King Fahd University of Petroleum and Minerals
Math. & Stat. Department
163-Math 101 Quiz (5)

| Name | ID | SEC 09 |
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Q1) Find the absolute maximum value and the absolute minimum value of the function $f(x) = 2\sin x + \cos 2x$ on the internal $[0, \pi/2]$.

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Q2) Find the number $c$ satisfying the conclusion of the mean value theorem $f(x) = 1 + \sqrt{2x-1}$ on the interval $[1,5]$.

Q3) Evaluate $\lim_{x\to 0^+}(1-3\sin 2x)^{2\cot 8x}$ .

Q4) Determine the intervals where $f(x)=1+2x+6x^2-x^4$ concave upward and concave downward. Find inflection points.