0 %)

distribution



0 (0 %)

inventory



0 (0 %)



cycle inventory



7 (100 %)

physical



0 (0 %)

inventory



0 (0 %)

Average Grade: 0 / 0 (100 %)

Standard Deviation: 0.00 %

Point Biserial: n/a

Discrimination Index: 0.00 %

Question 8 Difficulty: 1

Quantity discounts lead to



a significant

buildup of cycle inventory in the supply chain	<div><div></div></div>	5 (71.43 %)
a slight buildup of cycle inventory in the supply chain	<div><div></div></div>	2 (28.57 %)
a decrease in cycle inventory in the supply chain	<div><div></div></div>	0 (0 %)
minor fluctuations of cycle inventory in the supply chain	<div><div></div></div>	0 (0 %)

Average Grade: 0 / 0 (71.4 %)
Standard Deviation: 45.18 %
Point Biserial: 1.92
Discrimination Index: 50.00 %

Question 9 Difficulty: 1

Which of these is typically NOT considered a driver of lot sizing decisions in the supply chain?

Fixed costs associated with production or purchasing	<div><div></div></div>	0 (0 %)
Quantity discounts offered by suppliers	<div><div></div></div>	0 (0 %)
Short-term price discounts offered by suppliers	<div><div></div></div>	0 (0 %)
➡ Order batching at any step further upstream than retail	<div><div></div></div>	7 (100 %)

Average Grade: 0 / 0 (100 %)
Standard Deviation: 0.00 %
Point Biserial: n/a
Discrimination Index: 0.00 %

Question 10 Difficulty: 1

Which of these managerial levers should be used to reduce large lots associated with the fixed cost of production?

→ Reducing changeover times	<div><div></div></div>	7 (100 %)	
Facilitating the aggregation of shipments	<div><div></div></div>	0 (0 %)	Average Grade: 0 / 0 (100 %)
Deployment of suitable technology	<div><div></div></div>	0 (0 %)	Standard Deviation: 0.00 %
Reducing supplier fixed costs	<div><div></div></div>	0 (0 %)	Point Biserial: n/a
			Discrimination Index: 0.00 %

Question 11 Difficulty: 1

Safety inventory is inventory carried for the purpose of satisfying demand that exceeds the amount forecasted for a given period.

→ True	<div><div></div></div>	7 (100 %)	Average Grade: 0 / 0 (100 %)
False	<div><div></div></div>	0 (0 %)	Standard Deviation: 0.00 %
			Point Biserial: n/a
			Discrimination Index: 0.00 %

Question 12 Difficulty: 1

Postponement allows the supply chain to delay product differentiation, which results in disaggregating most of the inventories in the supply chain.

True	<div><div></div></div>	1 (14.29 %)	Average Grade: 0 / 0 (85.7 %)
→ False	<div><div></div></div>	6 (85.71 %)	Standard Deviation: 34.99 %
			Point Biserial: 1.65
			Discrimination Index: 25.00 %

Question 13 Difficulty: 1

The trade-off that a supply chain manager must consider when planning safety inventory is

→ increasing product availability	<div><div></div></div>	
versus increasing inventory holding costs	<div><div></div></div>	7 (100 %)
decreasing product availability	<div><div></div></div>	
versus decreasing	<div><div></div></div>	0 (0 %)

inventory
holding costs
increasing
product
availability
versus raising
the level of
safety inventory
decreasing
product
availability
versus
decreasing the
level of safety
inventory

Average Grade: 0 / 0 (100 %)
Standard Deviation: 0.00 %
Point Biserial: n/a
Discrimination Index: 0.00 %

0 (0 %)

0 (0 %)

Question 14 Difficulty: 1

Lead time is the gap between

→ when an order
is placed and
when it is
received 6 (85.71 %)

when an order
is received
and when it is
put away 0 (0 %)

when an order
is received
and when it is
used 0 (0 %)

when an order
is
acknowledged 1 (14.29 %)
and when it is
received.

Average Grade: 0 / 0 (85.7 %)
Standard Deviation: 34.99 %
Point Biserial: -1.65
Discrimination Index: -25.00 %

Question 15 Difficulty: 1

As the uncertainty of supply or demand _____, the required level of safety inventories _____

→ grows;
increases 7 (100 %)

increases;
decreases 0 (0 %)

decreases;
grows 0 (0 %)

Average Grade: 0 / 0 (100 %)
Standard Deviation: 0.00 %
Point Biserial: n/a
Discrimination Index: 0.00 %

decreases;
increases

0 (0 %)

Question 16 Difficulty: 1

The equation: $ROP = d * LT$ is used for constant demand and lead time

Average Grade: 0 / 0 (71.4 %)

- True  5 (71.43 %)
- False  2 (28.57 %)







Standard Deviation: 45.18 %

Point Biserial: -0.64

Discrimination Index: -25.00 %

Question 17 Difficulty: 1

Determinants of the reorder point include: (select all that apply)

- The rate of demand  7 (100 %)
- The lead time  7 (100 %)
- The extent of demand and/or lead time variability  7 (100 %)
- The degree of stockout risk acceptable to management  6 (85.71 %)
- The product cost  1 (14.29 %)
- The safety stock quantity on hand  4 (57.14 %)



Average Grade: 0 / 0 (42.8 %)

Standard Deviation: 49.49 %

Point Biserial: n/a

Discrimination Index: 75.00 %

Question Details

[Export to CSV](#)[Export to Excel](#)☐ Has Start Date 4/20/...☐ Has End Date 4/27/...[Apply](#)

(Number of First Attempts: 5)

[What do the statistics on this page mean?](#)

Chopra ch 4 5 6

Quiz 4 network design

Question 1 Difficulty: 1

Companies in the same industry often select very different distribution networks, because the choice of the distribution network can be used to achieve a variety of supply chain objectives ranging from low cost to high responsiveness.

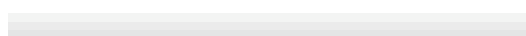
Average Grade: 0 / 0 (100 %)

 True

5 (100 %)

Standard Deviation: 0.00 %

False



0 (0 %)

Point Biserial: n/a

Discrimination Index: n/a

Question 2 Difficulty: 1

Transportation costs are high with drop-shipping because the average outbound distance to the end consumer is large and package carriers are used to shipping the product.

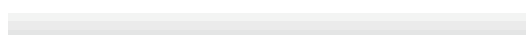
Average Grade: 0 / 0 (100 %)

 True

5 (100 %)

Standard Deviation: 0.00 %

False



0 (0 %)

Point Biserial: n/a

Discrimination Index: n/a

Question 3 Difficulty: 1

A decrease in the response time customers desire increases the number of facilities required in the network.

Average Grade: 0 / 0 (100 %)

 True

5 (100 %)

Standard Deviation: 0.00 %

False



0 (0 %)

Point Biserial: n/a

Discrimination Index: n/a

Question 4 Difficulty: 1

The major disadvantage of a distribution network with local storage is the increased inventory and facility costs.

Average Grade: 0 / 0 (100 %)

➔ True	<div><div></div></div>	5 (100 %)	Standard Deviation: 0.00 %
False	<div><div></div></div>	0 (0 %)	Point Biserial: n/a
			Discrimination Index: n/a

Question 5 Difficulty: 1

To extract the maximum benefit from the online channel for physical goods, firms should keep it separate from their existing supply chain networks.

			Average Grade: 0 / 0 (100 %)
True	<div><div></div></div>	0 (0 %)	Standard Deviation: 0.00 %
➔ False	<div><div></div></div>	5 (100 %)	Point Biserial: n/a
			Discrimination Index: n/a

Question 6 Difficulty: 1

Distribution is a key driver of the overall profitability of a firm because

the addition of distributors only adds cost to the supply chain	<div><div></div></div>	0 (0 %)	Average Grade: 0 / 0 (100 %) Standard Deviation: 0.00 % Point Biserial: n/a Discrimination Index: n/a
➔ it directly impacts both the supply chain cost and the customer experience	<div><div></div></div>	5 (100 %)	
it slows down the responsiveness of the supply chain	<div><div></div></div>	0 (0 %)	
it cannot be developed as a part of supply chain strategy	<div><div></div></div>	0 (0 %)	

Question 7 Difficulty: 1

Outbound transportation costs per unit tend to be

about the same as inbound costs	<div><div></div></div>	0 (0 %)	Average Grade: 0 / 0 (80 %) Standard Deviation: 40.00 % Point Biserial: n/a Discrimination Index: n/a
➔ higher than inbound costs	<div><div></div></div>	4 (80 %)	
lower than inbound costs	<div><div></div></div>	1 (20 %)	
neither higher or lower than inbound costs	<div><div></div></div>	0 (0 %)	

Question 8 Difficulty: 1

As the number of facilities in a supply chain increases

→ the inventory and resulting inventory costs also increase	<div></div>	5 (100 %)	
the inventory and resulting inventory costs decrease	<div></div>	0 (0 %)	
the inventory increases and resulting inventory costs decrease	<div></div>	0 (0 %)	
the inventory decreases and resulting inventory costs increase	<div></div>	0 (0 %)	
			Average Grade: 0 / 0 (100 %)
			Standard Deviation: 0.00 %
			Point Biserial: n/a
			Discrimination Index: n/a

Question 9 Difficulty: 1

Which distribution network design is being used when inventory is not held by manufacturers at the factories, but is held by distributors/retailers in intermediate warehouses and package carriers are used to transport products from the intermediate location to the final customer?

Manufacturer storage with direct shipping	<div></div>	0 (0 %)	
Manufacturer storage with direct shipping and in-transit merge	<div></div>	0 (0 %)	
→ Distributor storage with package carrier delivery	<div></div>	5 (100 %)	
Distributor storage with manufacturer pickup	<div></div>	0 (0 %)	
			Average Grade: 0 / 0 (100 %)
			Standard Deviation: 0.00 %
			Point Biserial: n/a
			Discrimination Index: n/a

Question 10 Difficulty: 1

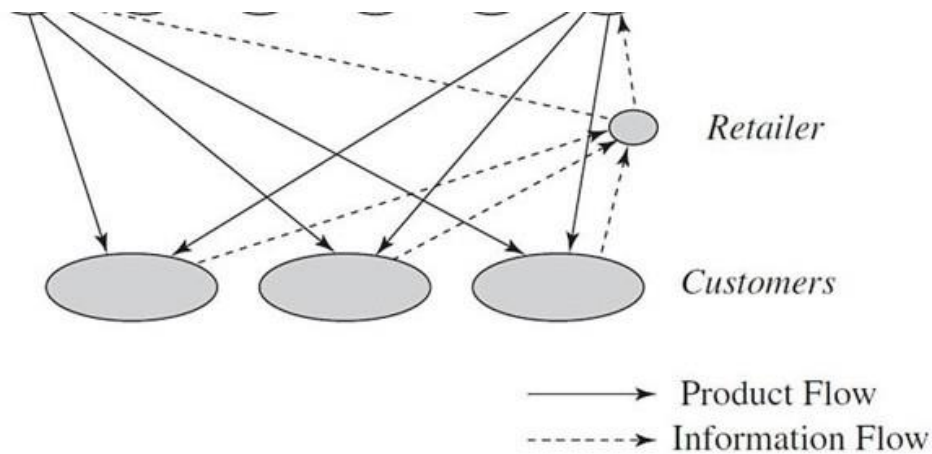
A retailer delivers products all the way to the customer's home without using a package carrier. This type of service is named

full service delivery	<div></div>	0 (0 %)	
turnkey shopping	<div></div>	0 (0 %)	
→ last mile delivery	<div></div>	5 (100 %)	
disintermediation	<div></div>	0 (0 %)	
			Average Grade: 0 / 0 (100 %)
			Standard Deviation: 0.00 %
			Point Biserial: n/a
			Discrimination Index: n/a

Question 11 Difficulty: 1

What type of distribution network is shown in this diagram?





Distributor storage with carrier delivery	0 (0 %)
Manufacturer/distributor storage with customer pickup	1 (20 %)
Distributor storage with last-mile delivery	0 (0 %)
→ Manufacturer storage with direct shipping	4 (80 %)

Average Grade: 0 / 0 (80 %)
Standard Deviation: 40.00 %
Point Biserial: n/a
Discrimination Index: n/a

Question 12 Difficulty: 1

The interaction between a customer and a retailer is primarily in terms of three flows. Which of these items is NOT one of the flows?

information	0 (0 %)	Average Grade: 0 / 0 (100 %)
product	0 (0 %)	Standard Deviation: 0.00 %
funds/money	0 (0 %)	Point Biserial: n/a
→ contracts	5 (100 %)	Discrimination Index: n/a

Question 13 Difficulty: 1

Supply chain *network design decisions* include the location of manufacturing, storage, or transportation-related facilities and the allocation of capacity and roles to each facility.

→ True	5 (100 %)	Average Grade: 0 / 0 (100 %)
False	0 (0 %)	Standard Deviation: 0.00 %
		Point Biserial: n/a
		Discrimination Index: n/a

Question 14 Difficulty: 1

Network design decisions have a significant impact on performance because they determine the supply chain configuration and set constraints within which inventory, transportation, and information can be used to either decrease supply chain cost or increase responsiveness.

→ True	5 (100 %)	Average Grade: 0 / 0 (100 %)
		Standard Deviation: 0.00 %

False

0 (0 %)

Point Biserial: n/a
Discrimination Index: n/a

Question 15 Difficulty: 1

Supply chain *network design decisions* include

only the location of
manufacturing,
storage, or
transportation-
related facilities

0 (0 %)

only the allocation
of capacity and roles
to each facility

0 (0 %)

→ both the location of
manufacturing,
storage, or
transportation-
related facilities and
the allocation of
capacity and roles to
each facility

5 (100 %)

Average Grade: 0 / 0 (100 %)
Standard Deviation: 0.00 %
Point Biserial: n/a
Discrimination Index: n/a

neither the location
of manufacturing,
storage, or
transportation-
related facilities nor
the allocation of
capacity and roles to
each facility

0 (0 %)

Question 16 Difficulty: 1

Facility location decisions have a long-term impact on a supply chain's performance because

→ it is very expensive
to shut down a
facility or move it to
a different location

5 (100 %)

it is not expensive
to shut down a
facility or move it to
a different location

0 (0 %)

Average Grade: 0 / 0 (100 %)
Standard Deviation: 0.00 %

it is advisable to
shut down a facility
or move it to a
different location

0 (0 %)

Point Biserial: n/a
Discrimination Index: n/a

it is cost effective to
shut down a facility

or move it to a
different location

0 (0 %)

Question 17 Difficulty: 1

Duties that must be paid when products and/or equipment are moved across international, state, or city boundaries are referred to as

taxes	<div><div></div></div>	0 (0 %)	Average Grade: 0 / 0 (100 %)
tax incentives	<div><div></div></div>	0 (0 %)	Standard Deviation: 0.00 %
→ tariffs	<div><div></div></div>	5 (100 %)	Point Biserial: n/a
incentives	<div><div></div></div>	0 (0 %)	Discrimination Index: n/a

Question 18 Difficulty: 1

Decisions made during the supply chain design phase regarding significant investments in the supply chain, such as the number and size of plants to build, the number of trucks to purchase or lease, and whether to build or lease warehouse space, cannot be altered in the short term.

			Average Grade: 0 / 0 (100 %)
→ True	<div><div></div></div>	5 (100 %)	Standard Deviation: 0.00 %
False	<div><div></div></div>	0 (0 %)	Point Biserial: n/a
			Discrimination Index: n/a

Question 19 Difficulty: 1

Long-term contracts for both warehousing and transportation requirements will be more effective if the demand and price of warehousing do not change in the future or if the price of warehousing goes up.

			Average Grade: 0 / 0 (100 %)
→ True	<div><div></div></div>	5 (100 %)	Standard Deviation: 0.00 %
False	<div><div></div></div>	0 (0 %)	Point Biserial: n/a
			Discrimination Index: n/a

Question 20 Difficulty: 1

A global supply chain with offshoring would tend to see metrics associated with which of these performance dimensions decline in performance?

→ Inventories	<div><div></div></div>	4 (80 %)	Average Grade: 0 / 0 (80 %)
On time delivery	<div><div></div></div>	0 (0 %)	Standard Deviation: 40.00 %
Supply chain visibility	<div><div></div></div>	1 (20 %)	Point Biserial: n/a
Clarity of order communication	<div><div></div></div>	0 (0 %)	Discrimination Index: n/a

Question 21 Difficulty: 1

Offshoring to low-cost countries is most attractive for products with
large production

→ volume	<div><div></div></div>	4 (80 %)
high variety	<div><div></div></div>	0 (0 %)
low labor content	<div><div></div></div>	1 (20 %)
a high ratio of transportation cost to product value	<div><div></div></div>	0 (0 %)

Average Grade: 0 / 0 (80 %)
Standard Deviation: 40.00 %
Point Biserial: n/a
Discrimination Index: n/a

Question 22 Difficulty: 1

A decision tree is

a graphic device used to evaluate decisions under certainty	<div><div></div></div>	0 (0 %)
→ a graphic device used to evaluate decisions under uncertainty	<div><div></div></div>	4 (80 %)
a tabular device used to evaluate decisions under certainty	<div><div></div></div>	0 (0 %)
a tabular device used to evaluate decisions under uncertainty	<div><div></div></div>	1 (20 %)

Average Grade: 0 / 0 (80 %)
Standard Deviation: 40.00 %
Point Biserial: n/a
Discrimination Index: n/a

Question 23 Difficulty: 1

a tabular device used to evaluate decisions under uncertainty.

Answer: B

Firms should use simulation for evaluating decisions when

underlying decision trees are simple and explicit solutions for the underlying decision tree are difficult to obtain	<div><div></div></div>	0 (0 %)
→ underlying decision trees are very complex and explicit solutions for the underlying decision tree are difficult to obtain	<div><div></div></div>	5 (100 %)
underlying decision trees are simple and explicit solutions for the underlying decision tree are easy to obtain	<div><div></div></div>	0 (0 %)



Average Grade: 0 / 0 (100 %)
Standard Deviation: 0.00 %
Point Biserial: n/a
Discrimination Index: n/a

underlying decision
trees are very
complex and
explicit solutions for
the underlying
decision tree are
easy to obtain

 0 (0 %)

Section Average Grade: 0.02 / 0.02 (95.65 %)

Question Details

[Export to CSV](#)[Export to Excel](#)☐ Has Start Date 4/28/...☐ Has End Date 5/5/2...

Apply

(Number of First Attempts: 5)


[What do the statistics on this page mean?](#)


Chopra ch 14 Transportation

Question 1 Difficulty: 1

Transportation is a significant component of the costs incurred by most supply chains.

Average Grade: 0 / 0 (100 %)

→ True  5 (100 %)

False  0 (0 %)

Standard Deviation: 0.00 %


Point Biserial: n/a

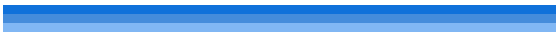
Discrimination Index: 0.00 %

Question 2 Difficulty: 1

The mode of transportation that results in the lowest transportation cost will also lower total costs for a supply chain.

Average Grade: 0 / 0 (100 %)

True  0 (0 %)

→ False  5 (100 %)

Standard Deviation: 0.00 %

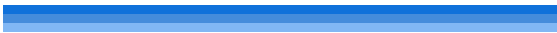
Point Biserial: n/a

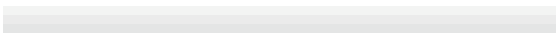
Discrimination Index: 0.00 %

Question 3 Difficulty: 1

Ignoring inventory costs when making transportation decisions can result in choices that worsen the performance of a supply chain.

Average Grade: 0 / 0 (100 %)

→ True  5 (100 %)

False  0 (0 %)

Standard Deviation: 0.00 %

Point Biserial: n/a

Discrimination Index: 0.00 %

Question 4 Difficulty: 1

Transportation plays a key role in every supply chain because
products are

normally
produced and
consumed in
the same
location

2 (40 %)

→ products are
rarely produced
and consumed
in the same
location

3 (60 %)

Average Grade: 0 / 0 (60 %)

Standard Deviation: 48.99 %

Point Biserial: 0.41

Discrimination Index: 33.33 %

the cost of
transportation is
inconsequential

0 (0 %)

transportation is
not a factor in
determining
profitability

0 (0 %)

Question 5 Difficulty: 1

The _____ is the party that requires the movement of the product between two points in the supply chain.

carrier 0 (0 %)

Average Grade: 0 / 0 (100 %)

producer 0 (0 %)

Standard Deviation: 0.00 %

→ shipper 5 (100 %)

Point Biserial: n/a

consumer 0 (0 %)

Discrimination Index: 0.00 %

Question 6 Difficulty: 1

_____ carriers typically move commodities over large distances at lower costs per unit shipped.

air 1 (20 %)

Average Grade: 0 / 0 (80 %)

truck 0 (0 %)

Standard Deviation: 40.00 %

→ rail 4 (80 %)

Point Biserial: 1.50

package 0 (0 %)

Discrimination Index: 33.33 %

Question 7 Difficulty: 1

Which mode of transportation is the least expensive?

air 0 (0 %)

Average Grade: 0 / 0 (100 %)

truck 0 (0 %)

Standard Deviation: 0.00 %

rail 0 (0 %)

Point Biserial: n/a

→ water 5 (100 %)

Discrimination Index: 0.00 %

Question 8 Difficulty: 1

When infrastructure is publicly owned, it is important to price usage to reflect

- ☐ the cost of rebuild the infrastructure once it is fully depreciated
- ☐ the incremental profit from the use of the infrastructure
- ☒ the marginal impact on the cost to society
- ☐ the market clearing price

Average Grade: 0 / 0 (100 %)
Standard Deviation: 0.00 %
Point Biserial: n/a
Discrimination Index: 0.00 %

Question 9 Difficulty: 1

Which transportation network design option establishes an extra layer between suppliers and retailers to store inventory and to serve as a transfer location?

- ☐ Direct shipping network
- ☐ Direct shipping with milk runs
- ☒ All shipments via central DC
- ☐ Direct shipping

Average Grade: 0 / 0 (100 %)
Standard Deviation: 0.00 %
Point Biserial: n/a
Discrimination Index: 0.00 %

Question 10 Difficulty: 1

Cheaper modes of transport typically have
shorter lead

times and

smaller

minimum

shipment

quantities

shorter lead

times and

larger

minimum

shipment

quantities

longer lead

times and

smaller

minimum

shipment

quantities



longer lead

times and

larger

minimum

shipment

quantities

0 (0 %)

0 (0 %)

0 (0 %)

5 (100 %)

Average Grade: 0 / 0 (100 %)

Standard Deviation: 0.00 %

Point Biserial: n/a

Discrimination Index: 0.00 %

Question 11 Difficulty: 1

Which transportation mode hauls the most freight in the US?

air

0 (0 %)

Average Grade: 0 / 0 (80 %)

water

0 (0 %)

Standard Deviation: 40.00 %



truck

4 (80 %)

Point Biserial: 1.50

rail

1 (20 %)

Discrimination Index: 33.33 %

Section Average Grade: 0.01 / 0.01 (92.73 %)