

(091) Math 131:First Quiz Test-II (3.3-3.4-3.5-3.6): October 31. 2009

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Contents

Marks: 20; Time: 20 Minutes

NAME:.....

I.D.#:

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SERIAL# SECTION #: (Sec.05A)

Check ✓ or ○	Sc 05 11 am	Sc 06 01 pm	Sc 07 02 pm
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NOTE: SHOW ALL STEPS OF THE SOLUTION.

NO CREDIT FOR ANSWERS WITHOUT COMPLETE SOLUTION.

The questions are not in any order of difficulty at all.

Only the nonprogramable calculators are allowed.

Write the simplified answer of each question at the end of each question.

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Q.1.(Marks: 12). 167H23R12. The supply and demand for product are given by

$$2p - q = 50$$

and

$$pq = 100 + 20q,$$

respectively. Find the market equilibrium point (q, p) .

Q.2. (Marks : 8) . 168H23R25. The profit function for a certain commodity is

$$P(x) = 110x - x^2 - 1000.$$

Find the level of production that yields maximum profit, and find the maximum profit.

$$x = \text{-----}$$

$$\text{Maximum Profit} = P(x) = \text{-----}$$

$$q =: \text{-----}$$

$$p =: \text{-----}$$