FINAL EXAMINATION – 2019-02-28

## name:

# Project Monitoring and Control

As the contractor’s Project Manager, you are managing the project given in the Gantt chart below (drafted using Microsoft Project as a software tool). The project is compensated based on a “Target cost plus incentive fixed fee” payment scheme, where:

* Fixed fee = 100,000€ which compensate for both overhead cost (1,000€/day) and profit
* Target cost = budgeted cost
* Incentive = 50% share of cost savings or cost overrun out of target cost



At the time now, today February 28th 2019, you get the following report:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Task** | **Original Duration** [days] | **Crashed Duration** [days] | **Target Budgeted Cost [€]** | page30image7098272**Cost after Crashing [€]** | **BCWP [€]** | **BCWS [€]** | **ACWP [€]** |
| A | 13 |  | 12,000 | page30image5889680 | 12,000 | 12,000 | 15,000 |
| B | 8 |  | 16,000 |  | 16,000 | 16,000 | 18,000 |
| C | 16 |  | 22,000 |  | 12,320 | 15,400 | 14,747.50 |
| D | 12 | 9 | 17,000 | 20,000 | 0 | 9,180 |  |
| E | 4 |  | 22,000 | page30image3796272 | 0 | 0 |  |
| F | 14 | 11 | 23,000 | 29,000 | 0 | 0 |  |
| G | 14 | 11 | 21,000 | 27,000 | 0 | 0 |  |
| H | 3 |  | page30image581313619,000 |  | 0 | 0 |  |

Analyse actual performance and propose a control action, if suitable.

# Project Charter (6 points)

You have been given the responsibility of organizing the Career Day for graduate students at PoliTo, which will be held on April 19th this year.

The project includes finalizing contracts with employers and organizations, setting up on-campus facilities, arrange for refreshments, hire an opening guest speaker, prepare publicity materials and promote the event among students and interested parties.

You are requested to draft down the outline of the Project Charter including essential contents.

Assume project T0 (signing of project charter) this next Friday, March 1st.

Budget will be based on grants from Companies signing in (2,000€ / each) and funding from PoliTo line of spending for students Stage & Job functions. Current standard values are 15€ / student. Make an educated guess on number of companies signing in and students attending.

Deadlines are given. Assume intermediate milestones considering that the Boards meets monthly last week of month. Make a judgement if their approval is required.

The Stage & Job dept has an available staff of 6, their hourly gross rate is 55€/hr. Subcontractor are hired at 35€/hr and external keynote speaker will charge 250€/hr. Physical facilities are free of charge.

Lay out all other assumptions you will make and clarify to secure approval from your executive sponsor, including your analysis and assessments.

# Decision making (6 points)

Your company is considering whether to bid or not to bid on the following project. If the bidder can complete the project within 20 weeks, it will receive a bonus of $25,000. But if the project delays beyond 23 weeks, it must pay a penalty of $5,000. What would you recommend?

|  |  |  |  |
| --- | --- | --- | --- |
| Task (AOA) | Optimistic duration [weeks] | Most likely | Pessimistic duration |
| 1-2 | 5 | 11 | 11 |
| 1-3 | 10 | 10 | 10 |
| 1-4 | 2 | 5 | 8 |
| 2-6 | 1 | 7 | 13 |
| 3-6 | 4 | 4 | 10 |
| 3-7 | 4 | 7 | 16 |
| 3-5 | 2 | 2 | 14 |
| 4-5 | 0 | 6 | 12 |
| 5-7 | 2 | 8 | 14 |
| 6-7 | 1 | 4 | 7 |

Normal distribution table

