

**BHARATI VIDYAPEETH (DEEMED TO BE UNIVERSITY)
MEDICAL COLLEGE, PUNE**

DEPARTMENT OF PHYSIOLOGY



From L-R: Mr. S. S. Badade, Dr. Mrs. M.M. Karandikar, Dr. S. S. Gavali, Dr. Mrs. A.V. Phadke, Dr. Mrs. Anuradha Joshi (Prof. and Head), Dr. Mrs. J.S. Kharche, Dr. D. B.Tambe, Dr. Mrs. G.R. Godbole, Dr. A. Pranita

GOAL:

The broad goal is to provide comprehensive knowledge of normal functioning of organ systems of the body which in turn facilitates an understanding of the physiological basis of health and disease.

OBJECTIVES:

At the end of the course the student will be able to:

1. Explain the normal functioning of all the organ systems of the body and their coordinated activity for total body functions.
2. Describe the contribution of each organ system to the maintenance of milieu interior.
3. Elucidate the physiological aspects of normal growth and development.
4. Describe the physiological response and adaptations to environmental stresses.
5. List the physiological principles underlying pathogenesis and treatment of some of the diseases.

CURRICULUM: Dept. follows Physiology curriculum as per MCI guidelines.

Department – milestones....

- Establishment of department in 1989
- MBBS - current intake is of 150 students

M.Sc. (Medical Physiology) in 2003

9 students have completed M.Sc.(Medical Physiology)



Recognized for M.D.(Physiology) in 2006

16 candidates have completed M.D. (Physiology)



Commencement of Ph.D. Course in 2010

2 faculty members were awarded Ph.D.(Medical Physiology)

In addition the department caters to other courses like

- B.D.S.
- Skill Development
- BSc Nursing
- B.PTh
- B. Optometry
- BASLP

Good infrastructure- Well equipped-laboratories



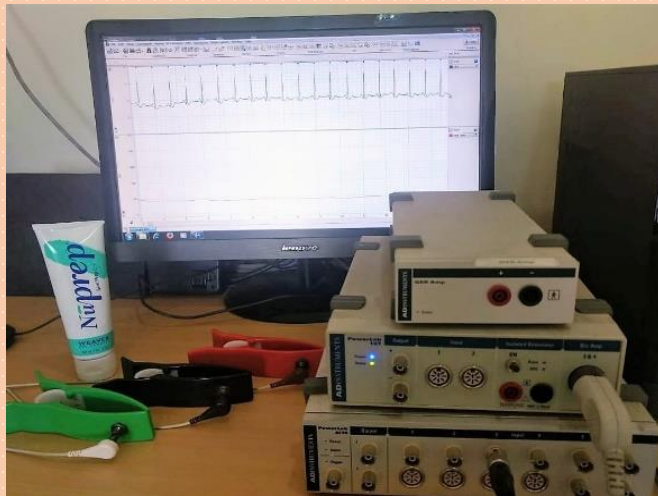
Hematology



Animal Physiology



Clinical



Research

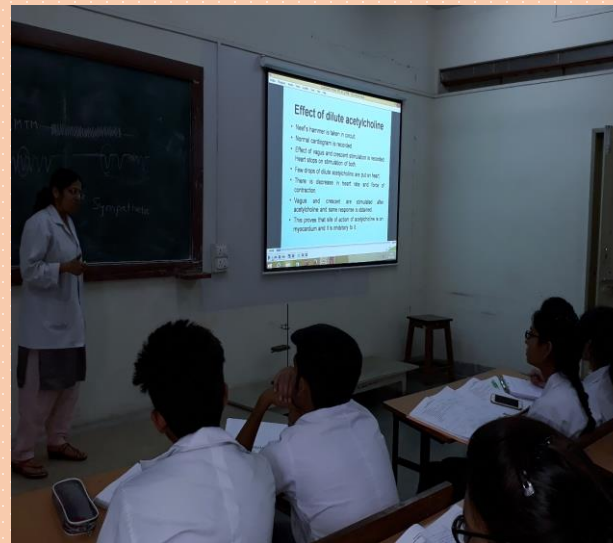
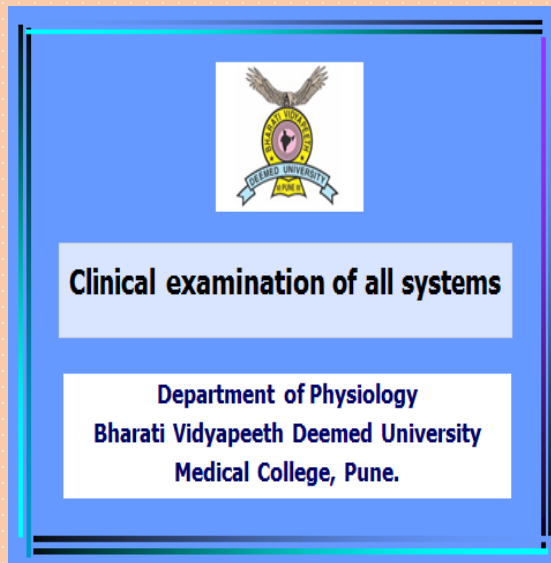
(Power lab for Autonomic function tests)



Departmental library

BEST PRACTICES

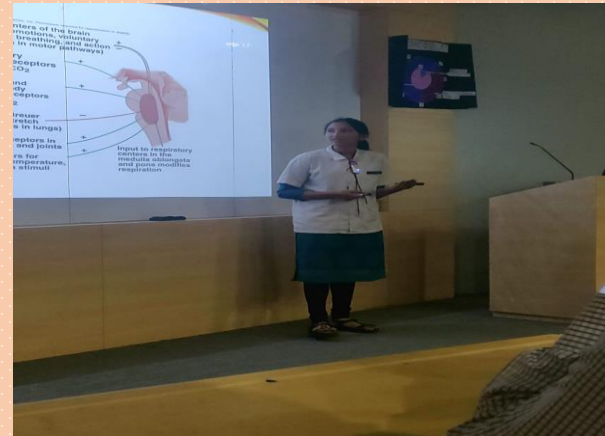
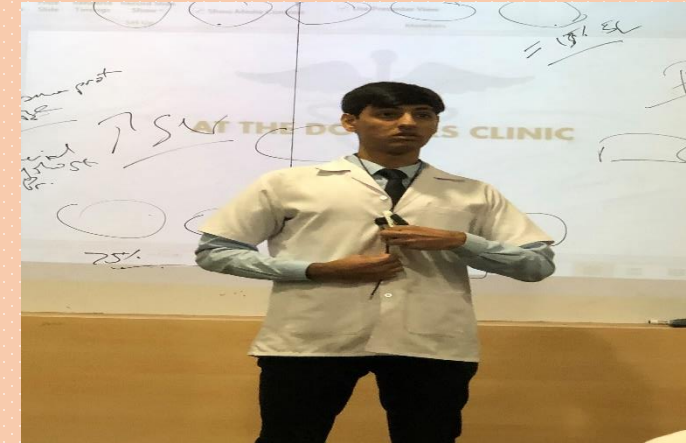
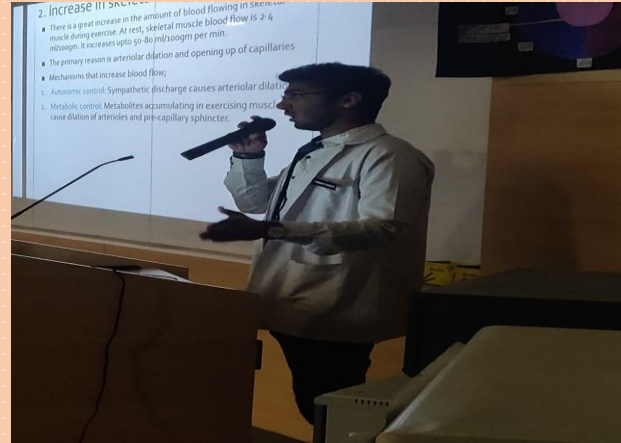
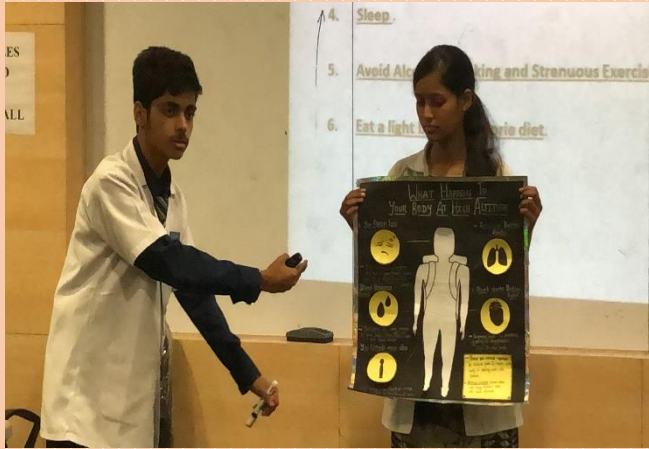
1. Inclusion of 'Clinical Problems' in theory & practical examination to make the students clinically oriented.
2. Computer assisted teaching- learning using educational CDs made in-house.



3. Teaching CPR technique & clinical skills using simulation



4. Seminars presented by UG students and models preparation:



5. Quiz and small group discussions:



6. ICMR STS projects:

Sr No	Name of the student	Title of the project
1	Mr. RohanWagh	Correlation of fasting blood glucose with depression status in middle aged women
2	Mr. Divij Mane	Measurement of anxiety in anxiety in young obese students
3	Miss. Avisha Singla	To study pulse, B.P. and autonomic functions in young adults of hypertensive parents.
4	Mr. Anish Dhore Patil	Aerobic capacity and ventilatory lung function tests in obese young adults
5	Miss. Poonam Patil	Comparison of non exercise test and step test in estimation of aerobic capacity (VO ₂ max) in young adults
6	Mr. Robbin G. Raju/	Anthropometric measurement and assessment of physical activity questionnaire in young adults
7	Shrirang Godbole	Screening for dementia in the elderly.
8	Aditya Lal Vallath	Effect of cigarette smoking on audio-visual reaction time in students pursuing professional course
9	Ms. Raghavi A. Bembey	Effect of sleep deprivation on cognitive functions and cardiovascular parameters
10	Tanmay Vaidya	Study of road traffic accident cases in comparison with other emergency cases in the causality

7. Guest lectures conducted for undergraduate students:

Sr No	Date	Name of the speaker	Topic
1	05/12/2013	Mr. V.K. Mohan	Professional ethics of doctor
2	08/03/2014	Col. Dr. Anuj Chawla	High Altitude Physiology and Survival at Siachen Glacier
3	15/04/2014	Dr. Bhuvnesh Awasthi	Processing of visual impulses by brain
4	16/09/2014	Dr. Milind Bhutkar	Exercise myths vs. medical facts
5	16 /02/2016	Dr. Sundeep Salvi	The Beauty of Lungs

RESULT OF UG (MBBS) UNIVERSITY EXAMINATIONS

Year of Exam.	Regular Batch	Repeater Batch
July 2013	75.00 %	---
September 2013	---	60.00 %
July 2014	79.38 %	---
September 2014	---	60.00 %
July 2015	73.33 %	---
September 2015	---	90.24 %
July 2016	80.13%	---
September 2016	---	87.50 %
July 2017	92.90 %	---
September 2017	---	54.55 %
July 2018	92.86 %	---
September 2018	---	50 %

Top Rankers in Physiology at I MBBS University Examination (last 5 years)

Batch	Name of the Student	Batch
2013	Mr. Patwardhan Shaunak	2013
2014	Ms. Pendse Tanvi	2014
2015	Mr. Shubham Mishra	2015
2016	Mr. Ameya Joshi	2016
2017	Mr. Aadi Palvia	2017

Distinction holders in Physiology at I MBBS University Examination (last 5 years)

S.N.	Batch	Name of the Student
01.	2013	Mr. Patwardhan Shaunak
		Ms. Shejal Agarwal
		Mr. Raman Vijay Singh
02.	2014	Ms. Akansha Mehra
		Ms. Vaz Nancy
		Ms. Pendse Tanvi
03.	2015	Mr. Shubham Mishra
		Mr. Neeraj Bhalerao
		Mr. Sunkari Sree Charan

Distinction in Physiology at I MBBS University Examination....

Sr. No.	Batch	Name of the Student
04.	2016	Mr. Ameya Joshi
05.	2017	Mr. Aadi Palvia
		Ms. Navya Gera
		Ms. Diksha Mishra
		Ms. Apoorva Vashishtha
		Ms. Shreya Arora

Research Activities

- **Grants Received**
- **Conferences**
- **Workshops**
- **Publications**

RESEARCH PROJECTS FUNDED BY BHARATI VIDYAPEETH UNIVERSITY

Sr. No.	Title of the project	Date of starting project	Amount Sanctioned (Rs.)	Principal/ Co-Investigator
1	To evaluate the risk of type-2 diabetes mellitus in undergraduate students using Indian Diabetes Risk Score	05/12/2011	20000/-	Dr. A. Pranita/ Dr. A.R. Joshi
2	Association of obesity with homocysteine levels in postmenopausal women	03/09/2013	25000/-	Dr. A.V. Phadke/ Dr. A.R. Joshi
3	Effect of examination stress on salivary cortisol levels in students pursuing professional course.	03/09/2013	20000/-	Dr. Anuradha Joshi
4	Assessment of folic acid and vitamin B12 in post-menopausal aged women	03/09/2013	25000/-	Dr. D.B. Tambe/ Dr. A.R. Joshi
5	Association of vitamin D and blood pressure in middle aged women.	03/09/2013	25000/-	Dr. J.S. Kharche/ Dr. A.R. Joshi
6	Metabolic syndrome biomarkers and nutritional status in young adults.	03/09/2013	25000/-	Dr. A. Pranita/ Dr. A.R. Joshi

Sr. No.	Title of the project	Date of starting project	Amount Sanctioned (Rs.)	Principal/ Co-Investigator
7	Association of malondialdehyde (MDA) and highly sensitive C reactive proteins (hs-CRP) levels in obese middle aged women.	03/09/2013	15000/-	Mrs. A.V. Rao/ Dr. A.R. Joshi
8	Effect of protein rich supplementation on reproductive function of multi-generationally undernourished wistar rats	20/05/2015	40000/-	Dr. M.M. Karandikar/ Dr. Mrs. S.M. Vaidya
9	Evaluation of risk factors for type 2 diabetes mellitus and hypertension in pune urban population	20/05/2015	25000/-	Dr. J.S. Kharche/ Dr. Mrs. S.M. Vaidya
10	Insulin resistance & obesity status in postmenopausal women	20/05/2015	50000/-	Dr. A. Pranita/ Dr. Mrs. S.M. Vaidya
11	Correlation of dementia and levels of vitamin D3 in elderly population	20/05/2015	30000/-	Dr. G.R. Godbole/ Dr. Mrs. S.M. Vaidya
12	Effect of multigenerational under-nutrition on initiation of puberty in female rats.	01/08/2016	50000/-	Dr. M. Karandikar/ Dr. Mrs. S.M. Vaidya

Conferences Presentations- Faculty



Poster Presented by Dr. Mrs. A.V. Phadke, in M.E. Conference at GSMC in 2015



Oral, Presentation by Dr. Mrs. Anuradha Joshi in National Conference 'RSSDI 2017' held in Bhubaneswar



Dr A Pranita was faculty for DIACON 2016 in Ahemadabad



Poster presentation by Dr. Mrs. M. Karandikar in 'Physicon' 2016



Poster presentation by Dr. Mrs. J.S. Kharche in International Family Medicine Conference at Dubai 2017



Poster presentation by Dr. Mrs. G.R. Godbole in National Conference at Wardha 2014

Conferences Presentations- UG and PG students



**Aditya Lal Vallath 'Empower 2014'
UG presentation at Chennai**



Swati Iyer 'RESCON'- 2015



Tanvi Pendse 'RESCON'-2017



Dr Saira (FIPSPHYSICON-2015) at Kolkata



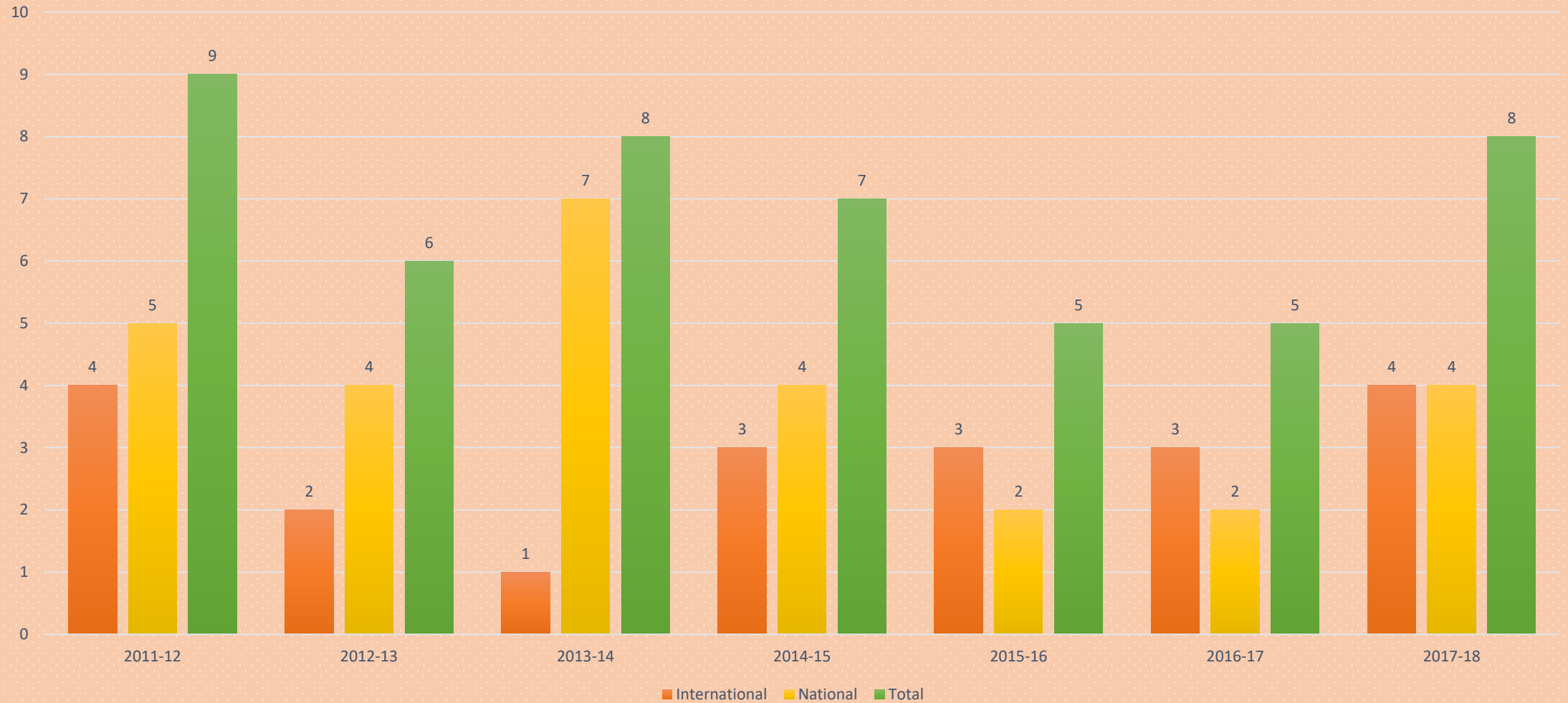
Neha Pimpale (2015)



Dr Nimty Raina (2015)

Research publications (last 7 years)

International- 20, National 28, Total =48



Research Publications by the Faculty (Last 2 Years)

S.N.	Title of the Paper & Name of the Author	Name of the Journal, Year, Volume.
1.	Effect of Multigenerational Under-nutrition on the Haematological Profile of Adult Wistar Rats. Mrs. M.M. Karandikar, Dr. S.M. Vaidya, Dr. K.G. Apte	Global Journal For Research Analysis, Vol. 5, Issue 7, July 2016, p-261-263 ISSN No.2277-8160
2.	Haematological profile in chronically undernourished thrifty rats in 28 days of age. Mrs. M.M. Karandikar, Dr. S.M. Vaidya, Dr. K.G. Apte	International Journal of Scientific Research, Vol.5, issue 8, August 2016, p-42-44. ISSN No.2277-8179
3.	Influence of education on cognitive function in the elderly population of Pune city, Maharashtra, India Shrirang Godbole, Gayatri Godbole*, Savita Vaidya	International Journal of Research in Medical Sciences. Sep., 2016 Vol. 4, Issue 9, P- 4119-4122, pISSN 2320-6071, eISSN 2320-6012
4.	Evaluation of perceived stress in bus drivers of Pune city Dr. Anuradha Rajiv Joshi, Dr. Savita Madhukar Vaidya	National Journal of Physiology, Pharmacy and Pharmacology, Jan. 2017, Vol. 7, Issue-1, Page No.: 90-93, ISSN (Online) : 2231-3206, ISSN (Print) : 2320-4672

Research Publications by the Faculty (Last 2 Years)....

S.N.	Title of the Paper & Name of the Author	Name of the Journal, Year, Volume.
5.	Effect of short term yoga on cardio respiratory fitness in middle aged females Dr. Anuradha Rajiv Joshi	Indian Journal of public health Research & Development Jan. –March 2017, Vol. 8, Issue -1, Page: 1-5
6.	Prevalence of metabolic syndrome in urban middle aged women Ashok Pranita, Balasubramanian B., Vaidya S.M.	International Journal of Scientific Research. July 2017, Vol.6, Issue 7, P-570-572, pISSN 2277-8179
7.	Study of Ventilatory lung function tests of bus drivers in Pune city Anuradha Rajiv Joshi, S.M. Vaidya, Neha Pimpale	International Journal Of Basic And Applied Physiology, 2017, Vol.6, Issue 1, P-97-102, pISSN 2320-172X
8.	Correlation of high-sensitivity C-reactive protein with blood sugar level in patients with Type 2 diabetes Leya Elizabeth Babu, Anuradha Joshi	National Journal of Physiology, Pharmacy and Pharmacology, 2018, Vol.9 Issue-1 P-37-41
9.	Stratification of patients with emergency severity index and effects of its implementation on the outcome in emergency Dept. of tertiary care hospital Dr. E C Sada, Dr. Shivkumar Iyer, Dr. Mrs Gayatri Rangnath Godbole	International Journal Of Scientific Research. 2018, Vol. 7, Issue 3, P-297-298, ISSN No 2277 – 8179

Research Publications by the Faculty (Last 2 Years)....

S.N	Title of the Paper & Name of the Author	Name of the Journal, Year, Volume.
10.	Effect of moderate aerobic exercise on perceived stress during luteal phase of menstrual cycle in students pursuing professional course Anuradha R. Joshi, Tanvi Pendse, S.M Vaidya	National Journal of Physiology, Pharmacy and Pharmacology, 2018, Vol.8 ,Issue 5, P- 705-708, ISSN No (P) 2320-4672.
11.	Assessment and correlation of the world health organization 5 well-being index and blood pressure in software professionals Swati Iyer, J.S. Kharche, Pranita Ashok, G.R. Godbole, Savita M. Vaidya	National Journal of Physiology, Pharmacy and Pharmacology, 2018, Vol. *, Issue 7, P-1022-1025 ISSN No (P) 2320-4672.
12.	Study of relation between family history of diabetes mellitus and awareness of diabetes mellitus in Pune urban population Shishir Joshi, Pranita Ashok, J.S. Kharche, G.R. Godbole.	National Journal of Physiology, Pharmacy and Pharmacology, 2018, Vol.8, Issue 10,P-1-4, ISSN No (P) 2320-4672.
13.	Gender specific association of hsCRP and Blood Glucose Levels in Diabetic individuals. Leya Elizabeth Babu, Anuradha Joshi 12-Feb-19	International Journal of Physiology,2018, Volume : 6, Issue : 3: (P) 72-75.

Faculty achievements-

1. Ph.D. in Medical Physiology:



Dr Mrs M.M.Karandikar (2016)



Dr. Mrs. A. Pranita (2018)

2. D.N.B. in Physiology:



Dr. Mrs. J.S. Kharche (2017)



Dr. Mrs. G.R. Godbole (2017)

3. Awards:



Dr. Mrs. A. Pranita received "Geetadevi Damodaral Saboo Young Investigator Award" during DIACON 2018 held in Ahmedabad .

Faculty on Editorial board/Reviewer

- **Dr Mrs. Anuradha Joshi-**

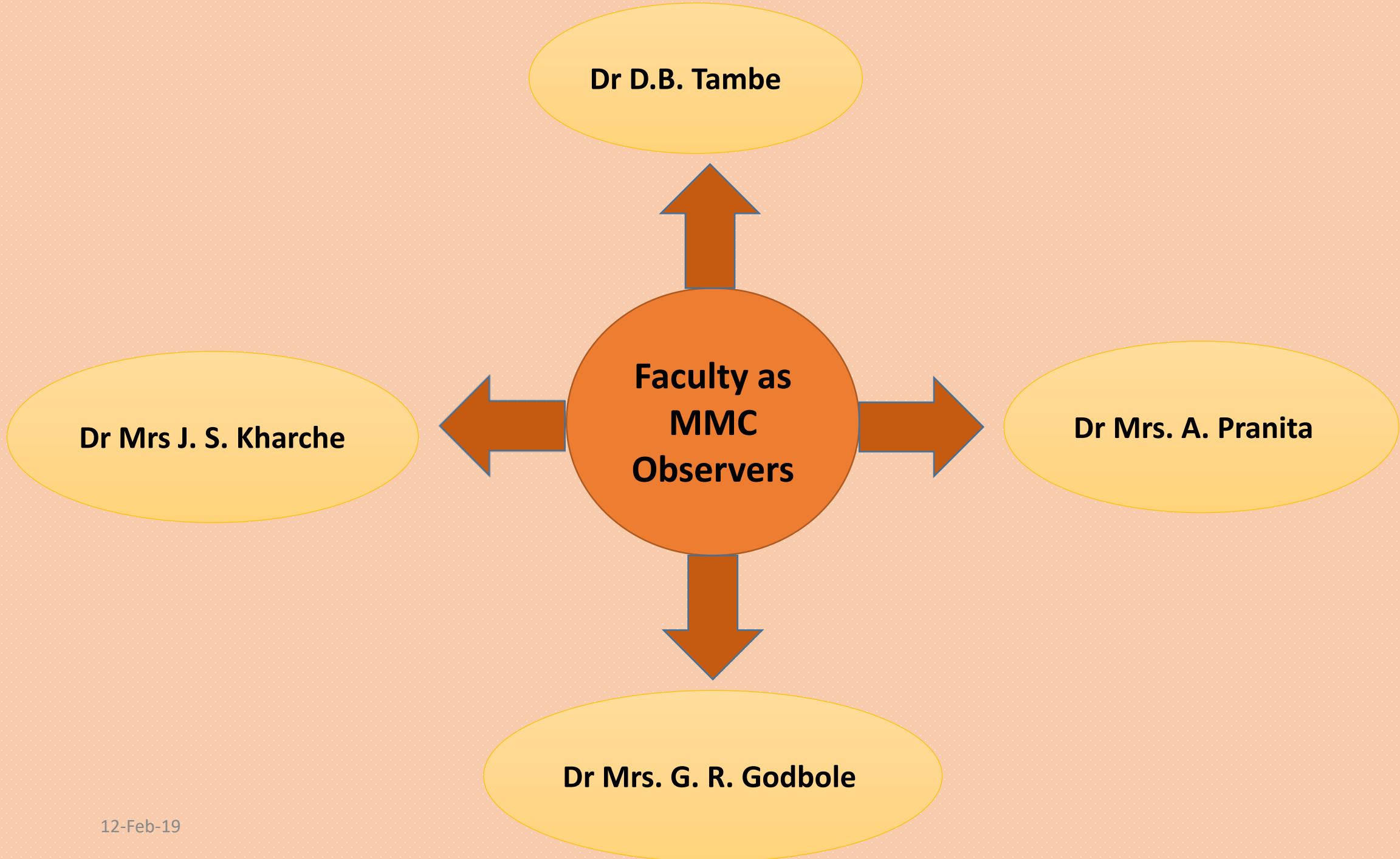
- 1. Assistant Editor-**National Journal of Physiology, Pharmacy and Pharmacology.
- 2. Editorial board-** International Journal of Current Advanced Research
- 3. Reviewer for Journal:** i) Lung India.
ii) Journal of Clinical and Diagnostic research

- **Dr Mrs. A. V. Phadke-**

- Reviewer for Journal:** i) National Journal of Integrated research in Medicine
ii) Adolescent, Health, Medicine and Therapeutics
iii) International Journal of Case reports and Images

Faculty members on various college committees:

- Dr Mrs. Anuradha Joshi- Curriculum committee
Medical Education unit
Student's council
Cultural and Magazine
- Dr Mrs. A.V. Phadke- Medical Education unit
NRI and Foreign students
- Dr Mrs. J.S.Kharche- IQAC and NAAC
- Dr Mrs.G.G.Godbole- Anti sexual harassment cell
UG co-ordination
- Mr S.S.Badade- MCI cell



Going beyond the call of duty



**Swine Flu Vaccination Camp
Dr. D. B. Tambe**



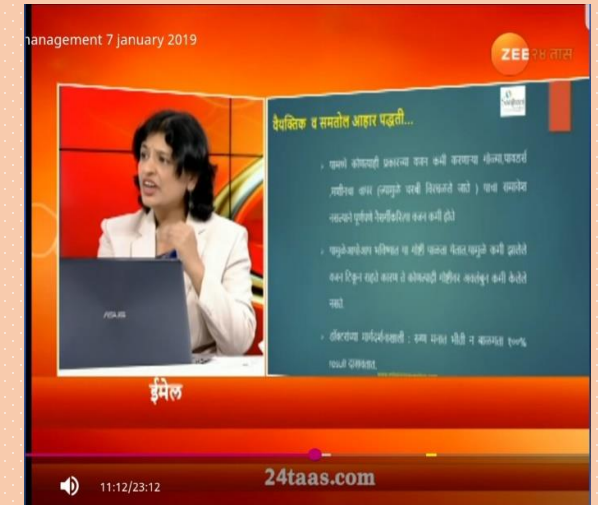
**Resource Person
Dr. S. S. Gavali**



**Resource Person
Dr. A Pranita**



Participation in 'Swachh Bharat Abhiyan' by Department



**Interview on
balanced Nutrition
on Zee TV
7 th Jan 2019**

Health Camps organised for PMT Drivers



Participation in Blood Donation Camp



FUTURE PLANS

Conduct Intercollegiate Undergraduate Quiz

Develop Exercise Physiology Laboratory

Extensive Community Based Research

Develop Autonomic Function Tests Laboratory