CCP EXAM PREP

ASSESSMENT QUESTIONS (80)

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11/17/2013

1	In a fixed price contract the: ○ **A** Contractor has no risk in the project ○ **B** Contactor assumes all the performance risk ○ **C** Contractor is paid for actual costs ○ **D** Owner has all the risk
2	You have been hired as the cost engineer for a mechanical contractor and have been provided the following information: Total budgeted hours 12,000 The planned project duration in days 130 Rules of credit are as follows: Pipe received 5% Hangers installed 10% Pipe in place 30% Welded 50% Flushed 5% The following question requires your selection of CCC/CCE Scenario 2 (2.3.50.1.2) from the right side of your split screen, using the drop down menu, to reference during your response/choice of responses. The entire pipe has been received, hangers have been installed, and all pipes are in place. None has been welded or flushed. What percent complete is this project? ○ **A** 45% ○ **B** 50% ○ **C** 95% ○ **D** 30%

3	You have been hired as the cost engineer for a mechanical contractor and have been provided the following information: Total budgeted hours 12,000 The planned project duration in days 130 Rules of credit are as follows: Pipe received 5% Hangers installed 10% Pipe in place 30% Welded 50% Flushed 5% The following question requires your selection of CCC/CCE Scenario 2 (2.3.50.1.2) from the right side of your split screen, using the drop down menu, to reference during your response/choice of responses. 6,573 hours have been expended to date. Planned completion at this time is 60%. The project is determined to be 55% complete. How many hours have been earned? o **A 6,600** o **B 6,960** o **C 7,200** o **D 6,573**
4	You have been hired as the cost engineer for a mechanical contractor and have been provided the following information: Total budgeted hours 12,000 The planned project duration in days 130 Rules of credit are as follows: Pipe received 5% Hangers installed 10% Pipe in place 30% Welded 50% Flushed 5% The following question requires your selection of CCC/CCE Scenario 2 (2.3.50.1.2) from the right side of your split screen, using the drop down menu, to reference during your response/choice of responses. 9,375 hours have been expended to date. Planned completion at this time is 75%. The project is determined to be 66% complete. What is the current cost performance index (CPI)? o **A 0.96** o **B 0.84** o **C 1.14** o **D 0.88**

5

You have been hired as the cost engineer for a mechanical contractor and have been provided the following information:

Total budgeted hours	12,000
The planned project duration in days	130

Rules of credit are as follows:

Pipe received	5%
Hangers installed	10%
Pipe in place	30%
Welded	50%
Flushed	5%

The following question requires your selection of CCC/CCE Scenario 2 (2.3.50.1.2) from the right side of your split screen, using the drop down menu, to reference during your response/choice of responses.

9,375 hours have been expended to date. Planned completion at this time is 75%. The project is determined to be 66% complete. What is the current schedule performance index (SPI)?

- **A** 0.96
- **B** 0.88
- **C** 0.84
- **D** 1.14

6

You have been hired as the cost engineer for a mechanical contractor and have been provided the following information:

Total budgeted hours	12,000
The planned project duration in days	130

Rules of credit are as follows:

Pipe received	5%
Hangers installed	10%
Pipe in place	30%
Welded	50%
Flushed	5%

The following question requires your selection of CCC/CCE Scenario 2 (2.3.50.1.2) from the right side of your split screen, using the drop down menu, to reference during your response/choice of responses.

9,375 hours have been expended to date. Planned completion at this time is 75%. The project is determined to be 66% complete. Based on current trends, how many hours will be expended at project completion?

- o **A 16,215**
- o **B 14,201**
- o **C 12,000**
- o **D 10,526**

7

You have been hired as the cost engineer for a mechanical contractor and have been provided the following information:

Total budgeted hours	12,000
The planned project duration in days	130

Rules of credit are as follows:

Pipe received	5%
Hangers installed	10%
Pipe in place	30%
Welded	50%
Flushed	5%

The following question requires your selection of CCC/CCE Scenario 2 (2.3.50.1.2) from the right side of your split screen, using the drop down menu, to reference during your response/choice of responses.

10,278 hours have been expended to date. The CPI at this point in time is 0.93. SPI is 1.03. How many hours have been earned?

- o **A 9,979**
- o **B 10,586**
- o **C 11,052**
- o **D 9,559**

8

You have been hired as the cost engineer for a mechanical contractor and have been provided the following information:

Total budgeted hours	12,000
The planned project duration in days	130

Rules of credit are as follows:

Pipe received	5%
Hangers installed	10%
Pipe in place	30%
Welded	50%
Flushed	5%

The following question requires your selection of CCC/CCE Scenario 2 (2.3.50.1.2) from the right side of your split screen, using the drop down menu, to reference during your response/choice of responses.

10,278 hours have been expended to date. The CPI at this point in time is 0.93. SPI is 1.03. How many hours were planned?

- ○ **A** 10,586
- ○ **B** 9,280
- ○ **C** 9,559
- ○ **D** 10,278

9

You have estimated that the present day price for a piece of equipment is $350,000. The delivery of the equipment is scheduled 30 months from today. The price of the equipment has been separated into the following categories:

Category	Percent
Steel	30
Copper	30
Manufacturing Labor	40

Based on information from forecasting services, the current cost index value and the expected inflation rate for each commodity is as follows:

		INFLATION RATE (projected)			
Commodity	Current Index	Year 1	Year 2	Year 3	Year 4
Steel	2.40	2.5%	2.5%	3.0%	2.0%
Copper	4.20	1.0%	1.5%	2.0%	2.0%
Manufacturing Labor	6.50	2.5%	3.0%	3.0%	3.5%

The following question requires your selection of CCC/CCE Scenario 4 (2.7.50.1.1) from the right side of your split screen, using the drop down menu, to reference during your response/choice of responses.

What is the cost of manufacturing labor for the piece of equipment today?

- o **A $140,000**
- o **B $875,000**
- o **C $210,000**
- o **D $105,000**

10

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Steel	30
Copper	30
Manufacturing Labor	40

Based on information from forecasting services, the current cost index value and the expected inflation rate for each commodity is as follows:

		INFLATION RATE (projected)			
Commodity	Current Index	Year 1	Year 2	Year 3	Year 4
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Copper	4.20	1.0%	1.5%	2.0%	2.0%
Manufacturing Labor	6.50	2.5%	3.0%	3.0%	3.5%

The following question requires your selection of CCC/CCE Scenario 4 (2.7.50.1.1) from the right side of your split screen, using the drop down menu, to reference during your response/choice of responses.

What is the cost index value of copper at the end of Year 2? (rounded to 2 decimal positions)

- o **A 4.62**
- o **B 4.24**
- o **C 4.10**
- o **D 4.31**

11

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Steel	30
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Manufacturing Labor	40

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		INFLATION RATE (projected)			
Commodity	Current Index	Year 1	Year 2	Year 3	Year 4
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Copper	4.20	1.0%	1.5%	2.0%	2.0%
Manufacturing Labor	6.50	2.5%	3.0%	3.0%	3.5%

The following question requires your selection of CCC/CCE Scenario 4 (2.7.50.1.1) from the right side of your split screen, using the drop down menu, to reference during your response/choice of responses.

At the end of Year 3, steel prices will have increased by what percentage over today's price? (round to 1 decimal)

- o **A 8.7%**
- o **B 8.2%**
- o **C 4.6%**
- o **D 8.0%**

12

You have estimated that the present day price for a piece of equipment is $350,000. The delivery of the equipment is scheduled 30 months from today. The price of the equipment has been separated into the following categories:

Category	Percent
Steel	30
Copper	30
Manufacturing Labor	40

Based on information from forecasting services, the current cost index value and the expected inflation rate for each commodity is as follows:

		INFLATION RATE (projected)			
Commodity	Current Index	Year 1	Year 2	Year 3	Year 4
Steel	2.40	2.5%	2.5%	3.0%	2.0%
Copper	4.20	1.0%	1.5%	2.0%	2.0%
Manufacturing Labor	6.50	2.5%	3.0%	3.0%	3.5%

The following question requires your selection of CCC/CCE Scenario 4 (2.7.50.1.1) from the right side of your split screen, using the drop down menu, to reference during your response/choice of responses.

At the end of 30 months, copper prices will have increased by what percentage over today's price?

- o **A 4.6%**
- o **B 3.5%**
- o **C 6.6%**
- o **D 2.5%**

13

You have estimated that the present day price for a piece of equipment is $350,000. The delivery of the equipment is scheduled 30 months from today. The price of the equipment has been separated into the following categories:

Category	Percent
Steel	30
Copper	30
Manufacturing Labor	40

Based on information from forecasting services, the current cost index value and the expected inflation rate for each commodity is as follows:

		INFLATION RATE (projected)			
Commodity	Current Index	Year 1	Year 2	Year 3	Year 4
Steel	2.40	2.5%	2.5%	3.0%	2.0%
Copper	4.20	1.0%	1.5%	2.0%	2.0%
Manufacturing Labor	6.50	2.5%	3.0%	3.0%	3.5%

The following question requires your selection of CCC/CCE Scenario 4 (2.7.50.1.1) from the right side of your split screen, using the drop down menu, to reference during your response/choice of responses.

If steel costs $1800/ton at the end of Year 3, what is the price of steel at the end of Year 4?

- o **A $1,890/ton**
- o **B $1,863/ton**
- o **C $1,948/ton**
- o **D $1,836/ton**

14

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Category	Percent
Steel	30
Copper	30
Manufacturing Labor	40

Based on information from forecasting services, the current cost index value and the expected inflation rate for each commodity is as follows:

		INFLATION RATE (projected)			
Commodity	Current Index	Year 1	Year 2	Year 3	Year 4
Steel	2.40	2.5%	2.5%	3.0%	2.0%
Copper	4.20	1.0%	1.5%	2.0%	2.0%
Manufacturing Labor	6.50	2.5%	3.0%	3.0%	3.5%

The following question requires your selection of CCC/CCE Scenario 4 (2.7.50.1.1) from the right side of your split screen, using the drop down menu, to reference during your response/choice of responses.

At the end of 30 months, the final price for the piece of equipment will be:

- o **A $328,810**
- o **B $370,710**
- o **C $375,658**
- o **D $378,750**

15

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Category	Percent
Steel	30
Copper	30
Manufacturing Labor	40

Based on information from forecasting services, the current cost index value and the expected inflation rate for each commodity is as follows:

		INFLATION RATE (projected)			
Commodity	Current Index	Year 1	Year 2	Year 3	Year 4
Steel	2.40	2.5%	2.5%	3.0%	2.0%
Copper	4.20	1.0%	1.5%	2.0%	2.0%
Manufacturing Labor	6.50	2.5%	3.0%	3.0%	3.5%

The following question requires your selection of CCC/CCE Scenario 4 (2.7.50.1.1) from the right side of your split screen, using the drop down menu, to reference during your response/choice of responses.

At the end of Year 4, the commodity which experienced the greatest projected percentage price index increase over today is:

- o **A None of the above**
- o **B Manufacturing labor**
- o **C Steel**
- o **D Copper**

16

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Category	Percent
Steel	30
Copper	30
Manufacturing Labor	40

Based on information from forecasting services, the current cost index value and the expected inflation rate for each commodity is as follows:

		INFLATION RATE (projected)			
Commodity	Current Index	Year 1	Year 2	Year 3	Year 4
Steel	2.40	2.5%	2.5%	3.0%	2.0%
Copper	4.20	1.0%	1.5%	2.0%	2.0%
Manufacturing Labor	6.50	2.5%	3.0%	3.0%	3.5%

What is the range of unit cost?

- o **A $21.57**
- o **B $26.65**
- o **C $48.22**
- o **D $485.00**

17

You have estimated that the present day price for a piece of equipment is $350,000. The delivery of the equipment is scheduled 30 months from today. The price of the equipment has been separated into the following categories:

Category	Percent
Steel	30
Copper	30
Manufacturing Labor	40

Based on information from forecasting services, the current cost index value and the expected inflation rate for each commodity is as follows:

		INFLATION RATE (projected)			
Commodity	Current Index	Year 1	Year 2	Year 3	Year 4
Steel	2.40	2.5%	2.5%	3.0%	2.0%
Copper	4.20	1.0%	1.5%	2.0%	2.0%
Manufacturing Labor	6.50	2.5%	3.0%	3.0%	3.5%

Calculate the mean unit cost:

- A $48.09
- B $48.22
- C $48.35
- D $46.59

18

You are analyzing historic unit costs for 18" Class 5 reinforced concrete pipe in a database. The unit costs include all costs - material, labor, equipment, and other, for the excavation, bedding, pipe and backfill. Refer to the following table:

BID DATE	LOCATION	ESTIMATED QUANTITY	UNIT COST
3/11/03	Cincinnati, OH, USA	147	$55.00
9/14/05	Eau Clair, WI, USA	143	$34.50
8/17/06	Louisville, KY, USA	462	$37.30
8/31/05	Atlanta, GA, USA	530	$55.00
11/19/04	Atlanta, GA, USA	308	$40.00
1/26/05	Atlanta, GA, USA	45	$26.78
2/21/07	Denver, CO, USA	256	$46.59
4/18/06	Colorado Springs, CO, USA	176	$75.00
4/18/06	Colorado Springs, CO, USA	80	$65.00

The following question requires your selection of CCC/CCE Scenario 6 (2.7.50.1.3) from the right side of your split screen., using the drop down menu, to reference during your response/choice of responses.

Calculate the weighted average unit cost.

- o **A $46.13**
- o **B $47.63**
- o **C $48.35**
- o **D $48.09**

19

You are analyzing historic unit costs for 18" Class 5 reinforced concrete pipe in a database. The unit costs include all costs - material, labor, equipment, and other, for the excavation, bedding, pipe and backfill. Refer to the following table:

BID DATE	LOCATION	ESTIMATED QUANTITY	UNIT COST
3/11/03	Cincinnati, OH, USA	147	$55.00
9/14/05	Eau Clair, WI, USA	143	$34.50
8/17/06	Louisville, KY, USA	462	$37.30
8/31/05	Atlanta, GA, USA	530	$55.00
11/19/04	Atlanta, GA, USA	308	$40.00
1/26/05	Atlanta, GA, USA	45	$26.78
2/21/07	Denver, CO, USA	256	$46.59
4/18/06	Colorado Springs, CO, USA	176	$75.00
4/18/06	Colorado Springs, CO, USA	80	$65.00

What is the range of estimated quantities?

- o **A $26.78 to $75.00**
- o **B $485**
- o **C $45 to $530**
- o **D $48.22**

20

You are analyzing historic unit costs for 18" Class 5 reinforced concrete pipe in a database. The unit costs include all costs - material, labor, equipment, and other, for the excavation, bedding, pipe and backfill. Refer to the following table:

BID DATE	LOCATION	ESTIMATED QUANTITY	UNIT COST
3/11/03	Cincinnati, OH, USA	147	$55.00
9/14/05	Eau Clair, WI, USA	143	$34.50
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8/31/05	Atlanta, GA, USA	530	$55.00
11/19/04	Atlanta, GA, USA	308	$40.00
1/26/05	Atlanta, GA, USA	45	$26.78
2/21/07	Denver, CO, USA	256	$46.59
4/18/06	Colorado Springs, CO, USA	176	$75.00
4/18/06	Colorado Springs, CO, USA	80	$65.00

What is the relative frequency of nit cost from Atlanta, GA.

- o **A $40.59**
- o **B 3**
- o **C $48.33**
- o **D 33.33%**

21

You are analyzing historic unit costs for 18" Class 5 reinforced concrete pipe in a database. The unit costs include all costs - material, labor, equipment, and other, for the excavation, bedding, pipe and backfill. Refer to the following table:

BID DATE	LOCATION	ESTIMATED QUANTITY	UNIT COST
3/11/03	Cincinnati, OH, USA	147	$55.00
9/14/05	Eau Clair, WI, USA	143	$34.50
8/17/06	Louisville, KY, USA	462	$37.30
8/31/05	Atlanta, GA, USA	530	$55.00
11/19/04	Atlanta, GA, USA	308	$40.00
1/26/05	Atlanta, GA, USA	45	$26.78
2/21/07	Denver, CO, USA	256	$46.59
4/18/06	Colorado Springs, CO, USA	176	$75.00
4/18/06	Colorado Springs, CO, USA	80	$65.00

What is the relative frequency of unit cost amounting to $55.00/unit?

- o **A 22.22%**
- o **B $55.00**
- o **C 2**
- o **D 338.5**

22

A major theme park is expanding the existing facility over a five-year period. The design phase will be completed one year after the contract is awarded. Major engineering drawings will be finalized two years after the design contract is awarded and construction will begin three years after the award of the design contract. New, unique ride technology will be used and an estimate will need to be developed to identify these costs that have no historical data.

The following question requires your selection of CCC/CCE Scenario 26 (2.5.50.1.2) from the right side of your split screen, using the drop down menu, to reference during your response/choice of responses.

What class of estimate is used for the preliminary design phase of a project?

- ○ **A** Class 5 - order of magnitude estimate with +50% / -30% accuracy
- ○ **B** Class 1 - order of magnitude with +30% / -30% accuracy
- ○ **C** Class 4 - budget estimate with +30% / -15% accuracy
- ○ **D** Class 2 - definitive estimate with +15%/-5% accuracy

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A major theme park is expanding the existing facility over a five-year period. The design phase will be completed one year after the contract is awarded. Major engineering drawings will be finalized two years after the design contract is awarded and construction will begin three years after the award of the design contract. New, unique ride technology will be used and an estimate will need to be developed to identify these costs that have no historical data.

The following question requires your selection of CCC/CCE Scenario 26 (2.5.50.1.2) from the right side of your split screen, using the drop down menu, to reference during your response/choice of responses.

What information is needed to develop a Class 2 definitive estimate?

- **A** Soil data, detailed construction drawings, quantity takeoffs, minimum contingency detailed indirect costs, detailed engineering estimates
- **B** Preliminary quantities with labor, material, and factors applied, square footage of facilities, minimum contingency detailed indirect costs
- **C** Square footage of facilities, factored indirects and home office costs
- **D** Vendor quotes, home office detailed estimate, preliminary quantities with labor, material, and factors applied

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The following question requires your selection of CCC/CCE Scenario 26 (2.5.50.1.2) from the right side of your split screen, using the drop down menu, to reference during your response/choice of responses.

Select the statement that best describes the method to estimate the cost of the new rides:

- **A** Break down the technology into components
- **B** Call vendors for quotes
- **C** Use historical data from past projects
- **D** Adjust known data from existing rides

25	A major theme park is expanding the existing facility over a five-year period. The design phase will be completed one year after the contract is awarded. Major engineering drawings will be finalized two years after the design contract is awarded and construction will begin three years after the award of the design contract. New, unique ride technology will be used and an estimate will need to be developed to identify these costs that have no historical data. The following question requires your selection of CCC/CCE Scenario 26 (2.5.50.1.2) from the right side of your split screen, using the drop down menu, to reference during your response/choice of responses. Why is a +/- notation necessary when developing an estimate? ○ **A** Contingency cushion ○ **B** It makes up for the lack of time to develop a real estimate ○ **C** It is a government requirement ○ **D** There are unknowns that affect the final cost of a project
26	A major theme park is expanding the existing facility over a five-year period. The design phase will be completed one year after the contract is awarded. Major engineering drawings will be finalized two years after the design contract is awarded and construction will begin three years after the award of the design contract. New, unique ride technology will be used and an estimate will need to be developed to identify these costs that have no historical data. The following question requires your selection of CCC/CCE Scenario 26(2.5.50.1.2) from the right side of your split screen, using the drop down menu, to reference during your response/choice of responses. Select the statement that best describes the meaning of the +/-notations associated with an estimate. The actual cost is expected: ○ **A** To be exactly the percentages stated ○ **B** To fall within the percentage range stated ○ **C** To be higher or lower that the percentages stated ○ **D** To be outside the percentages stated

27	A major theme park is expanding the existing facility over a five-year period. The design phase will be completed one year after the contract is awarded. Major engineering drawings will be finalized two years after the design contract is awarded and construction will begin three years after the award of the design contract. New, unique ride technology will be used and an estimate will need to be developed to identify these costs that have no historical data. The following question requires your selection of CCC/CCE Scenario 26 (2.5.50.1.2) from the right side of your split screen, using the drop down menu, to reference during your response/choice of responses. Which statement best describes the type of information available for a design phase estimate? ○ **A** Home office detail, specific vendor quotes, preliminary quantities with labor and material factors applied ○ **B** Square footage of buildings, factored indirects, types of rides and exhibits identified, utility requirements, conceptual layouts ○ **C** Detailed construction drawings, quantity takeoffs, detailed labor hours and material costs applied, quotes from all major subcontractors ○ **D** Utility requirements, detailed building plans and (- specifications, types of rides and exhibits identified, all vendor quotes or estimates received from subcontractors
28	A major theme park is expanding the existing facility over a five-year period. The design phase will be completed one year after the contract is awarded. Major engineering drawings will be finalized two years after the design contract is awarded and construction will begin three years after the award of the design contract. New, unique ride technology will be used and an estimate will need to be developed to identify these costs that have no historical data. According to Maslow's hierarchy of needs, giving the employees an award that acknowledges their achievements is most likely to satisfy which level of need? ○ **A** Belonging needs ○ **B** Safety needs ○ **C** Power needs ○ **D** Self-actualization

29	A major theme park is expanding the existing facility over a five-year period. The design phase will be completed one year after the contract is awarded. Major engineering drawings will be finalized two years after the design contract is awarded and construction will begin three years after the award of the design contract. New, unique ride technology will be used and an estimate will need to be developed to identify these costs that have no historical data. After an individual's safety needs are met, what needs would the individual be motivated to fulfill next in Maslow's hierarchy of needs? ○ **A** Belonging needs ○ **B** Self-actualization ○ **C** Knowledge ○ **D** Pay and compensation
30	A major theme park is expanding the existing facility over a five-year period. The design phase will be completed one year after the contract is awarded. Major engineering drawings will be finalized two years after the design contract is awarded and construction will begin three years after the award of the design contract. New, unique ride technology will be used and an estimate will need to be developed to identify these costs that have no historical data. Cost engineers who feel completely satisfied and fulfilled by their work as part of a project team are said to have reached the _____ stage of Maslow's hierarchy of needs. ○ **A** Need satisfaction ○ **B** Belonging needs ○ **C** Self-actualizations ○ **D** Esteem

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A major theme park is expanding the existing facility over a five-year period. The design phase will be completed one year after the contract is awarded. Major engineering drawings will be finalized two years after the design contract is awarded and construction will begin three years after the award of the design contract. New, unique ride technology will be used and an estimate will need to be developed to identify these costs that have no historical data.

Fred Fiedler's contingency model suggests that:

- A Leadership styles are just the opposite of the managerial grid model
- B Successful leadership depends upon a good match
- C between the style of the leader and the demands of the situation
- D Successful leadership can always be imposed by experienced supervision
- E A relationship oriented leader described the least preferred worker in an unfavorable light

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In an exit interview, an employee comments that the reason he is leaving the organization is lack of teamwork and cohesion among his co-workers. Which need of Maslow's hierarchy of needs is unmet?

- A Belongingness needs
- B Primary needs
- C Self-actualization needs
- D Esteem needs

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According to Maslow's hierarchy of needs, which level should be satisfied first?

- A Physiological
- B Self-actualization
- C Safety needs
- D Ego-status

34

A major theme park is expanding the existing facility over a five-year period. The design phase will be completed one year after the contract is awarded. Major engineering drawings will be finalized two years after the design contract is awarded and construction will begin three years after the award of the design contract. New, unique ride technology will be used and an estimate will need to be developed to identify these costs that have no historical data.

In Rensis1 4 model system, the exploitative-authoritative management style is one in which:

- A Management makes most decisions and passes them down
- B Informal organizations generally support the goals of the formal organization
- C Management issues orders, but employees have some freedom to comment
- D Management has a lot of confidence in the employees

35	A major theme park is expanding the existing facility over a five-year period. The design phase will be completed one year after the contract is awarded. Major engineering drawings will be finalized two years after the design contract is awarded and construction will begin three years after the award of the design contract. New, unique ride technology will be used and an estimate will need to be developed to identify these costs that have no historical data. Which of the following percent complete measurement techniques is best suited for long-term non-production accounts (such as overhead accounts)? ○ **A** Ratio/level of effort ○ **B** Start/finish ○ **C** Units completed ○ **D** Incremental milestone
36	A major theme park is expanding the existing facility over a five-year period. The design phase will be completed one year after the contract is awarded. Major engineering drawings will be finalized two years after the design contract is awarded and construction will begin three years after the award of the design contract. New, unique ride technology will be used and an estimate will need to be developed to identify these costs that have no historical data. A cyclical process model was chosen as the basis for total cost management (TCM) because: ○ **A** It is one of the basic tenets of quality improvement ○ **B** Refinement is needed to prepare the estimate at completion (EAC) ○ **C** Strategic assets and projects have inherent life cycles ○ **D** It facilitates development of budgets and schedules

37	A major theme park is expanding the existing facility over a five-year period. The design phase will be completed one year after the contract is awarded. Major engineering drawings will be finalized two years after the design contract is awarded and construction will begin three years after the award of the design contract. New, unique ride technology will be used and an estimate will need to be developed to identify these costs that have no historical data. When analyzing a precedence diagram schedule, the "backward pass" ○ **A** Allows total float to be calculated ○ **B** Determines the duration of each activity ○ **C** Calculates the earliest allowable start and finish times for the activities in the schedule ○ **D** Allows activities to finish as soon as all their 'predecessor' relationships are satisfied
38	A major theme park is expanding the existing facility over a five-year period. The design phase will be completed one year after the contract is awarded. Major engineering drawings will be finalized two years after the design contract is awarded and construction will begin three years after the award of the design contract. New, unique ride technology will be used and an estimate will need to be developed to identify these costs that have no historical data. The latest allowable end time minus the earliest allowable end time on a schedule activity is referred to as: ○ **A** Activity total slack ○ **B** Remaining duration ○ **C** Just-in-time" scheduling ○ **D** Free float

39	A major theme park is expanding the existing facility over a five-year period. The design phase will be completed one year after the contract is awarded. Major engineering drawings will be finalized two years after the design contract is awarded and construction will begin three years after the award of the design contract. New, unique ride technology will be used and an estimate will need to be developed to identify these costs that have no historical data. Which of the following methods a used for creating critical path schedules: A Precedence diagram method B Precedence and arrow diagram methods only C Gantt chart (bar chart) method D Arrow diagram method
40	A major theme park is expanding the existing facility over a five-year period. The design phase will be completed one year after the contract is awarded. Major engineering drawings will be finalized two years after the design contract is awarded and construction will begin three years after the award of the design contract. New, unique ride technology will be used and an estimate will need to be developed to identify these costs that have no historical data. Resource planning must take all of the following into account except: A Types of materials, equipment and labor skills required to complete the project B Cash flow (expenditures) limitations for completing work on the project C Time available to complete the project D Earned value techniques established for the project
41	A major theme park is expanding the existing facility over a five-year period. The design phase will be completed one year after the contract is awarded. Major engineering drawings will be finalized two years after the design contract is awarded and construction will begin three years after the award of the design contract. New, unique ride technology will be used and an estimate will need to be developed to identify these costs that have no historical data. The following is NOT an advantage of the critical path method: A The ability to determine cost overruns of critical path activities B The ability to identify activities that cannot have their schedules slip if the desired project end date is to be achieved C Reveals activities that additional resources need to be dedicated toward D The ability to show slippage in the progress of key activities

42	A major theme park is expanding the existing facility over a five-year period. The design phase will be completed one year after the contract is awarded. Major engineering drawings will be finalized two years after the design contract is awarded and construction will begin three years after the award of the design contract. New, unique ride technology will be used and an estimate will need to be developed to identify these costs that have no historical data. You are reporting on a roadway project, which was estimated to be 10 miles of road. It was scheduled to be completed in 16 weeks, which is this week. According to your calculations, the project has a schedule performance index of 0.80. What would you advise the management about the scheduled completion date? ○ **A** Project will be completed in 20 more weeks ○ **B** Project will be completed this week - on schedule ○ **C** Project will be completed in 4 more weeks ○ **D** Project will be completed in 12.8 more weeks
43	A major theme park is expanding the existing facility over a five-year period. The design phase will be completed one year after the contract is awarded. Major engineering drawings will be finalized two years after the design contract is awarded and construction will begin three years after the award of the design contract. New, unique ride technology will be used and an estimate will need to be developed to identify these costs that have no historical data. The project scheduler left the company and has left unfinished work. You have been hired as the new project scheduler and must update the existing schedule. What will be your first task? ○ **A** Recalculate the early finish for each activity ○ **B** Recalculate the early start for each activity ○ **C** Update the remaining duration for each activity ○ **D** Recalculate the critical path

44

A major theme park is expanding the existing facility over a five-year period. The design phase will be completed one year after the contract is awarded. Major engineering drawings will be finalized two years after the design contract is awarded and construction will begin three years after the award of the design contract. New, unique ride technology will be used and an estimate will need to be developed to identify these costs that have no historical data.

Profits that could not be formally recognized during a specific financial accounting period because the goods and services did not satisfy all the customer's requirements are:

- **A** Marginal profits
- **B** Lost profits
- **C** Incurred profits
- **D** Postponed profits

45

A major theme park is expanding the existing facility over a five-year period. The design phase will be completed one year after the contract is awarded. Major engineering drawings will be finalized two years after the design contract is awarded and construction will begin three years after the award of the design contract. New, unique ride technology will be used and an estimate will need to be developed to identify these costs that have no historical data.

The recognition of loss of value of a natural resource used in the production process is referred to as:

- **A** Capital reduction
- **B** Net loss
- **C** Depreciation
- **D** Depletion

46

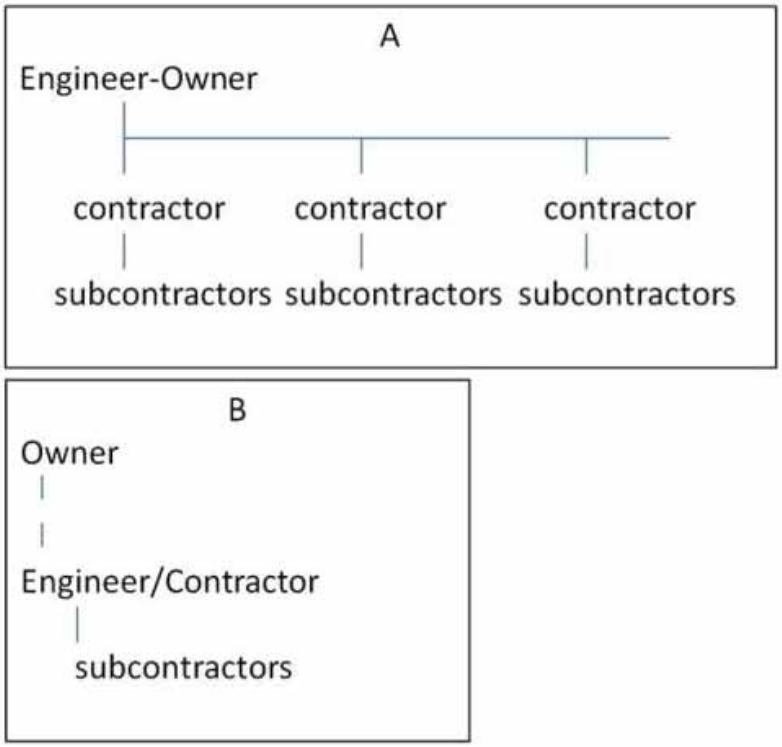
A major theme park is expanding the existing facility over a five-year period. The design phase will be completed one year after the contract is awarded. Major engineering drawings will be finalized two years after the design contract is awarded and construction will begin three years after the award of the design contract. New, unique ride technology will be used and an estimate will need to be developed to identify these costs that have no historical data.

Which of the following is least likely to improve a large earthmoving contractor's productivity?

- **A** Using apprentice operators to save labor costs
- **B** Starting summer work in the early morning hours to minimize work during peak heat periods of the day
- **C** Remove underground hazards prior to excavation work
- **D** Replacing old excavators with new, larger excavators

47

Given the two organization structures below, answer the question.



In the A relationship, the subcontractor might use an unbalance bid to:

- **A** To get more payment early in the job
- **B** Decrease the chances of extended claim litigation
- **C** Reduce the risk of quantities being greater than estimated
- **D** Provides an alternative to competitive bidding

48

For the diagram shown in question 82:

An unbalanced bid methodology can best be used by:

- **A** Engineer/contractor working for the owner (Plan B)
- **B** Subcontractor working for contractor (Plan A or B)
- **C** Contractor working directly for engineer (plan A or B)
- **D** Engineer working for the owner (Plan A)

49	For the diagram shown in question 82: An unbalanced bid methodology can best be used by: A Engineer/contractor working for the owner (Plan B) B Subcontractor working for contractor (Plan A or B) C Contractor working directly for engineer (plan A or B) D Engineer working for the owner (Plan A)
50	For the diagram shown in question 82: A reason for using a Construction Manager type agreement is: A To better coordinate contractors B Coordinate the owner and engineer as in Type A C To better coordinate subcontractors D To better coordinate contractors and subcontractors as in Type B
51	For the diagram shown in question 82: If the owner in B has as his primary goal to get the project completed and on line as fast as possible, then he would most likely use the _____type of contract. A Cost plus B Lump sum C Unit Rate D Lump sum + incentive
52	For the diagram shown in question 82: If the owner in A has a primary goal of completion within budget, the following contract types with the engineer/contractor would be best: A Engineer — cost plus, contractor fixed price B Engineer — cost plus, contractor cost plus C Engineer fixed price, contactor cost plus D Engineer — fixed price, contractor fixed price

53 For the diagram shown in question 82:

Given a unit price contract between the owner and contractor, each assumes the following:

- A Bid unit rate, owner quantities can exceed estimate range Contractor can perform above
- B Bid unit rate, owner quantities are within estimate range
- C Contractor can perform at or below bid unit rate, owner quantities can exceed estimate range
- D Contractor can perform at or below bid unit rate, owner quantities are within estimate range

54

Money is value. Having money when you need it is very important. Money can also be valuable when used wisely by knowing when to spend and when to conserve Also, planning now for future expenses can be a plus to the company rather than a debit.

There are several ways to capitalize money and spending. Basically there is the single payment method that has a compound amount factor and a present worth factor. There is the uniform annual series that has a sinking fund factor, capital recovery factor and also the compound amount factor and present worth factor. At this point, we can assure money is worth 10%.

If $10,000 is scheduled to be paid out 5 years from now, what is the minimum amount we can invest today?

- A $3,855
- B $8,129
- C $6,209
- D $3,791

55

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If $20,000 is invested at the end of each fiscal year for the next 10 years, how much would our total investment be worth assuming the interest is at 10%?

- A $289,370
- B $318,740
- C $265,798
- D $420,236

56

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Five years from now it is required the company have $100,000. How much money should be invested at the end of each year to reach this?

- A $15,937
- B $15,397
- C $16,380
- D $13,168

57

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There are several ways to capitalize money and spending. Basically there is the single payment method that has a compound amount factor and a present worth factor. There is the uniform annual series that has a sinking fund factor, capital recovery factor and also the compound amount factor and present worth factor. At this point, we can assure money is worth 10%.

If the company needs to repay a loan of $100,000 in 10 uniform annual payments, how much will each payment be?

- A $16,380
- B $16,578
- C $15,937
- D $16,273

58

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There are several ways to capitalize money and spending. Basically there is the single payment method that has a compound amount factor and a present worth factor. There is the uniform annual series that has a sinking fund factor, capital recovery factor and also the compound amount factor and present worth factor. At this point, we can assure money is worth 10%.

If you are scheduled for a $100,000 payment at the end of each year for the next five years, what is the equivalent amount if you were to make a lump sum payment now?

- A $162,370
- B $679,397
- C $379,100
- D $500,000

59

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There are several ways to capitalize money and spending. Basically there is the single payment method that has a compound amount factor and a present worth factor. There is the uniform annual series that has a sinking fund factor, capital recovery factor and also the compound amount factor and present worth factor. At this point, we can assure money is worth 10%.

A contractor must purchase a piece of equipment for $150,000. It has an estimated life of 10 years with no salvage value at the end. Ten years from now it will be necessary to purchase another piece of equipment, but this time it will cost $250,000. How much will the contractor need to invest at the end of each year in order to have the right amount?

- A $15,687
- B $12,550
- C $16,273
- D $9,412

60

An agricultural corporation that paid 53% in income tax wanted to build a grain elevator designed to last twenty-five (25) years at a cost of $80,000 with no salvage value. Annual income generated would be $22,500 and annual expenditures were to be $12,000.

Answer the question using a straight line depreciation and a 10% interest rate.

What is the 25 year after tax present worth of this project?

- A $13,738
- B $137,466
- C $(22,533)
- D $22,533

61

An agricultural corporation that paid 53% in income tax wanted to build a grain elevator designed to last twenty-five (25) years at a cost of $80,000 with no salvage value. Annual income generated would be $22,500 and annual expenditures were to be $12,000.

Answer the question using a straight line depreciation and a 10% interest rate.

Present worth calculations is represented by which of the following equations?

A. $[(1+i)^n-1]/[I(1+i)^n]$

B. $[i(1+i)^n-1]/[I(1+i)^{n-1}]$

C. $[i(1+i)^n-1]/[1+i)^n-1]$

D. $1/(1+i)^n$

- A Option A
- B Option B
- C Option C
- D Option D

62

An agricultural corporation that paid 53% in income tax wanted to build a grain elevator designed to last twenty-five (25) years at a cost of $80,000 with no salvage value. Annual income generated would be $22,500 and annual expenditures were to be $12,000.

Answer the question using a straight line depreciation and a 10% interest rate.

What is the "book value (BV) of the asset at the end of 5 years?

- A $64,000
- B $16,000
- C $3,200
- D $60,000

63

An agricultural corporation that paid 53% in income tax wanted to build a grain elevator designed to last twenty-five (25) years at a cost of $80,000 with no salvage value. Annual income generated would be $22,500 and annual expenditures were to be $12,000.

Answer the question using a straight line depreciation and a 10% interest rate.

Depreciation (in the United States) is calculated in accordance with which of the following?

- A Modified Accelerated Cost Recovery System (MACRS)
- B The Federal IRS Reform Act (FIRSRA)
- C Generally Accepted Accounting Practices (GAAP)
- D Accelerated Cost Recovery System (ACRS)

64

An agricultural corporation that paid 53% in income tax wanted to build a grain elevator designed to last twenty-five (25) years at a cost of $80,000 with no salvage value. Annual income generated would be $22,500 and annual expenditures were to be $12,000.

Answer the question using a straight line depreciation and a 10% interest rate.

All of the following are included in "income tax" calculations except:

- A Annual income
- B Annual expenditures
- C Depreciation
- D Initial cost of investment

65

An agricultural corporation that paid 53% in income tax wanted to build a grain elevator designed to last twenty-five (25) years at a cost of $80,000 with no salvage value. Annual income generated would be $22,500 and annual expenditures were to be $12,000.

Answer the question using a straight line depreciation and a 10% interest rate.

Annual estimated tax would be:

- A $3,869
- B $5,565
- C $10,500
- D $11,925

66

An agricultural corporation that paid 53% in income tax wanted to build a grain elevator designed to last twenty-five (25) years at a cost of $80,000 with no salvage value. Annual income generated would be $22,500 and annual expenditures were to be $12,000.

Answer the question using a straight line depreciation and a 10% interest rate.

Assuming a 53% tax rate, how much cumulative depreciation will have been claimed at the end of the grain elevator's life span?

- A None
- B $42,400
- C $37,600
- D $80,000

67

An agricultural corporation that paid 53% in income tax wanted to build a grain elevator designed to last twenty-five (25) years at a cost of $80,000 with no salvage value. Annual income generated would be $22,500 and annual expenditures were to be $12,000.

Answer the question using a straight line depreciation and a 10% interest rate.

Which of the following is considered a measure of profitability?

- A Rate of return
- B Annual Dividends
- C Total assets
- D Annual sales

68

An agricultural corporation that paid 53% in income tax wanted to build a grain elevator designed to last twenty-five (25) years at a cost of $80,000 with no salvage value. Annual income generated would be $22,500 and annual expenditures were to be $12,000.

Answer the question using a straight line depreciation and a 10% interest rate.

The main financial objective of many enterprises is:

- A To maximize the total long-term economic return
- B Subject to a well-conceived quality control plan
- C To balance opportunities and risks
- D Dependent on the backlog projects and the availability of resources

69	An agricultural corporation that paid 53% in income tax wanted to build a grain elevator designed to last twenty-five (25) years at a cost of $80,000 with no salvage value. Annual income generated would be $22,500 and annual expenditures were to be $12,000. Answer the question using a straight line depreciation and a 10% interest rate. Which of the following should be included in the life-cycle cost analysis of a power plant? ○ **A** Construction cost, operating cost, maintenance cost ○ **B** Factory expenses, distribution expenses, mark-up ○ **C** Capacity factor, end product units, physical dimensions ○ **D** Resources, work activities, final cost objects
70	If you deposit $100 per month for two (2) years and earn interest at 12% APR (Annual Percentage Rate) compounded monthly, how much will you have at the end of the period? ○ **A** $2,424 ○ **B** $2,976 ○ **C** $2,688 ○ **D** $2,697
71	An agricultural corporation that paid 53% in income tax wanted to build a grain elevator designed to last twenty-five (25) years at a cost of $80,000 with no salvage value. Annual income generated would be $22,500 and annual expenditures were to be $12,000. Answer the question using a straight line depreciation and a 10% interest rate. If $100,000 is needed to purchase a piece of equipment 3 years from now, how much money needs to be invested today assuming a 10% rate of return (rounded to the nearest thousand)? ○ **A** $78,000 ○ **B** $70,000 ○ **C** $75,000 ○ **D** $82,000

72	An agricultural corporation that paid 53% in income tax wanted to build a grain elevator designed to last twenty-five (25) years at a cost of $80,000 with no salvage value. Annual income generated would be $22,500 and annual expenditures were to be $12,000. Answer the question using a straight line depreciation and a 10% interest rate. How much money should be set aside today to have $20,000 available eight (8) years from now if the interest rate is 6% compounded annually? ○ **A** $31,875 ○ **B** $12,550 ○ **C** $29,600 ○ **D** $13,515
73	An agricultural corporation that paid 53% in income tax wanted to build a grain elevator designed to last twenty-five (25) years at a cost of $80,000 with no salvage value. Annual income generated would be $22,500 and annual expenditures were to be $12,000. Answer the question using a straight line depreciation and a 10% interest rate. If $50 was invested at 6.0% on January 1, year 1, what would be the value of year-end withdrawals made in equal amounts each year for 10 years and leaving nothing in the fund after the tenth withdrawal? ○ **A** $6.80 ○ **B** $3.10 ○ **C** $5.35 ○ **D** $2.22

74	In order to withdraw $400 at the end of each year for seven years, what amount should be deposited at 6.0% interest to leave nothing in the fund at the end of seven years? ○ **A** $2,233 ○ **B** $3,357 ○ **C** $2,483 ○ **D** $2,968
75	An agricultural corporation that paid 53% in income tax wanted to build a grain elevator designed to last twenty-five (25) years at a cost of $80,000 with no salvage value. Annual income generated would be $22,500 and annual expenditures were to be $12,000. Answer the question using a straight line depreciation and a 10% interest rate. How many years will it take to earn $400 in interest on $800 at 4% compounded annually? ○ **A** 10 years ○ **B** 11 years ○ **C** 12 years ○ **D** 13 years
76	An agricultural corporation that paid 53% in income tax wanted to build a grain elevator designed to last twenty-five (25) years at a cost of $80,000 with no salvage value. Annual income generated would be $22,500 and annual expenditures were to be $12,000. Answer the question using a straight line depreciation and a 10% interest rate. If you buy a lot for $3,000 and sell it for $6,000 at the end of 8 years, what is your annual rate of return? ○ **A** 10.4% ○ **B** 9.1% ○ **C** 8.3% ○ **D** 9.9%

77	An agricultural corporation that paid 53% in income tax wanted to build a grain elevator designed to last twenty-five (25) years at a cost of $80,000 with no salvage value. Annual income generated would be $22,500 and annual expenditures were to be $12,000. Answer the question using a straight line depreciation and a 10% interest rate. Which of the following interest rates disregards the effects of compounding periods that occur more frequent than annually? A Continuous compounding rate B Simple interest rate C Minimum attractive rate of return D Nominal interest rate
78	An agricultural corporation that paid 53% in income tax wanted to build a grain elevator designed to last twenty-five (25) years at a cost of $80,000 with no salvage value. Annual income generated would be $22,500 and annual expenditures were to be $12,000. Answer the question using a straight line depreciation and a 10% interest rate. Which of the following would NOT be considered part of a project cost and schedule forecast? A Usage of contingency B Current trends of time and money C Peripherals report D Changes to the project execution plan

79	An agricultural corporation that paid 53% in income tax wanted to build a grain elevator designed to last twenty-five (25) years at a cost of $80,000 with no salvage value. Annual income generated would be $22,500 and annual expenditures were to be $12,000. Answer the question using a straight line depreciation and a 10% interest rate. You have been asked to provide ETC information to management. Based on the following information, what is the ETC? Original Budget = $9,000,000 Actuals to date = $3,513,000 Current estimate at completion = $10,613,000 Actuals for current month = $1,200,000 ○ **A** $10,613,000 ○ **B** $9,000,000 ○ **C** $5,487,000 ○ **D** $7,100,000
80	Money is value. Having money when you need it is very important. Money can also be valuable when used wisely by knowing when to spend and when to conserve. Also, planning now for future expenses can be a plus to the company rather than a debit. There are several ways to capitalize money and spending. Basically there is the single payment method that has a compound amount factor and a present worth factor. There is the uniform annual series that has a sinking fund factor, capital recovery factor and also the compound amount factor and present worth factor. At this point, we can assume money is worth 10%. The following question requires your selection of CCC/CCE Scenario 7 (4.8.50.1.1) from the right side of your split screen, using the drop down menu, to reference during your response/choice of responses. If $10,000 is invested now at 10% compounded annually, what will the investments be worth 10 years from now? ○ **A** $25,940 ○ **B** $29,450 ○ **C** $21,345 ○ **D** $16,180