

DEPARTMENT WISE LIST OF FACULTY MEMBERS

Department	Name of the Faculty Qualification IMR Number	Current Designation & date of Promotion	Nature of employment Regular/Per manent or Outsourced	Details of service in last 5 years					Number of lectures taken/year Topics covered
				1	2	3	4	5	
Pharmacology	Dr. N. Meena Devi Regd No. 4640	Professor & Head (01.02.2016)	Regular	Professor 01.02.2016 till date					a.) 2017 to 2020 – 150 Lectures & Topic covered. Enclosed (annexure No. (A) b).2020 – lectures (main) and 138 lectures (SGD) Topic enclosed (Annexure No. (B)
Pharmacology	Dr. Ng. Gunindro Singh Regd No. 09-6873	Professor (01.02.2018)	Regular	Assoc Professor 11.02.2014 to 31.01.2018		Professor 01.02.2018 till date			
Pharmacology	Dr. P. Shyamasakhi Devi Regd No. 3344	Associate Professor (01.02.2015)	Regular	Assoc. Professor 01.02.2015 till date					
Pharmacology	Dr. M. Medhabati Devi Regd No. 3705	Associate Professor (01.02.2017)	Regular	Assoc. Professor 01.02.2017 till date					
Pharmacology	Dr.L.Tarinita Devi Regd No. 4290	Associate Professor (01.02.2018)	Regular	Asst. Professor 01.02.2013 to 31.01.2018		Assoc. Professor 31.01.2018 till date			
Pharmacology	Dr. Usham Dharmaraja Meetei Regd No. 10-8309	Assistant Professor (01.02.2015)	Regular	Asst. Professor 01.02.2015 till date					

Annexure - I

Sr.No	Faculty Name	Publication in Vancouver referencing style	Pubmed Index Yes/No	Scopes
1	Prof. N Meena Devi	<ol style="list-style-type: none"> 1. Medhabati M, Devi S P, Devi N M, Subhalakshmi A. Analgesic activity of <i>Portulaca oleracea</i> Linn. in experimental animal models. J Evol Med Dent Sci 2017 Jan; 6 (4): 269-272. 2. Rakesh Singh Moirangthem, Gunindro N, Singh T D, Devi S K, Devi N M, Rita S. Protective effect of <i>phyllanthus fraternus</i> against <i>cyclophosphamide</i> induced nephrotoxicity in rats. Int. J. of Basic & Clinical Pharmacology. April 2017; 6(4). 3. Dutta S, Bhattacharjee A, Yadav M, Shougrakpam P, Monin R G, Das A and Devi N M. Antibacterial activity of spiny coriander <i>Eryngium foetidum</i> linn. on gram positive and gram negative bacteria. Int J of recent Sci Res August 2017; 8(9): 19959-62. 4. Devi N M Protective effect of the aqueous extract of <i>Eryngium foetidum</i> Linn. on acetaminophen - induced nephrotoxic rats. Int. Journal of current Res September. 2017; 9(9): 57264-7 5. Dutta S, Bhattacharjee A, Devi N M. Prescription pattern of antibiotics in paediatric inpatients at a tertiary care hospital in North East India. Int. Journal of basic & Clinical Pharmacology October,2017;6 (10):2384-7 6. Kumar T, Devi P S, Banerjee P and Devi <u>N M</u>. Anticonvulsant effect of ethanolic extract of <i>Trigonella foenum graecum</i> linn. And sodium valproate - a comparative study in albino mice. Int Journal of Advanced Res November 2017; 5(11): 350-354 7. Dutta G, Kumar T, Kumar R, Devi N M, Banerjee P and Devi P S. Awareness in undergraduate medical students regarding care and handling of experimental animals: A questionnaire based study. Int J Pharm Bio Sci 2018 (October - December); 9(4): 33-8 8. Kumar T, Devi PS, Banerjee P, Devi N M. Anticonvulsant effect of ethanolic extract of <i>Trigonella foenum-graecum</i> Linn. and sodium valproate-A comparative study in albino mice. Int J Adv Res 2017 Nov; 5(11):350-4. 	<p>EMBASE, Indian Citation Index</p> <p>EMBASE, Indian Citation Index</p>	

		<ol style="list-style-type: none"> 9. Dutta G, Kumar T, Kumar R, Devi NM, Banerjee P, Devi PS. Awareness in undergraduate medical students regarding care and handling of experimental animals: A questionnaire based study. <i>Int J Pharm Bio Sci</i> 2018 Oct; 9 (4):33-8. 10. Bhattacharjee A, Dutta A, Devi L T , Devi NM Anthelmintic activity of aqueous extract of <i>tagetes patula</i> flowers in adult earth worms. <i>Ijmsir</i> 2020 July; 5 (4):143-47. 11. Bhattacharjee A, Das R, Meetei U D and Devi NM Effect of aqueous extract of piper betle leaves on drug induced nephrotoxicity in albino rats. <i>International journal of current medical and pharmaceutical research</i>, 2020 July; 6 (7a) 5203-7. 12. Athira M, Nongthongbam S, Sinha S K and Devi N M. Pharmacoeconomic study on drug wastage. (<i>ijar</i>) 2020 Sep 28. 13. Datta S, Ningthoujam G, Zosangpuii C, Shyamasakhi P and Devi NM. In vitro evaluation of anthelmintic activity of ethanolic extract of <i>Centella Asiatica</i> Linn. in Indian adult earthworm. <i>Int J Curr Pharm Res</i> 2021 Sep; 13(5): 39-41. 14. Sinha SK, Neison M, Muralidas A, Momin RG, Shyamasakhi P, Devi NM. Anticonvulsant activity of <i>Toona ciliate</i> M. Roem in albino mice. <i>Int J Sci Rec</i> 2020 Oct; 9(10):78-80. 15. Momin RG, Medhabati M, Nongthombam S, Sinha SK, Shyamasakhi P, Devi NM and Marak RC. Anti-inflammatory activity of ethanolic extract of <i>Toona ciliate</i> M. Roem (EETC) in albino rats. <i>Ijsr</i> 2020 Dec; 9 (12):72-5. 16. Datta S, Zosangpuii C, Ningthoujam G, Moirangthem S, Devi PS and Devi NM. In vitro evaluation of anthelmintic activity of ethanolic extract of <i>Ipomoea Aquatica</i> Forsk. in Indian adult earthworms. <i>JMSCR</i> 2021 July; 9(7): 146-50. 17. Datta S, Zosangpuii C, Ningthoujam G, Paonam SD, Leishangthem TD, Devi NM and Nameirakpam SS. A retrospective study on adverse drug reactions of anticancer drugs in a tertiary care hospital in northeast India. <i>JCDR</i> 2021 Nov; 15(11):1-5. 	<p style="text-align: center;">EMBASE, Indian Citation Index</p>	
2	<p>Prof. Ng. Gunindro Singh</p>	<ol style="list-style-type: none"> 1. Shougrakpam P, Bhattacharjee A, Medhabati M, Gunindro N. Comparative study of antidepressant-like effect of the leaves of <i>Sapindus emarginatus</i> and <i>Acorus calamus</i> in experimental animal models. <i>Int J Curr Pharm Res</i>.2020; 13(1):28-31. 2. Shougrakpam P, Bhattacharjee A, Medhabati M, Gunindro N comparative study of 	<p style="text-align: center;">EMBASE, Indian Citation Index</p>	

		<p>antidepressant like effect of the leaves of <i>sapindus emarginatus</i> and <i>acorus calamus</i> in experimental animals. <i>Int.j.curr.pharm.res.</i> Jan 2021; 13(1):28-31.</p> <p>3. Medhabati M, Babycha L, Bhattacharjee A, Gunindro N anticonvulsant activity of <i>portulaca oleracea</i> linn. And <i>eupatorium brimanicum</i> dc in mes induced seizure: a comparative study. <i>Int.curr.pharm.res.</i> March 2021; 13(2):67-9.</p> <p>4. Bhattacharjee A, Devi S K, Gunindro N cardioprotective activity of aqueous extract of <i>tagetes patula</i> flowers against cyclophosphamide induced cardiotoxicity in rats: a biochemical, and histopathologic. <i>International journal of medical and biomedical studies.</i> 5,2 (mar. 2021).</p> <p>5. Bhattacharjee A, Devi S K, Gunindro N effect of aqueous extract of piper betle leaves on drug induced nephrotoxicity in albino rats. <i>international journal of current medical and pharmaceutical research.</i> July 2020;6(7) a.</p> <p>6. Shougrakpam P, Bhattacharjee A, Gunindro N, Rita S. Comparative study of anticonvulsant effect of the leaves of <i>sapindus emarginatus</i> and <i>acorus calamus</i> in experimentally induced animal models of epilepsy. <i>Int J Curr Pharm Res.</i> 2021;13(1): 36-9</p>	<p>EMBASE, Indian Citation Index</p> <p>EMBASE, Indian Citation Index</p> <p>EMBASE, Indian Citation Index</p>	
3	Dr.P. Shymasakhi Devi	<p>1. Priyotosh B, Tarun K, Kupar SP, Devi PS, Pfuzia A. Octreotide induced hypersensitivity reaction: A rare case report. <i>Int J Adv Res</i> 2017 Dec; 5 (12): 1921-3.</p> <p>2. Kumar T, Devi PS, Banerjee P, Devi N M. Anticonvulsant effect of ethanolic extract of <i>Trigonella foenum-graecum</i> Linn. and sodium valproate-A comparative study in albino mice. <i>Int J Adv Res</i> 2017 Nov; 5(11):350-4.</p> <p>3. Medhabati M, Devi S P, Devi N M, Subhalakshmi A. Analgesic activity of <i>Portulaca oleracea</i> Linn. in experimental animal models. <i>J Evol Med Dent Sci</i> 2017 Jan; 6 (4): 269-272.</p> <p>4. Kumar T, Pfuzia A, Banerjee P, Sougrakpam P, Devi PS. Comparative study of in-vitro anthelmintic activity of ethanolic extracts of <i>Allium tuberosum</i> Rottler Ex Spreng. and <i>Trigonella Foenum-graecum</i> Linn. on Indian earthworm. <i>Int J Adv Res</i> 2018 Dec; 6(12): 491-4.</p> <p>5. Dutta G, Kumar T, Kumar R, Devi NM, Banerjee P, Devi PS. Awareness in undergraduate medical students regarding care and handling of experimental animals: A questionnaire based study. <i>Int J Pharm Bio Sci</i> 2018 Oct; 9 (4):33-8.</p>		

		<ol style="list-style-type: none"> 6. Sinha S K, Neison M, Muralidas A, Momin R G, Paonam SD, Devi NM. Anticonvulsant activity of <i>Toona ciliate</i> M. Roem in albino mice. Int J Sci Rec 2020 Oct; 9(10):78-80. 7. Momin RG, Medhabati M, Nongthombam S, Sinha SK, Paonam SD, Devi NM and Marak RC. Anti-inflammatory activity of ethanolic extract of <i>Toona ciliate</i> M. Roam (EETC) in albino rats. Ijsr 2020 Dec; 9 (12):72-5. 8. Datta S, Ningthoujam G, Zosangpuii C, Paonam SD and Meena N. In vitro evaluation of anthelmintic activity of ethanolic extract of <i>Centella Asiatica</i> Linn. in Indian adult earthworm. Int J Curr Pharm Res 2021; 13(5): 39-41. 9. Datta S, Zosangpuii C, Ningthoujam G, Moirangthem S, Paonam SD and Devi NM. In vitro evaluation of anthelmintic activity of ethanolic extract of <i>Ipomoea Aquatica</i> Forsk. in Indian adult earthworms. JMSCR 2021 July; 9(7): 146-50. 10. Datta S, Zosangpuii C, Ningthoujam G, Paonam SD, Leishangthem TD, Nameirakpam MD and Nameirakpam SS. A retrospective study on adverse drug reactions of anticancer drugs in a tertiary care hospital in northeast India. JCDR 2021 Nov; 15(11):1 		
4	Dr. M. Medhabati Devi	<ol style="list-style-type: none"> 1. Medhabati M, Devi S P, Devi N M, Subhalakshmi A. Analgesic activity of <i>Portulaca oleracea</i> Linn. in experimental animal models. J Evol Med Dent Sci 2017 Jan; 6 (4): 269-272. 2. Sinha SK, Medhabati M, Nongthombam S, Momin R G, Muralidas A, et al. In vitro evaluation of anthelmintic activity of ethanolic extract of leaves of <i>toona ciliata</i> m. Roem on Indian earthworm. Int. J. Adv. Res. July 2019; 7(7):250-3. 3. Tewari B, Medhabati M. Anti-ulcer effect of aqueous extract of <i>gynura cusimbua</i> (d.don) S. Moore on swimming stress ulcer model in albino rats. J. Evolution med. Dent. Sci (jemds). Aug 2019; 8(33):2602-06. 4. Momin RG, Medhabati M, Nongthombam S, Sinha SK, Shyamasakhi P, Devi NM and Marak RC. Anti-inflammatory activity of ethanolic extract of <i>Toona ciliate</i> M. Roam 		

		<p>(EETC) in albino rats. <i>Int. J. Adv. Res.</i> 2020 Dec; 9 (12):72-5.</p> <p>5. Medhabati M, Babycha L, Bhattacharjee A, Gunindro N. Anticonvulsant activity of <i>portulaca oleracea</i> linn. And <i>eupatorium brimanicum</i> DC in MES induced seizure: a comparative study. <i>Int.curr.pharm.res.</i> March 2021; 13(2):67-9.</p> <p>6. Medhabati M, Babycha L, Tarinita L, Tewari B, Sinha SK. Evaluation of effect of aqueous extract of <i>portulaca oleracea</i> linn. Leaves in acute inflammation. <i>Int. j. Sci.res.</i> Oct 2020; 9(10):9-10.</p> <p>7. Shougrakpam P, Bhattacharjee A, Medhabati M, Gunindro N. Comparative study of antidepressant-like effect of the leaves of <i>sapindus emarginatus</i> and <i>acorus calamus</i> in experimental animal models. <i>International journal of current pharmaceutical research</i> 14 Sep 2020. revised and accepted: 17 Nov 2020.</p> <p>8. Shougrakpam P, Bhattacharjee A, Medhabati M, Gunindro N. Comparative study of antidepressant like effect of the leaves of <i>sapindus emarginatus</i> and <i>acorus calamus</i> in experimental animals. <i>Int.j.curr.pharm.res.</i> Jan 2021; 13(1):28-31.</p> <p>9. Devi L T, Devi M M, Lalvarmawi F and Datta S. Anti-pyretic and anti-inflammatory activity of aqueous extract of <i>solanum xanthocarpum</i> berries in suitable animal models <i>Int. J. Adv. Res.</i> 2021 9(11),1-6</p>		
5	Dr. L. Tarinita Devi	<p>1. Banerjee P, Meetei U D, Collins Z. Sono, Devi L T, Rita S. Antidiabetic effect of acacia catechu in normal and diabetic albino rats, <i>Int Sci Res</i>, March-2019; 8(3)</p> <p>2. Bhattacharjee A, Dutta S, Devi L T, Devi N M. Anthelmintic activity of aqueous extract of tagetes patula flowers in adult earth worms. <i>International journal of medical sciences and innovative research (ijmsir)</i> July – 2020;5 (4):143 – 7.</p> <p>3. Devi M M, Babycha L, Devi L T, Tewari B, Sinha Sk. Evaluation of effect of aqueous extract of <i>portulaca oleracea</i> linn. Leaves in acute inflammation. <i>Int.j.adv.res.</i> Oct 2020; 9(10):9-10.</p> <p>4. Datta S, Zosangpuii C, Ningthoujam G, Paonam SD, Leishangthem TD, Nameirakpam MD and Nameirakpam SS. A retrospective study on adverse drug reactions of anticancer drugs in a tertiary care hospital in northeast India. <i>JCDR</i> 2021 Nov; 15(11):1-5.</p>		

6	Dr. Usham Dharmaraja Meetei	<ol style="list-style-type: none"> 1. Singh S V J, Meetei U D, Devi A S, Devi R S. Effect of ethyl acetate extract of <i>Melothria perpusilla</i> on intestinal absorption of glucose in albino rats <i>ijbcp int journal of basic & clinical pharmacology</i>. March 2017; 6(3):543-6 2. Vikram S, Singh J, Meetei U D, Devi A S and Devi R. Effect of Ethyl Acetate Extract of <i>Melothria Perpusilla</i> on Oral Glucose Tolerance Test in Albino Rats, <i>J Clin Diagn Res</i>. 2017 Jun; 11(6):04–06. 3. Jitendra S V, Singh L, Bachaspatimayum R, Meetei U D, Devi S A, Devi R S. Terbinafine in Fixed <i>Cutaneous Sporotrichosis</i>. A Case Series <i>Journal of clinical and diagnostic research</i>, 2018, Nov, vol-12(11): 01-03 msir. 4. Banerjee P, Meetei U D, Collins Z. Sono, Devi L T, Rita S. Antidiabetic effect of acacia catechu in normal and diabetic albino rats, <i>Int Sci Res</i>, March-2019; 8(3) 5. Bhattacharjee A, Das R, Meetei U D and Devi N M. Effect of aqueous extract of piper betle leaves on drug induced nephrotoxicity in albino rats. <i>International journal of current medical and pharmaceutical research</i>, July 2020; 6(7)(a). 6. Banerjee P, Kumar T, Chandra S S, Meetei U D. Anthelmintic activity of aqueous extract of <i>tagetes patula</i> flowers in adult earth worms. <i>International journal of medical sciences and innovative research (ijmsir)</i>. July – 2020; 5 (4), page no. 143 – 7. 7. Banerjee P, Kumar T, Sarangi S C, Meetei U D. Pharmacoeconomic study on drug wastage <i>International Journal of Advanced Research (IJAR)</i> 28/Sep/2020 8. Banerjee P, Kumar T, Sarangi S C, Meetei U D. Anti-inflammatory potential of aqueous extract of <i>elsoltzia stachyodes</i> on experimental models of inflammation in rats. <i>Journal of natural science, biology and medicine</i> 2021; 12(1) 	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>	<p>Yes</p>
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3. Medical Educator Training/Research methodology and dates

Sl.No	Name of Faculty	Revised basic course workshop & AETCOM Yes /No if Yes with Date	Curriculum Implementation Support Program (CISP) Yes /No if Yes with Date	Basic Course in Biomedical Research Yes /No if Yes with Date
1.	Prof N. Meena Devi &	Yes. Revised Basic Course Workshop in Attitude, Ethics & Communication (AETCOM) 28 th Sep to 30 th Sep, 2021	Yes. Curriculum Implementation support programme (CISP) 29 th June to 1 st July 2019	Yes. Workshop on fundamentals of Biomedical research Methods. 8 th to 9 th October 2021
2.	Prof. Ng. Gunindro Singh		Yes. GCP, Current regulatory & Ethical requirement for conducting clinical trials/ Researched in India including schedule Y organized by CDSA, THSI, DBT Govt. of India – 5 th & 6 th June, 2018. *Curriculum Implementation support programme (CISP) 29 th June to 1 st July 2019	
3.	Dr. Paonam Shyamasakhi Devi	Yes. Revised Basic Course Workshop and Training Programme (AETCOM) held from 23 rd to 25 th March, 2021 at RIMS, Imphal.	Yes. Curriculum Implementation Support Programme II held in RIMS, Imphal From 7-8 September, 2020.	
4	Dr. M. Medhabati Devi	Yes. Revised Basic Course Workshop and Training Programme (AETCOM) held from 23 rd to 25 th March, 2021 at RIMS, Imphal	Yes. Curriculum Implementation Support Programme II held in RIMS, Imphal From 7-8 September, 2020.	

			*GCP, Current regulatory & Ethical requirement for conducting clinical trials/ Researched in India including schedule Y organized by CDSA, THSI, DBT Govt. of India – 5 th & 6 th June, 2018.	
5	Dr. L. Tarinita Devi	Yes. Revised Basic Course Workshop and Training Programme (AETCOM) held from 23 rd to 25 th March, 2021 at RIMS, Imphal	Yes. Curriculum Implementation Support Programme II held in RIMS, Imphal From 7-8 September, 2020. *GCP, Current regulatory & Ethical requirement for conducting clinical trials/ Researched in India including schedule Y organized by CDSA, THSI, DBT Govt. of India – 5 th & 6 th June, 2018.	
6	Dr. Usham Dharmaraja Meetei			Yes. Workshop on fundamentals of Biomedical research Methods. 8 th to 9 th October 2021

Annexure A

M.B.B.S. Syllabus of Manipur University in Pharmacology

1st paper (1st half)

A) General Pharmacology

1. Approaches to drug discovery and development of new drugs.
2. Routes of administration and new drug delivery system.
3. Absorption, Distribution & binding of drugs to plasma proteins.
4. Pharmacokinetics, Plasma half life and biological half life.
5. Biotransformation and excretion of drugs.
6. Enzyme induction, enzyme inhibition and competition; and drug interactions.
7. Mechanism of drug action and drug-receptor interactions.
8. Pharmacogenetics.
9. Terratogenicity and Carcinogenicity of drugs.
10. Adverse effects of drugs.
11. Factors modifying drug action.
12. Rational use of drugs and essential drugs.

B) Autonomic Nervous System (A.N.S.)

1. Anatomical and physiological consideration of Autonomic Nervous System.
2. Cholinergic drugs, Cholinergic receptors and their pharmacological characterization.
3. Anticholinergic, ganglion blocking and neuromuscular blocking drugs.
4. Irreversible cholinesterases and cholinesterase reactivating drugs.
5. Adrenergic drugs, adrenergic receptors and their pharmacological characterization.
6. Adrenergic blocking drugs.

C) Drugs affecting blood & blood formation

1. Haematinics and Erythropoietin
2. Drugs affecting coagulation, bleeding and thrombosis.
3. Hypolipidaemic drugs.

D) Drugs acting on respiratory system

1. Drugs used in Bronchial asthma and anti tussive agents.

A. Central nervous system (C.N.S.)

1. General anaesthetics
2. Ethyl and Methyl alcohols.
3. Sedative-hypnotics
4. Antiepileptic drugs
5. Antiparkinsonian drugs.
6. Drugs used in mental illness: Antipsychotic and antimaniac drugs
7. Drugs used in mental illness: Antidepressant and antianxiety drugs
8. Opioid analgesics and antagonists
9. CNS stimulants and cognition enhancers

B. Cardiovascular system

1. Electrophysiology of heart,
2. Patho-physiology of cardiac arrhythmias and anti-arrhythmic drugs.
3. Pharmacotherapy of congestive heart failure.
4. Anti-anginal agents.
5. Anti-hypertensive agents.

C. Drugs acting on Kidney

1. Diuretics and anti-diuretics.

A. Gastro-intestinal drugs

1. Drugs for peptic ulcer and gastroesophageal Reflux disease
2. Emetics & anti emetics, prokinetic and digestant drugs.
3. Drugs for constipation & diarrhoea.

B. Endocrinology

1. Hormones of anterior pituitary gland.
2. Thyroid hormones and thyroid inhibitors.
3. Insulin, oral hypoglycemic agents and glucagon.
4. Pharmacology and therapeutics of corticosteroids.
5. Gonadal hormones and their antagonists, oral contraceptive pills.
6. Oxytocin and drugs acting on uterus.

C. Drugs acting on Peripheral nervous system

1. Skeletal muscle relaxants
2. Local anaesthetics

IInd paper (2nd Half)

A. Autacoids and related drugs

1. Histamine & anti-histaminics.
2. Drug affecting coagulation, bleeding and thrombosis.
3. Hypolipidemic drugs.

B. Antimicrobial agents (AMAS)

1. General concept of chemotherapy and mechanism of action of AMAS.
2. Sulphonamides, co-trimoxazole and quinolones.
3. β — Lactam antibiotics.
4. Tetracyclines and chloramphenicol.
5. Aminoglycoside antibiotics.
6. Miscellaneous antibiotics.
7. Chemotherapy of tuberculosis and leprosy.
8. Anti-viral agents.
9. Anti — fungal agents.
10. Chemotherapy of malaria and other protozoan diseases.
11. Chemotherapy of helminthiasis.

C. Chemotherapy of Neoplastic diseases.

D. Autacoids and related drugs.

1. **Histamine** and antihistaminics.
2. 5-HT and its antagonists and drug therapy of migraine.
3. Prostaglandins, leukotrienes and platelet activating factor.
4. Renin-angiotensin system and plasma kinins

E. Miscellaneous drugs

1. Immunosuppressant drugs.
2. Drugs acting on skin and mucous membranes
3. Antiseptics, disinfectants and ectoparasiticides
4. Chelating agents.
5. Vitamins
6. Vaccines, antisera and immunoglobulins.
7. Drug interactions

Annexure B

Paper wise distribution of topics for Pharmacology.

1st paper (1st half)

A) General Pharmacology

1. Approaches to drug discovery and development of new drugs.
2. Routes of administration and new drug delivery system.
3. Absorption, Distribution & binding of drugs to plasma proteins.
4. Pharmacokinetics, Plasma half life and biological half life.
5. Biotransformation and excretion of drugs.
6. Enzyme induction, enzyme inhibition and competition: and drug interactions.
7. Mechanism of drug action and drug-receptor interactions.
8. Pharmacogenetics.
9. Terratogenicity and Carcinogenicity of drugs.
10. Adverse effects of drugs.
11. Factors modifying drug action.
12. Rational use of drugs and essential drugs.
13. Geriatric and paediatric pharmacology.

B) Autonomic Nervous System (A.N.S.)

1. Anatomical and physiological consideration of Autonomic Nervous System.
2. Cholinergic drugs, Cholinergic receptors and their pharmacological characterization.
3. Anticholinergic, ganglion blocking and neuromuscular blocking drugs.
4. Irreversible cholinesterases and cholinesterase reactivating drugs.
5. Adrenergic drugs, adrenergic receptors and their pharmacological characterization.
6. Adrenergic blocking drugs.

C) Drugs acting on respiratory system

1. Drugs used in Bronchial asthma and anti tussive agents.

D) Pandemic Management module

1. Module 2.5 Therapeutic strategies including new drug development.

E) AETCOM —

1. Module 2.6 Bioethics continued : Case studies on autonomy and decision making.
2. Module 2.8: What does it mean to be family member of a sick patient?

1st paper (2nd half)

A. Central nervous system (C.N.S.)

1. General anaesthetics
2. Ethyl and Methyl alcohols.
3. Sedative-hypnotics
4. Antiepileptic drugs
5. Antiparkinsonian drugs.
6. Drugs used in mental illness: Antipsychotic and antimaniac drugs
7. Drugs used in mental illness: Antidepressant and antianxiety drugs
8. Opioid analgesics and antagonists
9. CNS stimulants and cognition enhancers

B. Cardiovascular system (CVS)

1. Electrophysiology of heart.
2. Patho-physiology of cardiac arrhythmias and anti-arrhythmic drugs.
3. Pharmacotherapy of congestive heart failure.
4. Anti-anginal agents.
5. Anti-hypertensive agents.

C. Drugs affecting blood & blood formation

1. Haematinics and Erythropoietin
2. Drugs affecting coagulation, bleeding and thrombosis.

D. Hypolipidemic drugs

E. Drugs acting on Kidney

1. Diuretics and anti-diuretics.
2. Drugs acting on RAAS.

IInd paper (1st Half)

A. Gastro-intestinal drugs

1. Drugs for peptic ulcer and gastroesophageal Reflux disease
2. Emetics & anti emetics, prokinetic and digestant drugs.
3. Drugs for constipation & diarrhoea.

B. Endocrinology

1. Hormones of anterior pituitary *gland*.
2. Thyroid hormones and thyroid inhibitors.
3. Insulin, oral hypoglycemic agents and glucagon.
4. Pharmacology and therapeutics of corticosteroids.
5. Gonadal hormones and their antagonists. oral contraceptive pills.
6. Oxytocin and drugs acting on uterus.

C. Drugs acting on Peripheral nervous system

1. Skeletal muscle relaxants
2. Local anaesthetics

D. Autacoids & related drugs

IIst paper (2nd Half)

A. Antimicrobial agents (AMAS)

1. General concept of chemotherapy and mechanism of action of AMAS.
2. Sulphonamides, co-trimoxazole and quinolones.
3. β - Lactam antibiotics.
4. Tetracyclines and chloramphenicol.
5. Aminoglycoside antibiotics.
6. Miscellaneous antibiotics.
7. Chemotherapy of tuberculosis and leprosy.
8. Anti-viral agents.
9. Anti — fungal agents.
10. Chemotherapy of malaria and other protozoan diseases. I I.
Chemotherapy of helminthiasis.

B. Chemotherapy of Neoplastic diseases.

C. Miscellaneous topic

1. Immuno Modulators
2. Drugs acting on skin and mucous membranes
3. Antiseptics, disinfectants and ectoparasiticides
4. Chelating agents.
5. Vitamins & Nutraceuticals
- G. Vaccines, antisera and immunoglobulins.
7. National Health programme
8. Drugs for ocular diseases
9. Occupational & Environmental Toxicologies
10. Drug Regulations.
- I I. Common poisoning, sting & bites.