

باسمه تعالی وزارت علوم، تحقیقات و فناوری دانشــــــگـاه صــــــنعتی اصــــفـهــان دانشکده مهندسی صـــنابع و مرکز برنامه، بزی ســـستمها

## تحکیف ثماره شش-موعد تحویل: دوشنبه ع۹۸۹/۱۶-نحوه ارایه جواب: ابتدای کلاس

- 1- Assume that you are the project manager for the construction of a 15-mile road. Further assume that the work is uniformly distributed over 24 weeks. The total approved budget for this project is \$900,000.At the end of the first three weeks of work 160,000\$ has been spent, and five miles of road have been completed.
  - 1-1- What is the earned value of the project at the end of the first three weeks?
  - 1-2- What is the planned value of the project at the end of the first three weeks?
  - 1-3- What is the cost variance?
  - 1-4- What is the schedule variance?
- 2- A CPI value of 1.5 and an SPI value of 1.2 for a project mean which of the following?
  - A. The project is making slower progress and costing more than planned.
  - B. The project is making faster progress and costing less than planned.
  - C. The project is making slower progress and costing less than planned.
  - D. The project is making faster progress and costing more than planned.
- 3- You are a contract project manager for a wholesale flower distribution company. Your project is to develop a website for the company that allows retailers to place their flower orders online. You will also provide a separate link for individual purchases that are ordered, packaged, and mailed to the consumer directly from the grower's site. This project involves coordinating the parent company, growers, and distributors. You are preparing a performance review and have the following measurements at hand: PV = 250; AC = 400; and EV = 350.
  - 3-1- What do you know about this project?
    - A. The EAC is a positive number, which means the project will finish under budget.
    - B. The CV is a negative number in this case, which means you've spent less than what you planned as of the measurement date.
    - C. The CV is a positive number in this case, which means you're under budget as of the measurement date.
  - 3-2- What is the CPI of this project?
- 4- You are budgeted to spend \$1,000,000 in burdened labor and \$600,000 in material. At the end of the first month of your project, the following information is made available to you:
  - 4-1-Labor:
    - 4.1.1. ACWP=\$110,000
    - 4.1.2. BCWP=\$120,000
    - 4.1.3. BAC =\$1500,000
  - 4-2-Material:
    - 4.2.1. ACWP=\$750,000



باسمه تعالی وزارت علوم، تحقیقات و فناوری دانشــــــگاه صـــنعتی اصـــفهان دانشکده مهندسی صــنایع و مرکز برنامه ریزی ســـیستمها

- 4.2.2. BCWP=\$350,000
- 4.2.3. BAC=\$850,000
- 4-3- Questions:
  - 4.3.1. Find the EAC for Labor and Material separately and add together.
  - 4.3.2. Combine the two mentioned costs and then find the EAC.
  - 4.3.3. Compare the two answers. What is your conclusion?
- 5- The project manager establishes a material budget of 100 units (which includes 10 units for scrap factor) at a price of \$50 per unit. Therefore, the material budget was set at \$7,000. At the end of the short project, material actuals (ACWP) came in at \$15,950, which was \$950 over budget. What happened?

بجای سرزنش دیکران، سمی کنیم کوتابی بای خود را جبران کنیم. بیشتر تلاش کنیدوصادقانه و مثقانه جهت کابش اشتبابات، یکدیکر را یاری دبید. مرتضی راستی برزگی

rasti.iut.ac.ir