FINAL TEST – February 21st, 2017

## name:

# Monitoring (6 points)

Following is the original schedule of a project to implement a software solution. The project started on September 1st, 2016.

|  |  |  |  |
| --- | --- | --- | --- |
| Task name | Duration [months] | BAC [k€] | Predecessor |
| Functional specifications (Specs) | 2 | 50 |  |
| Hardware procurement and installation (HW) | 4 | 200 | Specs |
| Software customization and development (SW) | 5 | 200 | Specs |
| Test and deployment | 1 | 100 | HW; SW |

Below is also provided a status report just recorded on January 31, 2017.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **BAC** | **BCWS** | **ACWP** | **BCWP** |
| Functional specifications (Specs) | 50,000 | 50,000 | 52,000 | 50,000 |
| Hardware procurement &installation (HW) | 200,000 | 150,000 | 112,000 | 112,000 |
| Software customization and development (SW) | 200,000 | 120,000 | 127,500 | 150,000 |
| Testing&deployment (Test) | 100,000 | - | - | - |

Assume you are the project manager of the contracting consultant challenged with estimating the worst-case completion date and cost of the project. What would you propose?

# Contract definition (4 points)

The Sands Hotel organization has bought a land to build a casino a block off the famous boardwalk in Atlantic City, New Jersey, USA. While most of the well-known profitable casinos in town benefit from boardwalk frontage, this one is not visible from the well-trafficked road.

To achieve profitability, Sands realizes that they need a high-attracting architecture and upscale quality to draw a significant numbers of patrons from the boardwalk.

Suppose to be the Sands Hotel’s project manager facing the problem of defining the contract organization. What would you suggest with regard to the delivery system, the payment scheme and the award method?

# Small Project (8 points)

A project to develop a new manufacturing plant requires tasks performed according to the following chart:

TASK duration [weeks] predecessor budget [€]

Basic design 8 80,000.00

Detailed design 12 basic design 250,000.00

Procurement 20 basic design 3,500,000.00

Civil works erection 24 detailed design 1,200,000.00

Assembly of production line 16 procurement; civil works erect. 600,000.00

Testing 4 assembly of production line 120,000.00

Project management 20 48,000.00

The project is scheduled to be started-up on March 1st, 2017.

You are requested to prepare a draft Project Charter including a WBS and budget, a project network schedule with indicated critical path and project completion date, and a risk assessment plan that must reflect into the project schedule with preventive actions and a contingency budget.

To this end, consider the following additional information:

* the manufacturing plant is planned to be constructed in an industrial sector very close to Saint Petersburg, Russia
* in Russia the public administrative processes aimed at releasing construction permits are slow and may take from 8 to 24 weeks, once the request is submitted based on the basic design drawings
* the specifications from the owner are incomplete
* the electronic technology that is planned to be used for the new manufacturing line is quite new.

Note: please take into account the following approximation: 4 weeks = 1 month.