Name:	Class: MSc-III	Reg. No.:				
Quiz 4: Real Analysis II						
 Instructions: Please choose the most correct option be spoiled or overwritten selection has not 		g the box.				
Question 1 Find the value of p for which convergent		If $\left\{ f_n(x) = \frac{1}{x^n} \right\}$ be sequence of functions $I := [2, 10]$, then $\min_{x \in I} f_n(x) =$				
p > 0. $p < 0$.	()110ct10n /l					
NOT true.						
None of these $\left[\left(\lim_{n \to \infty} f_n(x) \right)' = \lim_{n \to \infty} f'_n(x) \text{ for all } x \in [a, b]. \right]$	e e	must be				

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	hoose the most correct option by fil or overwritten selection has no cree		ng the box.		
Question 1 convergent.	If $\lim_{n\to\infty} a_n = 0$, then $\sum a_n$	=	If $\{f_n\}$ is uniformly convergent on $[a,b]$, suitable condition which of the following is		
is must be	may be is not		$\lim_{n\to\infty} f_n(x) = \lim_{n\to\infty} (\lim_{x\to x_0} f_n(x))$		
Question 2 convergent	Find the value of <i>p</i> for which $\int_0^1 \frac{1}{x^p}$	$\frac{1}{n+1}ux$ is	$f_n(x)$ $= \lim_{n \to \infty} f'_n(x)$ for all $x \in [a, b]$. $\int_a^b f_n(x) dx = \lim_{n \to \infty} \int_a^b \lim_{x \to x_0} f_n(x) dx$		
		_	of these If f , $ f \in \mathcal{R}(\alpha; a, b)$, then one has		
	If $\left\{ f_n(x) = \frac{1}{x^n} \right\}$ be sequence of fur $= [2, 10]$, then $\min_{x \in I} f_n(x) =$	$\bigsqcup \int_a fa$	$\alpha \ge \int_a^b f d\alpha. \qquad \qquad \left \int_a^b f d\alpha \right \le \int_a^b f d\alpha.$ $ d\alpha \ge \int_a^b f d\alpha. \qquad \qquad d\alpha \le \int_a^b f d\alpha.$		
2^n	10^n	$\sqcup \sqcup J_a J^a$	$ \alpha \leq J_a J \alpha \alpha \leq J_a J \alpha \alpha \leq J_a J \alpha \alpha $		

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Quiz 4: Real Analysis II						
 Instructions: Please choose the most correct option Spoiled or overwritten selection has n 		ng the box.				
Question 1 If $\{f_n\}$ is uniformly converge then under suitable condition which of the NOT true.	Question	3 If $\left\{ f_n(x) = \frac{1}{x^n} \right\}$ be sequence of functions $I := [2, 10]$, then $\min_{x \in I} f_n(x) =$				
$\left[\left(\lim_{n \to \infty} f_n(x) \right)' = \lim_{n \to \infty} f'_n(x) \text{ for all } x \in [a, b] \right]$		$\blacksquare \frac{1}{10^n}$				
		$\square \frac{1}{2^n}$				
$\lim_{n \to \infty} \int_a^b f_n(x) dx = \lim_{n \to \infty} \int_a^b \lim_{x \to x_0} f_n(x) dx$	Question convergen	— · · · · · · · · · · · · · · · · · · ·				
None of these Question 2 Find the value of <i>p</i> for which		may be must be				
convergent	Question	If f , $ f \in \mathcal{R}(\alpha; a, b)$, then one has				
		$ d\alpha \ge \int_a^b f d\alpha. \qquad \qquad \int_a^b f d\alpha \le \int_a^b f d\alpha $ $ d\alpha \ge \int_a^b f d\alpha. \qquad \qquad \int_a^b f d\alpha \ge \int_a^b f d\alpha. $				

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Quiz 4: Real Analysis II					
 Instructions: Please choose the most correct option leads of the selection has not selection has not selection. 		the box.			
Question 1 If $\{f_n\}$ is uniformly converged then under suitable condition which of the follows:	Questions	If $\left\{ f_n(x) = \frac{1}{x^n} \right\}$ be sequence of functions = [2, 10], then $\min_{x \in I} f_n(x) =$			
$\left[\left(\lim_{n \to \infty} f_n(x) \right)' = \lim_{n \to \infty} f'_n(x) \text{ for all } x \in [a, b].$	10 ⁿ	$\Box \frac{1}{2^n}$			
$ \lim_{x \to x_0} \left(\lim_{n \to \infty} f_n(x) \right) = \lim_{n \to \infty} \left(\lim_{x \to x_0} f_n(x) \right) $		\blacksquare $\frac{1}{10^n}$			
$\lim_{n \to \infty} \int_a^b f_n(x) dx = \lim_{n \to \infty} \int_a^b \lim_{x \to x_0} f_n(x) dx$	Question 4 convergent.	If $\lim_{n\to\infty} a_n = 0$, then $\sum a_n$			
None of these Question 2 Find the value of <i>p</i> for which	$\int_0^1 \frac{1}{x^{p+1}} dx \text{ is} \qquad \qquad \text{must be}$	is not may be			
convergent		If $f, f \in \mathcal{R}(\alpha; a, b)$, then one has $\geq \int_a^b f d\alpha.$ $\leq \int_a^b f d\alpha$ $\int_a^b f d\alpha \geq \int_a^b f d\alpha.$			

Name:	Class: MS	Sc-III	Reg. No.:		
Quiz 4: Real Analysis II					
Instructions:Please choose the most correctSpoiled or overwritten selectio		cking or crossing the bo	x.		
Question 1 If $\{f_n\}$ is uniformly continuous then under suitable condition which NOT true.	· ·	Question 3 If $\{f_i\}$ defined on $I := [2, 10]$	$f_n(x) = \frac{1}{x^n}$ be sequence of function 0], then $\min_{x \in I} f_n(x) = 0$		
$ \lim_{x \to x_0} \left(\lim_{n \to \infty} f_n(x) \right) = \lim_{n \to \infty} \left(\lim_{x \to x_0} f_n(x) \right) = \lim_{n \to \infty} \left(\lim_{x \to x_0} f_n(x) \right) = \lim_{n \to \infty} \int_a^b \lim_{x \to x_0} f_n(x) dx = \lim_{n \to \infty} \int_a^b \lim_{x \to x_0} f_n(x) dx = \lim_{n \to \infty} f_n(x) dx = \lim_{n$					
None of these		Question 4 If f ,	$f \in \mathcal{R}(\alpha; a, b)$, then one has		
$\left[\lim_{n \to \infty} f_n(x) \right]' = \lim_{n \to \infty} f'_n(x) \text{ for all } x$	$x \in [a,b].$		$\left d\alpha. \right \left \int_a^b f d\alpha \right \le \int_a^b f d\alpha$		
Question 2 If $\lim_{n\to\infty} a_n = 0$, the	$\operatorname{en} \sum a_n$	$\left \int_{a}^{b} f d\alpha \right \ge \int_{a}^{b} \left \int_{a}^{b} d\alpha \right $	$f d\alpha$.		
convergent.	may be	Question 5 Find convergent	the value of p for which $\int_0^1 \frac{1}{x^{p+1}} dx$ is		
is not	must be	p > 0.	p < 1.		
		p < 0.	p < 0.		

Class: MSc-III Reg. No.: Quiz 4: Real Analysis II **Instructions:** • Please choose the most correct option by filling or ticking or crossing the box. • Spoiled or overwritten selection has no credit. If $\lim_{n\to\infty} a_n = 0$, then $\sum a_n$ Question 4 If f, $|f| \in \mathcal{R}(\alpha; a, b)$, then one has Question 1 convergent. must be is not may be If $\{f_n\}$ is uniformly convergent on [a, b], Question 5 Find the value of *p* for which $\int_0^1 \frac{1}{x^{p+1}} dx$ is **Question 2** then under suitable condition which of the following is convergent p > 0. p < 0. None of these $p \leq 0$. p < 1. **Question 3** If $\left\{ f_n(x) = \frac{1}{x^n} \right\}$ be sequence of functions defined on I := [2, 10], then $\min_{x \in I} f_n(x) =$ $\blacksquare \frac{1}{10^n}$

 2^n

 $\rfloor 10^n$