**(SIF B-6)**

**MEDICAL COUNCIL OF INDIA**

**STANDARD INSPECTION FORM**

**FORM – B**

On the

Facilities for teaching in the subject of

**PHARMACOLOGY**

For the Course of study leading up to

M.B.B.S. Examination

**Name of Institution: Government Medical College, Surat**

**Place: Surat**

**Affiliated to the University of Veer Narmad South Gujarat University, Surat**

**Name of the Head of the Department:Dr N.D. Kantharia**

Signature of the Dean/Principal Signature of the

(with seal) Head of the Department

(This form shall be first filled in by the Principal/Dean of the college in collaboration with the Head of the Department and handed over to the Inspector, who shall examine the information already furnished & gather such additional information as may be necessary to fill in the spaces provided for within)

1. Date of Inspection/Visitation :

2. Names of Inspectors or Visitors :

3. Date of last Inspection/Visitation :

4. Names of last Inspectors/Visitors :

Defects pointed out in the last Inspection / To what extent remedied

Visitation

Observations of the assessors are to be made in assessment report only.

**A. Teaching Staff :**In case this space is less a statement showing the following information may be attached in this format. (to be filled in by the Dean/Principal of the college).

**Department of Pharmacology**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Post** | **No.** | **Name** | | **Qualification with dates thereof & Where obtained** | | | Experience | | | | | | | |
|  | | | | | | | **As Demonstrator/Tutor** | | | | **As Asst. Professor/Lecturer** | | | |
|  | | | **Date** | | **College** | **Univ.** | **Instt.** | **From** | **To** | **Total** | **Instt.** | **From** | **To** | **Total** |
| **1** | **2** | **3** | **4** | | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** |
| **Professor** |  |  | |  |  |  |  |  |  |  |  |  |  |  |
| **Associate Professor/Reader** |  |  | |  |  |  |  |  |  |  |  |  |  |  |
| **Asst. Prof. /Lecturer** |  |  | |  |  |  |  |  |  |  |  |  |  |  |
| **Demonstrator/Tutor** |  |  | |  |  |  |  |  |  |  |  |  |  |  |
| **Any other Category** |  |  | |  |  |  |  |  |  |  |  |  |  |  |

(cont.)

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Post** | **Experience** | | | | | | | | **Grand Total of Teaching Experience** | **Remarks if any,** |
| **As Assoc. Professor/Reader** | | | | **As Professor** | | | |
|  | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| **Professor** | **Institution** | **From** | **To** | **Total** | **Institution** | **From** | **To** | **Total** |  |  |
| **Associate Professor/Reader** |  |  |  |  |  |  |  |  |  |  |
| **Asst. prof. /Lecturer** |  |  |  |  |  |  |  |  |  |  |
| **Demonstrator/Tutor** |  |  |  |  |  |  |  |  |  |  |
| **Any other Category** |  |  |  |  |  |  |  |  |  |  |

**B. List of non-teaching staff :**

**Name (s) of staff members**

a. Pharmaceutical Chemist Nil

b. Technical Assistant Mr. Hasmukh Patel

c. Technicians Mr. Mahesh Naik

d. Store keeper-cum-clerk Mr. Dhaval Rana

e. Steno-typist Nil

f. Laboratory Attendants Mr. Rakesh Solanki

Mr. Kamlesh Solanki

1. Sweepers Mr. Subhash Sheth

h. Any other category

**C. Buildings :**

(i) **Demonstration Room :**

a) Number 4

b) Accommodation

* Size 30 X 20 ft and 20 X 20 ft
* Capacity 75 Each

c) Audio-Visual equipment available :Available 2OHP, 2 slide projectors**.**

**(ii) PRACTICAL LABORATORIES :**

**Experimental Pharmacology Clinical Pharmacology & Pharmacy**

a) Accommodation

* Size 210 sq. m. 190 sq. m
* Capacity 80 100

b) Working arrangement

* Seats available 80 80

c) Main Equipment available :As per Appendix No.\_1

1. Ante-room/preparation room

* Size 15 Sqm
* Location Near Laboratory

1. Whether Laboratory Manuals

Kept by students?

* Yes
* ~~No~~

1. Close circuits TV/any other teaching aids: CCTV- Two, One Computer with projector

(iii) **Museum :**

a) Size : 180 Sqm

b) **How are the drug sample arranged?**

System vise and Classification vise in cupboard

c) **Number of catalogues of the samples available to the students:**

Information about drug samples is displayed in the museum and

formulation- availability information is provided to each student as that

forms part of their practical-session training. 20 catalogs are also

available

d) **Total number of drug samples:** About 300 of various categories

1. **List of charts, photograph and other exhibits and their arrangement**

Illustrations about 100 on classification etc. Some are displayed in the

museum.

1. **Is there any section depicting “History of Medicine”**?: Yes
2. **Departmental Library-cum-Seminar Room:**
3. Is there a separate departmental library? Yes
4. Accommodation

* Size 60 Sqm
* Capacity 30

c) Number of Books in Pharmacology? 535

d) List of Journals : Indian Journal of Pharmacology

1. **Research Laboratory :**
2. Size 50 Sqm
3. Equipment Appendix No 3.
4. Are there any students taken for M.D. or Ph.D. in Pharmacology?

Yes

If so how many per year during the last three years.

1. Diploma Nil
2. Degree 5
3. List of publications by the members of the staff during the last 3 years?

1.Aashal B Shah, Preeti P Yadav, Mayur A Chaudhari, Jayant Rai.‘Bipolar disorder: a review of current U.S. Food and Drug Administration approved pharmacotherapy.’ In International Journal of Basic & Clinical Pharmacology Issue July 2015.

2.Dr Jayant Rai, Aashal Shah, Preeti P. Yadav, Mayur A. Chaudhari. Impact of anti-epileptic drugs on cognition: a review. Int J Basic Clin Pharmacol. 2016; 5(3): 599-604. doi:10.18203/2319-2003.ijbcp20161497

3.Paresh Solanki,Preeti P Yadav, Naresh D Kantharia. Exploration of mechanism of action of Ephedrine on Rat blood pressure.RRJPTS; 2(3)2014,62-68.

4.Paresh Solanki,Preeti P Yadav, Naresh D Kantharia .Ephedrine :direct,indirect or mixed acting sympathomimetic?A review.LJBCP2014;3(3)

5.Yadav Preeti P, Chaudhary Mayur, Patel Jayshree, Shah Aashal, Kantharia ND. Effectiveness of integrated teaching module in pharmacology among medical undergraduates. Int J App Basic Med Res 2016;6:215-9.

6.Jaykaran Charan, Mayur Chaudhari,RyanJackson,RahulMhaskar, Tea Reljic,AmbujKumar,Comparison of methodological quality of positive versus negative comparative studies published in Indian medical journals: a systematic review. BMJ Open 2015;5:e007853 doi:10.1136/bmjopen-2015-007853

7.Acharya CR, Sharma AK, Kantharia ND. Involvement of oxidative stress in patients of gout and antioxidant effect of allopurinol. Int J Med Sci Public Health. 2015; 4(2): 168-172. doi:10.5455/ijmsph.2015.0310201435

8.Acharya CR, Thakar HN, Vajpeyee SK. A study of oxidative stress in gentamicin induced nephrotoxicity and effect of antioxidant vitamin C in Wistar rats.. Natl J Physiol Pharm Pharmacol. 2013; 3(1): 14-20. doi:10.5455/njppp.2013.3.14-20

9.M. J. Barvaliya, t. K. Patel1, j. C. Patel and c. B. Tripathi.Effect of Zidovudine and its Interaction with Rocuronium on Neuromuscular Transmission. Indian J Pharm Sci. 2013 Mar-Apr; 75(2): 191–196.

10.Patel JC, Barvaliya MJ, Patel TK, Tripathi CB.Neuromuscular blocking effect of fluoxetine and its interaction with rocuronium. Auton Autacoid Pharmacol. 2013 Apr;33(1-2):17-24. doi: 10.1111/aap.12005.

11.Patel JC, Patel PB, Acharya H, Nakum K, Tripathi CB. Efficacy and safety of lornoxicam vs ibuprofen in primary dysmenorrhea: a randomized, double-blind, double dummy, active-controlled, cross over study. Eur J ObstetGynecolReprod Biol. 2015 May;188:118-23. doi: 10.1016/j.ejogrb.2015.03.005.

12.Mandavia DR, Patel MK, Patel JC, Anovadiya AP, Baxi SN, Tripathi CR. Anti-urolithiatic effect of ethanolic extract of Pedalium murex linn. fruits on ethylene glycol-induced renal calculi. Urol J. 2013 Sep 26;10(3):946-52.

13.Panchasara AK, Patel JC, Vadgama VK, Barvaliya MJ, Tripathi CB. Interaction between rosuvastatin and rocuronium in rat sciatic-gastrocnemius nerve-muscle preparation. J Anesth. 2014 Oct;28(5):727-32. doi: 10.1007/s00540-014-1792-z. Epub 2014 Feb 21.

14.Patel C, DeoghareS.Heart failure : Novel therapeutic approaches. J.Post graduate. Med.2015: Apr-Jun; 61(2); 101-8

15.Vaghasia K, Patel C, Shahane K, Gamit N, Zala A, Shah A. Estimation of thyroid profile in patients with diabetes mellitus in new civil hospital surat. Int.J. Basic clin Pharmacol.2015; 4(4): 714-719.

16.Malam PP, Kantharia ND, Zala AC, Amin AJ, Deoghare SB, Gajera CN. Role of glipizide therapy on oxidative stress parameters in the patient with Type-II diabetes mellitus. IJBCP 2015

17.Zala AC, Kantharia ND, Malam PP, Vaghasiya KB, Soni RG, Gajera CN. Effect of atenolol on hemoglobin level in mild to moderate hypertension. Ijbcp 2015

18.Nrupal Patel, Mira Desai, Samdih Shah, Prakruti Patel, Anuradha Gandhi. A study of medication errors in a tertiary care hospital – October 2016 (Perspective clinical research 2016; 7: 168-73

19.B Divakar. The studyof adverse drug reactions (ADRs) in HIV patients taking Highly Active Antiretroviral Therapy in ART centre, NCH, Surat. (international journal of medical and pharmaceutical sciences -2012:3(2) 09-18

20.B Divakar. Effect of gabapentin on haloperidol induced inhibition of conditioned avoidance response in rat.IJBCP.November December 2012-VOL 1 –ISSUE 3-page 216.

21.B Divakar .Comparative study of the effect of taping on scapular stability and upper limb fuicntion in recovering hemiplegics with scapular weakness-chronicles of young scientists- vol4-issue 2,jul-dec 2013.

22.B Diwakar. Short communication: student led objective tutorials in pharmacology: an interventional study. IJP.2016,VOL-48,ISSUE 7.P 83-88.

23.Neha Patel. Prescription audit and drug utilization pattern in indoor patients of paediatrics department. International journal of current research and review. Vol-8, issue 23, Dec 2016.

24.Patel BS, Kubavat AR, Piparava KG. Correlation of Students’ performance in theory and practical of final summative pharmacology examinations in MBBS curriculum: A critical Insight. National Journal of Physiology, Pharmacy and Pharmacology.2013;3(2):171-175

25.Chaudhari JS, Kubavat AR, Mistry VR, Pandya AS, Hotchandani SC, Patel BS. A drug utilization study of analgesics for management of postoperative pain in patients admitted at a tertiary care teaching hospital. International Journal of Basic and Clinical Pharmacology.2013;2(6):757-762

26.Dr. Patel BS, Dr. Kubavat AR, Dr. Sondarva DB, Dr. Piparva KG. Drug utilization study in neonatal intensive care unit at tertiary care hospital, Rajkot, Gujarat: A prospective study. World journal of pharmacy and pharmaceutical Sciences. 2015;4(7):2034-2042

27.Dr. Sondarva DB, Dr. Kubavat AR, Dr. Patel BS, Dr. Mistry VR. Utilization of antimicrobial agents in pediatric indoor patients of pneumonia at tertiary care hospital. World journal of pharmacy and pharmaceutical Sciences. 2015;4(2):301-310

28.Patel BS, Kubavat AR, Sondarva DB, Chaudhari JS. Knowledge, Attitude and Practice of resident doctors about medical research in a tertiary care hospital, Rajkot, Gujarat. Int J Res Med. 2014; 3(2);94-97

29.Dr. Sondarva DB, Dr. Kubavat AR, Dr. Patel Bs, Dr. Modi JP. Assessment of knowledge, attitude and practice of pharmacovigilance among resident doctors and staff nurses in a tertiary care hospital, Gujarat. World journal of pharmaceutical research.2015;4(7):2261-2269

30.Patel BS, Chavda FM. Cost variation study of various artemisinin formulations available in Indian market. World journal of pharmaceutical research.2015;4(8):2924-2930

31.Patel BS, Chavda FM, Mundhava SG. Cost Variation Analysis Of Single Nonsteroidal Anti-Inflammatory Agents Available In Indian Market: An Economic Perspective. International Journal of Pharmaceutical Sciences and Research. 2016; 7(5): 2174-2180

32.Patel BS, Chavda FM, Mundhava SG. Study Of Variation In Price Of Various Nsaids Combinations Available In Indian Market. International Journal of Pharmaceutical Sciences and Research. 2016; Vol. 7(6): 2518-2524

33.Jaykaran, Yadav P, Kantharia ND. Ethics in animal experiments. Indian Med Ethics 2012 Jan-Mar; 9(1):70-1.

34.Jaykaran, Yadav P, Kantharia ND, Saxena D. Gender and racial bias in drug promotional material distributed by pharmaceutical companies. J PharmacolPharmacother2012;3:55-6.

35.Jaykaran Charan, Summaiya Mulla, Sridhar Ryavanki, Naresh Kantharia. New Delhi Metallo – beta lactamase – 1 containing Enterobacteriaceae: origin, diagnosis, treatment and public health concern. The Pan African Medical Journal. 2012;11:22.

36.Charan J, Goyal JP, Saxena D, Yadav P. Vitamin D for prevention of respiratory tract infections: A systematic review and meta-analysis. J PharmacolPharmacother2012;3:300-3.

37.Mody P, Biswas T, Charan J, Parikh D. Reporting of adverse drug reactions in clinical trials published in Indian Medical/Dental journals. J PharmacolPharmacother2012;3:325-6.

38.Study of pattern of road traffic accident mortalities in surat. Chirag Gajera, Malaviya ,Govekar, Chandegara , Malam , Zala AC. Int J Res Med. 2013; 2(2);158-161

39.Patel C, Deoghare S (2012) Medicine Withdrawal and Recall: Needs Proper Evaluation. Adv Pharmacoepidem Drug Safety 1:118. doi:10.4172/2167- 1052.1000118

40.Navadiya V , Sinha A, Barejia A, Gohil N, Malam P, Shah A. Effect of atorvastatin on serum levels of lipase and amylse in patients of hyperlipidemia in a tertiary care hospital. Jorunal of clinical and diagnostic research. 2018:2(9);FC09-12

1. **Current problems on which research work is going on and by whom?**

(a statement may be furnished)

1. Prospective observational study on effect of olanzapine on heart rate variability in patients of Schizophrenia and brief psychotic episode. By Dr.Kishan Patel
2. Impact of 1st line anti tubercular drugs on heart rate variability in category -1 tuberculosis patients at tertiary care hospital. By Dr. Disha Patel
3. ”Adverse Drug Reaction Monitoring in Anti-Tubercular Treatment alone and in combination with Highly Active Anti-Retroviral Therapy”. By Dr. Bhargav Darji
4. Evaluation of adverse drug reactions of anticancer drugs used in cancer treatment in a tertiary care teaching hospital, Gujarat. By Dr. Bhargavi patel
5. Effect of Vitamin-C Supplementation on Sputum Conversation Rate of Category-1 Pulmonary Tuberculosis Patients in Intensive Phase Antitubercular Therapy -A Prospective Observational Study. By Dr. Mrugank patel
6. Do Undergraduate students in any way participate in them?

Yes

1. **OFFICE ACCOMMODATION**

a) Professor and HOD : 60 Sqm

b) Associate Professors/Readers : 40+ 40 Sqm

c) Asst. Professors/Lecturers : 40+40 Sqm

d) Tutors/Demonstrators : 40+15 Sqm

e) Non-teaching and clerical staff : 15 Sqm

**D. TEACHING PROGRAMME :**Appendix No. 5

(For duration of the entire course)

I. Curriculum of studies

(To be filled by the Dean/Principal along with Head of the department). Curriculum in the subject as prescribed by MCI (a copy of the detailed curriculum along with the departmental and educational objectives of the subject may be appended).

* Is the above curriculum followed in totality? Yes
* If not, what are the variations and reasons thereof? NA

(To be filled in by the Inspectors/Visitors). Does the curriculum of studies adopted by the training center differ materially from that recommended by the Medical Council of India.

If so what are the variations and what are your observations regarding them ?

**II. Methodology**

(for duration of the entire course)

Number

1. Didactic Lectures80 Didactic lectures + 40 [Teachers Assisted learning sessions] interactive lectures

In theory class, entire batch is divided into at least four to five small batches. Topic for the small group class is announced well in advance and actually written on the notice board of department for the student information before at least three days. So student can actually prepare the topic .All the faculties involved in teaching met on the same day of class decide what should be taught among themselves keeping in mind the following terminologies.

----Must be taught

----Should be taught

----Should have been ignored

During the class, teacher will not go for the dietetic type of the lecture in which flow of information in unidirectional. But here the learners are usually actively involved and if they find any difficulty in understanding the topic they can have the active discussion with teacher.

**In practical class**

In practical class our department has started PBL where students use triggers from problem case so that they can define their own learning objectives. In this exercise, from each learning objective real life problems are derived e.g. secretion from mouth (PBL exercise) for OP poisoning in pharmacology.

The teachers clarify terms, concepts not really comprehensives.

Students discuss and analyze the problem and formulate the hypothesis

Synthesize the newly acquired information and try to solve the problem based on this knowledge.

In PBL, we facilitate the discussion, provides the guidance of all types, maintain time limit and try to prevent generation of wrong concepts in the mind of students.

In Gujarat state our college GMCS was pioneer in introducing Drip setting, Injection filing Practicals during pharmacology teaching and replaced traditional dispensing pharmacy.

1. Demonstrations: 18 demonstrations
2. Tutorials 40 Tutorials
3. Seminars

- conducted during the year. 10-12 Student seminar

- Number of students attending each: Whole Batch

1. Practicals: 12 Experimental and 12 Clinical Pharmacy
2. Any other teaching/training activities :

Problem based learning & Clinical case presentation from wards

1. Is there any integrated teaching? Yes
2. Records Methods of Assessment thereof :

Terminal examination (Theory+Practical) at the end of the term & day to day

Assessment in every practical

(Time table of lectures, demonstrations, seminars, tutorials, practical and dissection may be given).

Signature of Head of the Department

**F. OBSERVATIONS OF THE INSPECTORS/VISITORS :**

Observations of the assessors are to be made in assessment report only.