

<p>Modelling and Computation of Electric and Magnetic Fields A.A.</p> <p>Electrical Energy Engineering</p>

Date (y-m-d format): _____

Name and Surname: _____

Student ID number: _____

For report: other group members: _____

Instructions

Write your personal details (name, surname, etc.) on the sheets to be used for the exam (only once per sheet). Make sure to return all sheets by placing them inside the provided answer sheet

Questions

Question 1: Polarization and Magnetization

- (a) Discuss the physical effects of electric polarization and magnetization
- (b) Show the expression of Maxwell's equations can be extended to account for the two above phenomena

Question 2: Numerical integration

Discuss:

- (a) Rectangles method
- (b) Trapezoid method
- (c) Gauss integration
 - (a) Definition of quadrature rules
 - (b) Extension to arbitrary intervals