

Course Code : MAT101	Course Title : Mathematics I	Section : 67-F	Date
Class Test No. : 02	Signature of the Course Teacher :		

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Q1. Solve the inequality  $x^4 - 5x^2 + 4 \leq 0$  using sign table and draw the number line. 3

Q2. If  $\frac{1}{2^{x-1}} + 2^x = \frac{1}{3^{-1}}$  then find the value of  $x$ . 3

Q3. Evaluate  $\frac{dy}{dx}$ :

i)  $y = \cos \left[ e^{\ln \left\{ \cos^{-1} \left( \sin \left( e^{x^2-1} \right) \right) \right\}} \right]$       ii)  $y = x^x + (\sin x)^{\tan^{-1} x}$  6

Q4. If  $y = \{ \ln(\delta + 1) - \tan \delta \}$  and  $z = a \ln(1 - \sqrt{\delta})$  then find  $\frac{dz}{dy}$ . 3

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Start form here

Mathematics 1 (Quiz)