P.E.S. College of Engineering, Mandya - 571401
(An Autonomous Institution, affiliated to VTU, Belagavi)

Faculty Profile

General

Name	*Dr. B. Shanmukha*
Designation,	*Associate Professor & Head*
Department & Affiliated Institution	*Department of Mathematics* *P.E.S College of Engineering, Mandya – 571 401*
Research Area	Graph Theory And Fluid Mechanics (MHD)
Contact Number	+91 98453 98569
Email ID	drbsk_shan@yahoo.com

Academic Profile

Educational Qualifications

Degree	College	University	Year of Passing	% ge	Class
Ph. D	Central College	Bangalore University	2004	Awarded	
M. Sc.,	Central College	Bangalore University	1992	55.56	Second Class
M.Phill	Central College	Bangalore University	1994	74.4	First Class
PGDCA	PESCE	Mysore University	1990	67.54	First Class
B. Sc.,	Rural College, Kanakapura	Bangalore University	1989	54.83	Second Class

Professional Experience

Organization and Department	Designation	Period	Total Experience
SJCIT, Chickaballapura	Lecturer & HOD	1993-2003	10 Years
	Asst. Professor & HOD	2003-2006	3 Years
Nagarajuna college of Engineering, Devanahalli	Professor & HOD	2006-2010	4 Years
P.E.S. College of Engineering, Mandya	Asst. Professor	2010-2013	3 Years
	Associate. Professor	2013 – Till Date	10 Years

Reports on Academic and Research Activities

Academic Activities

Teaching Records (Details of courses taught)	<u>Undergraduate:</u> Engineering Mathematics (I to IV)
	        Additional Mathematics I & II
	        Graph Theory

Research Guidance (Candidates Awarded / Pursuing Ph.D / M.Sc., Engg./ M.Phil)

Degree	Ph. D.	M.Sc., Engg.	M.Phil
Awarded	*4*	*Nil*	*09*
Pursuing	*6*	*Nil*	*Nil*

Sponsored Research Projects   (List of Projects taken up /completed and funds receiver & funding sources)

Project Title	Project Funded by	Grants Sanctioned	Grants Received
…	…	--	…

Research Publications in Refereed Journals and Conferences/Symposia

Number of Publications in	National	International
Journals	*04*	*21*
Conferences/Symposia	*01*	…

Other Important Responsibilities Held in the College

1. *Head of the department of Mathematics*	3. *BoS and BoE Member /chairmen*
2. *Nodal officer,PMSSS,J&K, Student*	4. *Programme officer YRCW*

LIST OF PUBLICATIONS

International Journals

2022

1 **Naba kumar Goswami B Shanmukha and Fidele Hategekimana** 2022, "A theoretical study of Mathematical Model for the spread of Zika virus disease", Non linear studies-www.nonlinearstudies.com Vol.29,No.2,PP.477-495,2022, ISSN 1359-8678.

2 **Naba kumar Goswami B Shanmukha and Fidele Hategekimana** 2022, "Modeling and Optimal Control: The role of media on the dynamics of the spread of crime" www.nonlinearstudies.com Vol.29,No.4,PP.1111-1129,2022, ISSN 1359-8678.

3 **Nithin J V, Dr Shanmukha B** 2022 "Invariant Logarithemic Mean Graph Labelling" GIS Science Journal,Volume 9 Issue 8 Aug2022

2021

1 **Naba kumar Goswami and Shanmukha.B.** 2021, "A Mathematical Analysis of zika virus Transmission with Optimal Control Strategies" Computational Methods for Differential Equations" Vol,9 No,1,2021, pp.117-145,http://cmde.tabrizu.ac.ir,DOI:10.22034/cmde.2019.34715.1585, ISSN (P)2345-3982, ISSN (O) 2383-2533.

2 **B Shanmukha, Shwetha H N and Manjunath N 2021** "Bounds for α-Adjacency Energy of a Graph" IOP Conf.series: Materials Science and Engineering 1070(2021)012019

2020

1 **Naba kumar Goswami and Shanmukha.B.** July 2020 "Modeling and Analysis of Symptomatic and Asymptomatic Infections of Zika Virus Diseas With Non-Monotonic Incidence Rate, Appl.Math.Inf.Sci.14, No.4,655-671, Publishedonline.http://dx.doi.org/10.18576/amis/140414,ISSN (P):1935-0090, ISSN (O): 2325-0399.

3 **Naba kumar Goswami and Shanmukha.B.** 2020 "Stability and optimal control analysis of Zika virus with saturated incidence rate", Malaya Journal of Matematik, Vol. 8, No.2, 331-342, https://doi.org/10.26637/MJM0802/0004,ISSN(P):2319-3786,ISSN(O):2321-5666.

4 **Balachandra P, Padmaja V Shanmukha B and Manjunath N** 2020, "S-Index of certain Line Graph of Subdivision Graphs" South East Asian J. of Mathematics and Mathematical Sciences Vol, 16,No 3(2020),PP.199-206 ISSN (P)0972-7752, ISSN (O) 2582-0850.

5 **Vidyalakshmi K Dr. M Siddappa and Dr.B Shanmukha DEC2020** "Cross Layer Solution for QoS Guaranteed Efficient Transmission of Data in Underwater Wireless sensor Networks" International Journal of Computer Science and Communication, special Issue, Page 9-14,December2020,ISSN:0973-7391,www.csjournals.com.

2019

1   **Yasien Nafe Shawarew and Shanmukha.B.** July 2019 "The Co total Hub Number In   Graphs "Journal of Computer and Mathematical Sciences, Vol.10 (7), PP:1512-1517, ISSN 0976-5727.

2 **Vidyalakshmi. Siddappa K.M., Shanmukha.B.** October 2019 " Hybrid Cross Layer Fault Resilient Energy   Efficient Data Transmission for Underwater Acoustic Sensor Networks"**,** JITEE, ISSN:2278-3075,Volume-8,issue-4, PP:2998-3002.

3.**Vidyalakshmi Siddappa K.M.**, **Shanmukha.B,** November 2019 "Service Differentiated QOC Guaranteed Cross Layer Solution For Underwater Acoustic Sensor Networks (SD-QCLS)"**,** IRITE,ISSN:2277-3878,Volume-8,issue-4. PP:155-161**.**

2018

1   **Vidyalakshmi Siddappa K.M, Shanmukha.B.** 2018,"Efficient communication in underwater Acoustic Network-A survey" international Journal Of applied engineering Research, ISSN 0973-4562 Volume13,PP 11231-11235.

2   **M Bharath kumar. M and Shanmukha.B.** 2018, "3D Magneto hydrodynamic slip flow of $Al_{50}CU_{50}$- water and cu-water nanofluids over a variable thickness stretched surface" Advance in physics theories and application ISSN2224-719X(P) ISSN2225-0638(O),Vol.69, PP:26-41.

2017

1   **Annapurna.M.S , Murali. R. and Shanmukha.B.** "Laceability In The Modified Distance Graph of Grid Graphs" Journal Of The International Mathematical Virtual Institute Issn (P) 2303-4866, ISSN (O) 2303-4947 Vol. 7, (2017), PP 17-35

2   **Vidyalakshmi Siddappa K.M Shanmukha.B. "Novel Study of Domination Parameters In GraphTheory",**IJERM,Volume-04,Issue-01,January2017,ISSN:2349-2058,

2015

1   **Manjunath G Murali. R. and Shanmukha.B.,** January2015**. "**Hamiltonian Laceability In Middle Graphs", **IJESRT** 4(1): ISSN : 2277-9655.

2014

1   **A. Girisha Murali. R. and. Shanmukha.B**. "Hamiltonian Lacebility in Ring Product and Cyclo product of Graphs", British Journal of Mathematics and Computer Science 4(13): 1857-1864, 2014

2012

1 **Leena.N.Shenoy, and Shanmukha.B,et.al** .(January-June 2012). **"**Hamilton city in   distance Graph of Paths", International Journal of Combinatorial Graph Theory and Applications, ISSN: 0973- 7421, Vol. 5.No.1pp.1-14.

2   **B.Shanmukha "**Metric Dimension in Product Graphs" (2012), International Journal Of Computational Science and Mathematics ISSN 0974-3189, Volume 4, Number 3, pp.243-248. **,**
2010

1 **B. Sooryanarayana, Shanmukha.B, Chandru Hegde and Vishukumar** "Metric Dimension of composition products of Graphs", International of Computational Science and Mathematics. Volume2, Number1 (2010), PP. 147-160.

National Journals

2013

1 **Shanmukha.B. and S.K Rajendra** April (2013)"Some results on the MetricDimension of a Graph" International Journal of Graph Theory Volume1, Issue2, PP 54-61.

2012

1 **Manjunath.G, Muruli. R, and Shanmukha.B.** January 2012 "Hamiltonian Laceability in Middle Graph" IJESRT, 4(1), 1-14.

2001

1 **B.Sooryanarayana and Shanmukha.B.** 2001 "A note on metric dimension "Far East J.Appl.Math5(3) 331-339.

2002

1 **Shanmukha.B. B.Sooryanarayana and K.S.Harinath,** 2002, "Matric dimension of wheels" Far East J.Appl.Math8(3) 217-229.

National Conferences

2018

1 **Shanmukha.B. et.al,** "Mathematical modelling of zika virus disease with nonlinear incicendence and Optimal control**",** National Conference on Mathematical Tecniques and its Application (NCMTA 18) IOPConf.Series:JournalofPhysics:Conf.Series1000(2018)0121114,ISSN(P):1742-588,ISSN(O):1742-6596

Guide ship:
Ph.D

1) **Yasien Nafe Ahamad Shawawreh** ,Awarded Ph.D degree in 2020 From University of Mysore.
TITLE: **"Some Studies On Hub Theory and Energy of Graphs"**

2) **Naba Kumar Goswami** , Awarded Ph.D degree in 2021 From University of Mysore.
TITLE: **"Mathematical Analysis of the Transmission Dynamics of Epidemics"**

3) **Shwetha H N,** Awarded Ph.D degree in 2023 from VTU Title " **A study of various Graphs Labeling Techniques and energy of Graph"**

Co-Guide ship:
Ph.D

1) **Vidyalakshmi K,** Awarded Ph.D degree in 2020 from VTU Title "**A priority Based Vehicular Communication using Artificial Intelligence in underwater Acoustic Communication"**

2) **Balachandra P** Awarded Ph.D degree in 2023 from VTU Title "**Some Studies in the Theory of Domination And related Parameters in Graphs**"