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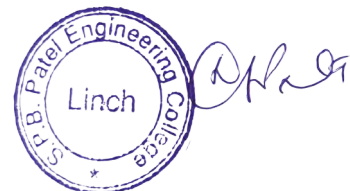
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## Response:

1. Cover page,
2. The first page of the chosen- publication
3. Web link of Journal/book



**[1]Title Name:** On Common Fixed Point Theorems in Intuitionistic Fuzzy Metric Spaces

~ **By Rasik Patel**

**Calendar Year of publication:** 2019

**1.Cover page of Journal/book:**



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**Research Article | Open Access**

Volume 65 | Issue 12 | Year 2019 | Article Id. IJMTT-V65I12P501 | DOI: <https://doi.org/10.14445/22315373/IJMTT-V65I12P501>

## On Common Fixed Point Theorems in Intuitionistic Fuzzy Metric Spaces

**Rasik M.Patel, Ramakant Bhardwaj**

**Abstract**







In this paper, we prove some common fixed point theorems for weakly compatible maps in Intuitionistic Fuzzy metric.

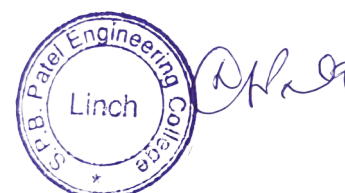
**Keywords**

Intuitionistic fuzzy metric space, weakly Compatible Mappings, Common fixed point.

**References**

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-  Abstract
-  Keywords
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-  Citation





## 2. First Page of Publication:

*International Journal of Mathematics Trends and Technology (IJMTT) - Volume 65 Issue 12 - Dec 2019*

# On Common Fixed Point Theorems in Intuitionistic Fuzzy Metric Spaces

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**Abstract:** *In this paper, we prove some common fixed point theorems for weakly compatible maps in Intuitionistic Fuzzy metric.*

**2010 Mathematics Subject Classification:** 47H10, 54H25.

**Key words and phrases:** *Intuitionistic fuzzy metric space, weakly Compatible Mappings, Common fixed point.*

### 1. Introduction

*It proved a turning point in the development of fuzzy mathematics when the notion of fuzzy set was introduced by L.A. Zadeh [15]. K. Atanassov [14] introduced and studied the concept of intuitionistic fuzzy sets. D. Coker [4] introduced the concept of intuitionistic fuzzy topological spaces. Jungck [13] common fixed point theorem in the setting of intuitionistic fuzzy metric space. Turkoglu et al. [5] further formulated the notions of weakly commuting and  $R$  weakly commuting mappings in intuitionistic fuzzy metric spaces and proved the intuitionistic fuzzy version of Pant's theorem [16]. Gregori et al. [19], Saadati and Park [21] studied the concept of intuitionistic fuzzy metric space and its applications. No wonder that intuitionistic fuzzy fixed point theory has become an area of interest for specialists in fixed point theory as intuitionistic fuzzy mathematics has covered new possibilities for fixed point theorists. Recently, many authors have also studied the fixed point theory in fuzzy and intuitionistic fuzzy metric spaces Dimri et al. [6], Grabiec [9], Imdad et al. [11], J.S. Park, Y.C. Kwan, and J.H. Park [12]. H. Dubey and R. Jain [9] studied the concept on common fixed point theorems in intuitionistic fuzzy metric spaces.*

### 2. Preliminaries

**Definition 2.1[3].** *A binary operation  $*$ :  $[0, 1] \times [0, 1] \rightarrow [0, 1]$  is a continuous  $t$ -norm if it satisfies the following conditions:*

*(1)  $*$  is associative and commutative,*

*(2)  $*$  is continuous,*

*(3)  $a * 1 = a$  for all  $a \in [0, 1]$ ,*

*(4)  $a * b \leq c * d$  whenever  $a \leq c$  and  $b \leq d$  for all  $a, b, c, d \in [0, 1]$ ,*

*Two typical examples of continuous  $t$ -norm are  $a * b = ab$  and  $a * b = \min(a, b)$ .*

**Definition 2.2[3].** *A binary operation  $\diamond$ :  $[0, 1] \times [0, 1] \rightarrow [0, 1]$  is a continuous  $t$ -co-norm if it satisfies the following conditions:*

*(1)  $\diamond$  is associative and commutative,*

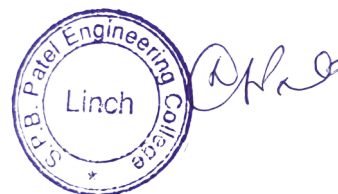
ISSN: 2231-5373

<http://www.ijmtjournal.org>

Page 1

### 3. Web link of Journal/book:

<https://ijmtjournal.org/public/assets/volume-65/issue-12/IJMTT-V65I12P501.pdf>





**[2]Title Name:** A survey on mitigation techniques of economical denial of sustainability attack in cloud computing.

~ **By Prof. Upasana Leela**

**Calendar Year of publication:** 2019

**1. Cover page of journal/ book:**

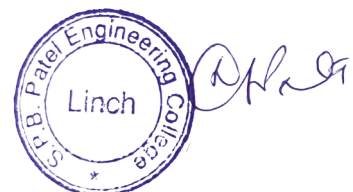
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## 2. First Page of Publication:



### SURVEY ON MITIGATION TECHNIQUES OF ECONOMICAL DENIAL OF SUSTAINABILITY ATTACK IN CLOUD COMPUTING

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**Abstract** - The promise of pay-as-you-go and scalable model of cloud computing has attracted a large number of medium and small enterprise to adopt E-commerce model of conducting on-line businesses. While E-commerce applications on cloud expand businesses by making them more widely acceptable, they also make these application susceptible to economic denial of sustainability attacks a form of application layer Distributed Denial of Service attack that drive up the cost of cloud computing by using up application resources. Economical Denial of Service attack intention is to consume all the resources (like memory, bandwidth and CPU etc.) of the web server thus making it unavailable to its legitimate users.

**Key Words:** Cloud computing, DDoS, EDoS, EDoS-Shield, EDoS-ADS, EDoS-Eye

#### 1. INTRODUCTION

Cloud computing is a strong contender to traditional IT implementations as it offers low-cost and “pay-as-you-go” based access to computing capabilities and services on demand providing ease users[1]. The cloud resources can be provisioned and freed with minimal cloud provider interaction by using an auto scaling feature. The auto scaling feature is activated by monitoring parameters such as CPU utilization, memory usage, response time and bandwidth.

##### 1.1 INTRODUCTION TO DOS ATTACK

##### 1. DoS and DDoS Attack

DoS attackers target the server, which is providing a service to its users, behaving like legitimate user, DoS attackers try to find active servers in such a way that service becomes unavailable due to large number of request pending and overflowing the service queue. A distributed DoS where attackers are group of machines targeting a particular service[1]



Fig-1: DoS Attack[1]

DDoS attacks have recently been very successful on cloud computing, where the attackers exploit the “pay-as-you-go” model. The three important features are reason behind the success trends of cloud computing. The same features are proven to be helpful to DDoS attackers in getting success in attacks. Those features are: Auto-scaling, Pay-as-you-go account and multi-tenancy[1].

### 3. Web link for Journal/book:

<https://www.irjet.net/archives/V6/i12/IRJET-V6I1292.pdf>

