

Internal Examination 2020
DEPARTMENT OF MATHEMATICS
3RD SEMESTER

MATH-H-GE-T-01

Differential Calculus

Answer the following questions. 10

1. Prove that $\lim_{x \rightarrow a} f(x) + \lim_{x \rightarrow a} g(x) = \lim_{x \rightarrow a} (f(x) + g(x))$ 5
2. If $y = \frac{x^2-6}{x^3-x^2-12}$ then find y_n . 5

Submit answer sheet to the following email id
mathematics@nvc.ac.in

MATH-G-CC-T-03

Real Analysis

Answer the following questions. 10

1. State and prove Archimedean Property. 5
2. Show that, \mathbb{Q} the set of all rational numbers is countable. 5

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