Menoufia University

Faculty of Engineering, Shebin El-Kom

Civil Engineering Department

First Semester Examination

Date of Exam: 21/1/2016



Subject: Computer Applications

Code: CVE113

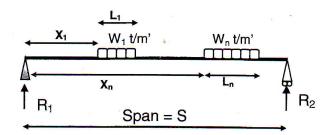
Year : 2015-2016

Time Allowed: 3 hours

Total Marks: 60 marks

Answer the following four questions (two pages)

Question 1 (20 marks)



Write a FORTRAN program to calculate the reactions R_1 and R_2 of a simple beam subjected to the shown distributed loads.

Assuming that number of distributed loads $n \le 5$

Question 2 (10 marks)

Write a Fortran program that computes the following series for any odd value of n.

$$Y = 1 + \frac{1}{3} + \frac{1}{5} + \frac{1}{7} + \frac{1}{9} + \frac{1}{11} + \frac{1}{13} \dots \dots \dots + \frac{1}{n}$$

See next page

Question 3 (15 marks)

Given a matrix B(200,200), it is required to write a Fortran program that reads the matrix row by row, then scans the matrix B to count and print the total number of zero elements, on the screen.

Question 4 (15 marks)

Write a Fortran program to print the grade of students knowing their marks, assuming the following relationships:

Mark	Grade
MARK ≥ 80	Α
80> MARK ≥ 70	В
70> MARK ≥ 60	C
60> MARK ≥ 50	D
50> MARK ≥ 40	Е
MARK < 40	F

With my best wishes.

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Question Number	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Skills	a1,a2 ,a5	a1,a2, a5	a1,a2, a5	a1,a2 ,a5	b1,b8	b1,b8	b1,b8	b1,b8	c1,c7	c1,c7	c1,c7	c1,c7	
	Knowledge &Understanding Skills				Intellectual Skills			Professional Skills					