Name:	**ID:**

MATH-102 **Term-142** **CQ-13** **FORM A**

(show your work and circle one letter to get a full mark or you will get zero)

1) The series $\sum_{n=2}^{\infty} \frac{(-1)^{n-1}3^{n-1}}{5^{n+1}}$ is

(a) -0.025
(b) -0.015
(c) -0.6
(d) 0.46
(e) 0.035
(f) none of the above

2) if $\{S_n\}$ is the sequence of partial sums of the series $\sum_{n=1}^{\infty} \frac{1}{(n+1)(n+2)}$ then $S_n =$

(a) 0.25
(b) 0.15
(c) 0.7
(d) 0.49
(e) 0.499
(f) none of the above

3) The series $\sum_{n=5}^{\infty} \left(\frac{1}{n+2} - \frac{1}{n} \right)$ is

(a) -1/7
(b) 1/7
(c) 1/30
(d) -1/30
(e) 1
(f) none of the above

4) $+\frac{1}{4} - \frac{1}{8} + \frac{1}{16} - \frac{1}{32} + \frac{1}{64} - \frac{1}{128} + \frac{1}{256} =$

(a) 39/54
(b) 255/256
(c) 59/(3x54)
(d) 255/(6x256)
(e) 129/(6x128)