# *KTest*

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# 問題集

**Exam** : **L4M7**

**Title** : Whole-life Assets Management

**Version** : DEMO

1.XYZ Ltd organises a meeting in order to decide on the safety stock level of a strategic material which is used in XYZ latest product - DMD. To do this, they must forecast the future demand for this new product. In the meeting, external consultants are invited to join with cross-functional team. Each person of the group anonymously replies to questionnaires and subsequently receives feedback in the form of a statistical representation of the "group response," after which the process repeats itself. The goal is to reduce the range of responses and arrive at something closer to expert consensus. XYZ Ltd is using which forecasting method?

A. Objective forecasting technique

B. Delphi method

C. Holt-Winters seasonal method

D. Time series analysis

**Answer:** B

**Explanation:**

Delphi method was developed in the 1950s, originally to forecast the impact of technology on warfare. The method entails a group of experts who anonymously reply to questionnaires and subsequently receive feedback in the form of a statistical representation of the "group response," after which the process repeats itself. The goal is to reduce the range of responses and arrive at something closer to expert consensus. The Delphi Method has been widely adopted and is still in use today. Delphi method is a subjective forecasting technique Holt-Winters forecasting is a way to model and predict the behavior of a sequence of values over time—a time series. Holt-Winters is one of the most popular forecasting techniques for time series. It's decades old, but it's still ubiquitous in many applications, including monitoring, where it's used for purposes such as anomaly detection and capacity planning.

Time series analysis is a statistical technique that deals with time series data, or trend analysis. Time series data means that data is in a series of particular time periods or intervals.

Objective forecasting approaches are quantitative in nature and lend themselves well to an abundance of data. There are three categories of objective forecasting methods: time series, causal/econometric, and artificial intelligence.

LO 2, AC 2.3

2.XYZ Ltd has been adopting MRP system for years. The system helps the company improve efficiency greatly and generates huge cost-savings. However, MRP system is only limited to production process management and XYZ management team would like to have better insights into re-sources required across the organisation as a whole.

Which software system would help XYZ management team achieve the above objective?

A. MRP II

B. MPS

C. ERP

D. P2P

**Answer:** C

**Explanation:**

Enterprise resource planning (ERP) is the integrated management of main business processes, often in real time and mediated by software and technology. ERP provides an integrated and continuously updated view of core business processes using common databases maintained by a data-base management system. ERP systems track business resources—cash, raw materials, production

capacity—and the status of business commitments: orders, purchase orders, and payroll. The applications that make up the system share data across various departments (manufacturing, purchasing, sales, accounting, etc.) that provide the data. ERP facilitates information flow between all business functions and manages connections to outside stakeholders.

Manufacturing resource planning (MRP II) is defined as a method for the effective planning of all resources of a manufacturing company. Ideally, it addresses operational planning in units, financial planning, and has a simulation capability to answer "what-if" questions and extension of closed-loop MRP. This is not exclusively a software function, but the management of people skills, requiring a dedication to database accuracy, and sufficient computer resources. It is a total company management concept for using human and company resources more productively.

A master production schedule (MPS) is a plan for individual commodities to be produced in each time period such as production, staffing, inventory, etc. It is usually linked to manufacturing where the plan indicates when and how much of each product will be demanded. This plan quantifies significant processes, parts, and other resources in order to optimize production, to identify bottlenecks, and to anticipate needs and completed goods. Since a MPS drives much factory activity, its accuracy and viability dramatically affect profitability.

Procure-to-pay (P2P) is a term used in the software industry to designate a specific subdivision of the procurement process. The procure-to-pay systems enable the integration of the purchasing department with the accounts payable (AP) department. Some of the largest players of the software industry agree on a common definition of procure-to-pay, linking the procurement process and financial department.

LO 2, AC 2.3

3.Assuming that all other factors are constant except one, the net present value of a capital expenditure increases when...?

A. The initial cost of a project increases
B. The discounted rate increases
C. Net cash flow during a time period increases
D. Cash outflow during a time period increases

**Answer:** C

**Explanation:**

Net present value (NPV) is the 'today' net value that deprives from 'future' cash flow of an invest-ment or a capital purchase.

The following formula is used to calculate NPV

$$NPV = \sum_{t=0}^{n} \frac{R_t}{(1+i)^t} = \frac{R_0}{(1+i)^0} + \frac{R_1}{(1+i)^1} + \frac{R_2}{(1+i)^2} + \cdots + \frac{R_n}{(1+i)^n}$$

Where:

Rt is the net cash flow (cash inflow - cash outflow) during the period t

i is the discount rate

t is the number of time periods

As you can conclude from the above formula, the net present value increases when the numerators (net cash flows) increase and/or denominators (1+i) decrease. So the correct answer should be "Net cash flow during a time period increases"

The purpose of this exercise is to help you identify the factors that influence the net present value and how to increase/decrease NPV in real-world scenario.

Reference:

- Net present value in capital expenditure
- CIPS study guide page 177

LO 3, AC 3.2

4.A supermarket calculates that the average holding cost for an item is $1.50 per cubic meter per day. A beer pallet which has volume of 0.5 cubic meter will be stored for 5 days.

What is the holding cost of this beer pallet?

A. $4.00

B. $4.50

C. $4.25

D. $3.75

**Answer:** D

**Explanation:**

The holding cost per day of the beer pallet is equal to 1.50/2=0.75

The beer pallet is stored for 5 days, the total holding cost is: 0.75*5=3.75.

LO 2, AC 2.2

5.Which of the following is the minimum aisle width for using standard counterbalanced forklifts?

A. 4.9 ft - 5.2 ft

B. 5.6 ft - 5.9 ft

C. 6.9 ft - 7.2 ft

D. 10.5 ft - 13.1 ft

**Answer:** D

**Explanation:**

Minimum open aisle width for standard counterbalance forklift is 10.5-13.1 ft. You can look at the minimum aisle width for different equipment here, or calculate yourself with an instruction here. LO 1, AC 1.3

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