



## Politecnico di Milano

School of Industrial and Information Engineering  
Polo Territoriale di Como, via Anzani 42, 22100 Como  
prof. Giuseppe Pozzi – Business Process Modelling  
e-mail: giuseppe.pozzi@polimi.it, ph.: 031-332.7332

---

### Business Process Modelling – Written Test of Feb 05<sup>th</sup>, 2018

Family name \_\_\_\_\_ First name \_\_\_\_\_ Politecnico ID # \_\_\_\_\_

Master Course in \_\_\_\_\_

*Please, fill in this sheet carefully.* All answers must be provided on this sheet, which must be returned at the end of the test. No additional sheet will be considered<sup>1</sup>.

---

**Rules.** The examination is passed if the student obtains at least 13 points out of a total of 25 points available for this test, and the grand total of obtained points, including those obtained with a presentation or a project, is greater than or equal to 18. Use of books, handbooks, lecture notes is not permitted: only the sheets provided by the teacher can be used. All the questions must be answered, at least partially: tests in which even one question has not been answered will not be evaluated. Duration of the test: 2 hours.

---

### Exercises

(1) Describe the concept of “*workflowability*” a business process must have in order to be properly described by a process model and executed by an execution engine.

space reserved to your answer

---

<sup>1</sup>**Remark.** Complete specifications whenever needed. Clarity and order will be taken into account for the evaluation.

**(2)** The CLC - Como Lake Cruises offers cruises on the Lake Como. After registering at the web site, a customer selects the cruise type (one day long or two days long), the number of participants, and proposes the date(s).

CLC has a fleet of three ships, namely *Small* up to 100 passengers, *Medium* up to 200 passengers, *Large* up to 350 passengers. CLC automatically assigns the ship name and checks ship availability over its database containing all the reservations – **Reservation(ShipName, StartDate, EndDate)**. If the ship is available, the reservation is accepted: otherwise, the customer may select a different date or close the process.

After the reservation has been performed, CLC issues the invoice and waits for the payment: if no payment is received within 30 days from the reservation, the reservation is canceled.

Provide a reasonable schema of the outlined process(es), according to the modeling formalism of WIDE. Please, suitably model all the *pre-conditions* and *post-conditions* of every task.

**(3)** With respect to the process(es) in Exercise 2, design the complete transaction tree.

space reserved to your answer - exercise 3

space reserved to your answer - exercise 2

(4) Describe the concepts of *cohesion* and of *coupling* within a business process model.

space reserved to your answer

---

This part for use by the teacher, only.

Ex. 1	Ex. 2	Ex. 3	Ex. 4	Total
4	12	5	4	25

---