

Department of Physiology

FACULTY INFORMATION

Sr.no.	Name of the Teacher	Designation
1	Dr A.N Kowale	Prof & Head
2	Dr N V Aundhakar	Professor
3	Dr. (Mrs.) V.S. Sarode	Asso. Prof.
4	Dr (Mrs.) S.H. Sathe	Associate Prof.
5	Dr (Mrs.) S.V. Deshpande	Associate Professor.
6	Dr (Mrs.) S.M. Gawali	Associate Professor.
7	Dr. K S Kulkarni	Associate Professor.
8	Dr.(Mrs).M.S .Sable	Associate Professor.
9	Dr.Sayyed Ashfak Ahmed Hussain	Asso Prof..
10	Dr. (Mrs) S.H. Shah	Assistant prof.

11	Veena Shriram	Assistant prof.
12	Dr A.S.Khare	Assistant prof.
13	Dr. P.H.Kamble	Assistant prof.
14	Dr C.E.Ahire	Assistant prof.
15	Dr P P Shende	Assistant prof.
16	Dr H D Kamble	Assistant prof.

EQUIPMENTS AVAILABLE

Name of the article	Existing
Electric time makers,100/sec.tunning fork,time marker,100/sec.	12
Electrodes, X-blocks,burette clamps,enamel bowls brass uprights,with coarse and fine adjustments basin, spirit lamps, cooper wire(double cotton covered)Kymograph paper etc.	As required
(b) MAMMALIAN EXPERIMENTS Large extension kymographs-Brodie-Starling complete with respiration pump, motor time marker manometer etc.	
Operation table	3
Volume recorders	2
Dale's bath for internal organ	1
Isolated Organs, Bath for students complete with liver etc.	1
Animal Weighing Machine, for small and big animals(for each)	1

Mary's Tambour	10
Venus and arterial canula(different sizes)(each)	5
Smoking outfit,with fume cupboard	1
Varnishing outfit, for long and short paper	1
Anaesthesia boxes	1
Surgical instruments for operative procedures, syringes, pulleys etc.	Yes
(c) HUMAN AND OTHER EXPERIMENTS	
Microscopes, Oil immersion	70
Demonstrations eye piece	5
Double Demonstration eye piece	1
Stage incubator	1
Westergen's Pipettes for E.S.R. on Stand(with space pipettes)	50
Perimeter Priestly Smith S.LP,984 B & T	5
Haemoglobinometer, Sahil or hellige(with spaces)	30
Sphygmomanometer	25
Stethoscopes, Demonstration with Multiple ear pieces	1
Polygraphs	2
Venus Pressur apparatus	1
Spirometer, Ordinary	6
Gas analysis apparatus, Haldane's student type	1
Van Slyko's apparatus manometric	1
Gas analyser-automatic for CO², O² N²	1
Douglas bag, complete	1
Basal metabolism apparatus	1
Erogograph Mosse's	3
Clinical thermometer	40
Compas	4
Thermanaesthesiometer	1
Algometer	1
Apparatus for passive movement	1
Knee hammer	20
Stethograph	6
Bicycle ergometer	1
Olfactometer	1
Ophthalmoscope	1
Schematic eye	1
Phakoscope	1

Perimeters, with charts	2
Colour percetion lantern Edridge Green	1
Maddox rod	1
Newtons colour wheel	1
Tuning forks to test hearing 32-10,000 cps (sets)	6
Dynamometer	1
Otorhinolaryngoscope	1
Sterliser Electric	1
Instrument trolley	1
Stop watches	2
GENERAL	
Phystograph, 3 channels,complete with accessories	1
Physiograph, single channel,with accessories	1
Centrifuge,high speed with technometer etc.	1
Calorimeter, photo-electric	1
pH meter, electric	1
Refrigerator, 9-10c ft.	1
Oxygen cylinder with trolley	2
Co2 cylinder with trolley	1
Electronic stimulator	1
Water distillation still, with spare heating elements	1
All glass distillation apparatus double stage	1
Voltage stabilizer	3
Stepdown transformers	1
Thermometers, balances,microslides and glassware	Yes

List of instruments (PG)

- Computerized Bicycle Ergometer
- Research Kymograph.
- Self Illuminated Microscopes.
- Reaction Time Equipment.
- Computerized 12 Lead ECG Machine
- Helios 401 Pc Based Spirometer
- Goniometer
- Grip Dynamometer

- Langendorff's Assembly
- 10.Dale's Bath
- 11. Bicycle ergometer for determination of VO₂ max and MET
- 12. Polyrite for NCV, EMG, BERA, Evoked potentials
- 13. Digital ECG machine

RESEARCH PUBLICATIONS

1. Dr.Kowale AN.Evaluation of renal function in apparently healthy asymptomatic chronic alcoholic. International Journal of current research. 2013;5(08):2013-14.
2. Effect of alcohol consumption on serum uric acid level. National journal of Basis Medical Research, A .N.Kowale 2012, July issue.
3. 45.Mobile revolution-Blow your brains out! Aundhakar NV, Sathe SH, Vaidya SM, Medical Journal of Western India, Feb.2012, Vol.40 Editorial.
4. Zingade US. A questionnaire based evaluation of teaching methods amongst I MBBS students. I.J.Medical Research and Health Sciences. 2013;2(1):19-22.
5. Zingade US. A prospective study of airway resistance in petrol pump workers. IOSR J of Dental and Medical Sciences. 2013;5(2):24-27.
6. Zingade US. Estimation of serum MDA levels in infertility. IOSR J of Dental and Medical Sciences. 2013;4(4):18-23.
7. Zingade US. A cross sectional study of Vo₂ max and plasma lactate values in football players. International journal of recent trends in science and technology.2012;4(3):125-29.
8. Zingade U.S. Preliminary study of lung function in athelets and non athelets in marathwada region. IJCRR. 2012;4(21):57.
9. Zingade U.S. Correlation of alpha1 antitypsin levels and smoking in COPD – An observational study. International Journal of Recent trends in Science and technology. 2012;4(3):130-3.
- 10.Zingade U.S. Effect of pranayama training on cardiovascular parameters. International Journal of Recent trends in Science and technology. 2012;5(1):39-52.
- 11.Zingade US. Sprint interval training better than continuous moderate exercise in metabolic syndrome- A randomized controlled trial. International Journal of Diabetic Association. (Accepted)
- 12.Zingade US. Prevalance of vitamin D deficiency in prediabetes and its correlation with glycemic indices- A cross sectional pilot study. International Journal of Diabetic Association.(Accepted)

13. Zingade US. Echocardiographic changes in left ventricular function in prediabetes- A cross sectional pilot study. International Journal of Diabetic Association.(Accepted)
14. Comparative Immunology – A journey of Immunity. Dr. S.H. Shah, Dr.P. Nahar, Dr. A.N. Kowale, Dr. U.S. Zingade. Research & reviews, A Journal of Immunology, 2012, 2(2), 01-05.
15. A preliminary study of lung functions in athletes and nonathletes of Marathwada region. Dr.Pawar BL, DR. S.Sable, Dr. A,N.. Kowale, Dr. US Zingade. International Jr. of current research and review. Nov 2012.
16. Ashish V.Radke, Prathamesh H Kamble, Sonali Khanapurkar, L.S. Kanzode. Study of Growth Pattern of Sickle Cell Patients in Central India Region. International journal of current medical research and review. Volume 4, Issue 5, March 2012, Page 10 – 16.
17. Prathamesh Haridas Kamble, Sunil Bhamre. Is skeletal muscle ‘a target organ’ in long term uncontrolled diabetes mellitus? A comparative and correlative study of type I & type II diabetes. International Journal of Current Research and Review’ May 2012, Vol 4, issue 8, pages 43-47.
18. Kamble Prathamesh H, Thobani Barkat Ali, Phatak Mrunal Suresh, Khare Anupam Suhas. Does bodybuilding decrease the risk for cardiovascular diseases? A comparative study of competitive bodybuilders and healthy sedentary subjects. International journal of sports sciences and fitness. July 2012, Volume 2, Issue 2, Pages: 15-20.
19. Prathamesh H Kamble, Sunil S Bhamare, Sachinkumar Wankhede, Shital S Maske. Gene doping in sports: A medical perspective. Indian Journal of basic and applied medical research. June 2012: Issue-3, Vol.-1, P. 157-165.
20. Prathamesh Kamble, Kamin Moyong, Harshal Kawanpure, Tempo Kaleon, Padmanabha BV. Study on Oxidative Stress in Senile Cataract. International Journal of Health Sciences & Research. July 2012, Volume 2; Issue 4; pages: 8-12.
21. Maske SS, Kamble PH. Anthropometric study of bilateral variability and percent directional asymmetries of thigh bones of Marathwada region. International Journal of Current Research and Review (IJCRR). October 2012, Volume 04, Issue 19, Pages 122-127.
22. Prathamesh Kamble, Motilal Tayade, Shital Maske, Kirankumar Jadhav, Dr. Sunil Bhamare. Editorial Review: – Encyclopedia of DNA Elements (ENCODE): a major Scientific milestone. International Journal of healthcare and biomedical research. October 2012, Volume 1, Issue 1, Pages: 1-5.
23. Maske SS, Kamble PH, Joshi DS. Sexing the femora from Marathwada region using demarcating point method. International Journal of healthcare and biomedical research. October 2012, Volume 1, Issue 1, Pages: 13-16.

24. Prathamesh Kamble, Pravin Jadhao, Deshpande VK, Phatak MS. The study of auditory and visual reaction times in chronic smokers. *International Journal of Medical and Health Sciences*. Volume 2, issue 1, Jan 2013. Page: 18-32.
25. Reena Kaur Ruprai, Prathamesh Kamble, Manisha Kurwale. Effect of Yoga Training on Breathing Rate and Lung Functions in Patients of Bronchial Asthma. *International Journal of Recent Trends in Science And Technology*, Volume 5, Issue 3, January 2013. Page: 127-129.
26. Prathamesh Kamble, Reena Kaur Ruprai, Manisha Kurwale. 'Environmental stress and changes in anxiety score and reaction time: a comparative study among day scholars and hostilities in first year MBBS students.' Published in 'Global journal of interdisciplinary social sciences' Volume 1, Issue 2, December 2012, Pages: 1-3.
27. Jaykar RD, Kasabe P, Bhushan C, Kamble PH. Giant Retroperitoneal Lipoma: a Case Report and Review. *International Journal of Recent Trends in Science and Technology*, Volume 5, Issue 2, December 2012. Pages: 71
28. Doijad Vinayak, Kamble Prathamesh H. Effect of Yogic exercises on aerobic capacity (VO₂ max). *International journal of Physiology*. February 2013. Issue-6, Vol.-2, P. 460-463.
29. Dr. D B Katikar, Dr. R D Jaykar, Dr. R R Ghule, Dr. P H Kamble. Atlantoaxial Dislocation After Hyperextension Of Neck: A Rare Case Report. *International Journal of healthcare and biomedical research*. April 2013, Volume 4, Issue 8, Pages: 31-35.
30. Motilal C. Tayade, Prathamesh Kamble, Sunil M. Bhamare, Kirankumar Jadhav. Review: Writing good research paper: Advice for beginners. *Indian Journal of Basic & Applied Medical Research*; March 2013: Issue-6, Vol.-2, P. 460-463.
31. Dr. Jaykar R D, Dr. Kamble P H, Dr. Jadhav S C, Dr. Bhushan C. Compound and Multiple intussusceptions caused by inverted Meckel's diverticulum: A rare case report. *Indian Journal of basic and applied medical research*. April 2013, Issue-13, Vol.-11, P. 157-165.
32. Dr. Kamble P, Dr. Patil R. Serum total bilirubin & LDH levels in HIV positive patients. *International Journal of Current Research and Review*. March 2013, Volume 04, Issue 19, Pages 122-127.
33. Dr. S.B. Jore, Dr. Prathamesh Kamble, Dr. T.B. Bhutada: Effect of Pranayama training on Audio-Visual Reaction Time. *International Journal of Recent Trends in Science and Technology*, Volume 5, Issue 2, March 2013. Pages: 71-76.
34. Dr. Patil R, Dr. Kamble PH. Serum ALP & GGT levels in HIV positive patients. *International Journal of Recent Trends in Science and Technology*, Volume 5, Issue 3, 2013. Pages: 155-157.
35. Effect of yoga breathing exercise on lung function tests in young healthy subjects.

- Shriram V.D., Dr. Sarode V.S., Dr.Dandare K.M. Medical Journal of western India ; 2012 40(1) 30-37.
34. Effect of Acute cold pain on cardiopulmonary parameters.
Dr. Swati H. Shah, Dr.P. Balasubramaniam. The Indian practitioner, 2011 64(2),86-92.
 35. Pulmonary function tests in type 2 diabetes mellitus and their association with glycemic control and duration of the disease.
Dr.S.H. Shah, Dr. P.Sonawane, Dr.P. Nahar, Dr. S. Vaidya, Dr. S. Salvi. Lung India, 2013 30(2), 104-107.
 36. Upper limb skeletal muscle dysfunction in COPD, Indian Journal of Medical Research, October 2013, Volume 138. Dr S.H.Shah, D Nahar P, Dr Vaidya S.M.Dr Salvi S.
 37. Evaluation of pulmonary function tests in patients undergoing laparotomy.
Dr.P. Nahar, Dr.S.Shah, Dr.S.M.Vaidya, Dr. A.N. Kowale. Indian Jr.of physiotherapy and occupational therapy(An international Jr) , 2013, 7(1), 170-175. Dr.meenakshi Sable, Dr.S. Vaidya, IJPP, March 2012.
 38. Quitting smoking – How to go about it.Dr.S.M.Gawali, Dr.S. Vaidya. Journal, Indian Academy of clinical medicine, Vol.13(4) Dec.2012, 311-315.
 39. Smoking and heart – The basis for action. Dr.S.M.Gawali, Dr.S.Vaidya. The Indian practitioner Vol.65(7) July 2012,417- 420.
 40. Effect of different stressors on ECG derived Index QT dispersion. Dr.S.M. Gawali, Priya Mardikar, VG Jaltade. International Jr. of current research and review , Vol 4(22), Sept. 2012, 109-114.
 41. Dr. Yogesh Gupta. (JR2) Sensitivity and specificity of body plethysmography in COPD patients. European Respiratory Society Journal.2013;47.
 42. Dr Sathe Sneha. Violence against doctors. Medical Journal of Western India. Volume 1, issue 2, Aug 2015.
 43. Effect of different stressors on ECG derived Index QT dispersion. Dr.S.M. Gawali, Priya Mardikar, VG Jaltade. International Jr. of current research and review , Vol 4(22), Sept. 2012, 109-114.
 44. QT dispersion. Left ventricular hypertrophy in essential hypertensive patients. Dr.S.M. Gawali, Veena Shriram, Dr VG Jaltade. International Jr. of current research and review , Vol 1(3), July-aug. 2013, 76-83.
 45. Correlation of QT dispersion with lipid profile in chronic smokers. Dr.S.M. Gawali. International Jr. of applied research and studies , Vol 4(5), May. 2015.
 46. Correlation of adiposity markers and abdominal strength with pulmonary function in Indian adult population. Dr meenakshi sable, Dr.S.M. Gawali International Jr. of current research . Vol 7(5), May 2015.
 47. The influence of gender on force per square unit area in young Indian adults and its correlation with endurance and aerobic capacity. Indian journal of basic and

applied medical research. Dr Prathamesh Kamble, Dr Garima Suryavanshi, Dr Sangeeta Gawali. Vol4(3) June 2015. 364-69.

48. Shenwai M, Aundhakar NV. Effect of cigarette smoking on various hematological parameters in young male smokers. Indian journal of basic and applied medical research. Dec 2012. Vol2(5). 386-92.
49. Shenwai M, Aundhakar NV. Study of effect of cigarette smoking on platelet count and platelet aggregability in young male smokers. Indian journal of basic medical science. Dec 2012. Vol3 (5).
50. Aundhakar NV. Oxidative stress and antioxidants level in patients of diabetes and diabetes with hypertension. Indian journal of pharmacy and integrated life sciences. Vol2(110). 1-14.
51. Aundhakar NV. Study of perceived stress amongst I MBBS Medical students. JETHS. Vol 2(1) 2015. 8-12.

On going research projects

Sr.no	Name of Investigator	Guide name	Topic
1	Dr.Santosh .M.Kayande	Dr.Mrs.U.S.Zingade	A Comparative Study of Autonomic Functions in pt's of Hypothyroidism
2	Dr.Garima.C.Suryavanshi	Dr.Mrs.S.M.Gawali	Brainstem Auditory Evoked Potential in essential Hypertension
3	Dr.Pallavi Talele	Dr.Deshpande	Comparative Study of Autonomic Functions in Normotensive And Hypertensive Subjects
4	Dr.Dhanashri Joshi	Dr.Sarode	Effect of Structured Yoga Practice on Cardiac Autonomic Functions And Psychological Status in Cases With Premenstrual Syndrome
5	Dr.Sagar Chavan	Dr.S.H.Sathe	Comparison of Nerve Conduction Functions in

			Male Smoker And Non Smokers
6	Veena Shriram	Dr. Aundhakar	Study of oxidative stress and pulmonary function tests in chronic obstructive pulmonary disease patients (COPD)
7	Dr. Prathamesh Kamble	Dr. Kowale	Study of prevalence morbidity and consequences of neurophysiological changes in a geriatric population residing in metro-city.

Awards

Sr. No.	Name of Teacher/Student	Name of the Award	State/National/International	Place
1)	Dr.U.S.Zingade	Bharat Seva Ratan Gold Medal Award by Global Foundation Research	National	Delhi
2)	Ms. Veena Shriram	Bharat Shiksha Ratan Award Global Society for Health and Education Growth	National	Delhi
3)	Dr. Payal Agrawal Dr.Varsha Sarode	Received IInd prize in poster presentation in 40 th Annual Conference of Research Society B.J.G.M.C. & S.G.H. Pune.	Local	Pune
4)	Dr.Anupam khare	Best oration prize at Annual research society conference BJGMC	Local	Pune

Achievements: Academic achievements of department

- Dr. Anupam Khare : Best oration prize at Annual research society Conference BJGMC 2012.
Topic : noise induced hearing loss in workers exposed to industrial noise pollution.
- Dr.Pranali Sonawane : best oration prize at international conference of Basic and applied Physiology at Ahmadabad 2012.
Topic : Effect of glycemc control on peripheral nerve function in lower limb in Type II DM patients.
- Dr.Pranali Sonawane : best poster prize at Annual research society Conference BJGMC 2012.
Topic : Pulmonary function tests in Type II DM patients
- Dr.Payal Agarwal : Best poster prize at Annual research society Conference BJGMC 2014.
Topic : Pulmonary function tests in AC users.
- Dr.Anupam Khare : Best oration prize at Annual research society Conference BJGMC 2015.
Topic : Item analysis of single best response type of MCQs in physiology.
- 3 PG students stood 1st in PG university examination.
 - Dr.Pranali Sonawane.Summer 2013
 - Dr.Vaishali Bansode. Summer 2014
 - Dr.Payal Agarwal.Winter 2014