11 Lecture - MTH101

Important Mcqs

1. **What is the limit of f(x) as x approaches 2 if f(x) = x^2 - 3x + 2?**
   A. 1
   B. 2
   C. 3
   D. 4
   Answer: D. 4

2. **What is the limit of g(x) as x approaches 0 if g(x) = sin(x)/x?**
   A. 0
   B. 1
   C. -1
   D. Does not exist
   Answer: B. 1

3. **What is the limit of h(x) as x approaches infinity if h(x) = 5/x?**
   A. 0
   B. 5
   C. infinity
   D. Does not exist
   Answer: A. 0

4. **What is the limit of j(x) as x approaches 1 if j(x) = (x - 1)/(x^2 - 1)?**
   A. 0
   B. 1
   C. -1
   D. Does not exist
   Answer: B. 1

5. **What is the limit of k(x) as x approaches infinity if k(x) = (3x - 2)/(4x + 1)?**
   A. 3/4
   B. 2/3
   C. 3/1
   D. Does not exist
   Answer: A. 3/4

6. **What is the limit of f(x) as x approaches 0 if f(x) = (2x + 1)/(x - 3)?**
   A. 1/3
   B. 2/3
   C. -1/3
   D. Does not exist
   Answer: D. Does not exist

7. **What is the limit of g(x) as x approaches 2 if g(x) = (x^2 - 4)/(x - 2)?**
   A. 0
   B. 1
   C. 2
   D. Does not exist
   Answer: C. 2

8. **What is the limit of h(x) as x approaches 3 if h(x) = sqrt(x - 3)?**
   A. 0
   B. 1
   C. 3
   D. Does not exist
   Answer: D. Does not exist

9. **What is the limit of j(x) as x approaches infinity if j(x) = e^(-2x)?**
   A. 0
   B. 1
   C. -1
   D. Does not exist
   Answer: A. 0

10. **What is the limit of k(x) as x approaches 1 if k(x) = (x - 1)^2/|x - 1|?**
    A. 0
    B. 1
    C. Does not exist
    D. infinity
    Answer: C. Does not exist