**Project Management Exam – 19 Feb 2019**

## NAME:

# SCHEDULING (6 points)

Assume you are the Project manager of the following project:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Task | Predecessor | Duration [months] | Risk severity  [scale 1-10] | Deadline |
| Start |  |  |  | 1 March |
| Concept design | - | 6 | 8 | 31 August |
| Market study | - | 3 | 8 | \_\_\_\_\_\_\_\_\_\_\_\_ |
| Engineering | Concept design | 3 | 10 | \_\_\_\_\_\_\_\_\_\_\_\_ |
| Prototyping | Engineering | 1 | 5 | \_\_\_\_\_\_\_\_\_\_\_\_ |
| Production line installation | Market study | 3 | 4 | \_\_\_\_\_\_\_\_\_\_\_\_ |
| Production startup | Prototyping;  Production line installation | 2 | 6 | \_\_\_\_\_\_\_\_\_\_\_\_ |
| Advertising preparation | Market study | 2 | 2 | \_\_\_\_\_\_\_\_\_\_\_\_ |
| Advertising campaign | Advertising preparation | 1 | 2 | \_\_\_\_\_\_\_\_\_\_\_\_ |

Please fill in the “Deadline” column with the most opportune finish date you would like to assign as to make sure all responsible resources will finish on time. Please justify your answers.

# Theory (6 points)

In a comparison between the PERT and CCM scheduling techniques, please explain which one provides for the greatest flexibility in time scheduling.

# Monitoring (6 points)

Assume you are the contractor’s Project Manager managing a “Cost plus 10% fee with GMP = 6 mil€” contract.

Both direct and overhead costs are reimbursed by the client and time penalties worth 200k€ are applicable per month and month fraction of delay. Overhead costs are 100k€/month.

The project schedule and EVA are given below.



**EVA report at 31 January 2019:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **BAC [k€]** | **WS [%]** | **BCWS [k€]** | **WP [%]** | **BCWP [k€]** | **ACWP [k€]** |
| A | 200 | 100 | 200 | 100 | 200 | 240 |
| B | 1000 | 100 | 1000 | 70 | 700 | 900 |
| C | 400 | 100 | 400 | 60 | 240 | 300 |
| D | 1200 | 50 | 600 | 100 | 1200 | 500 |
| E | 800 | 0 | 0 | 50 | 400 | 440 |
| F | 900 | 0 | 0 | 0 | 0 | 0 |
| G | 300 | 0 | 0 | 0 | 0 | 0 |
| H | 500 | 0 | 0 | 0 | 0 | 0 |

You are requested to analyze actual performance and propose control actions, if any, to maximize the contractor’s profit.