

**Block J (Neurosciences-II Module)****Fourth Year Mbbs course content for Kmu**

By Modular Medical Circle

**Pharmacology (Mcqs=20)**

S.no.	Topics	Lippincot [10 <sup>th</sup> Edition]	Tara [5 <sup>th</sup> edition]	Mini Katzung [12 <sup>th</sup> Edition]
1	Introduction to the Pharmacology of CNS [Common terminologies, BBB, Neurotransmitters, Ion channels and its receptors]	P#103-105 [Ch#8]	P# 176 Ch#5	Ch# 21 pg#181 (Whole Chapter) [BBB: Missing]
2	Sedative-hypnotics (Minor tranquilizers): Benzodiazepines, Barbiturates, Buspirone, Ramelteon	Ch#9 p#116 (whole chapter) classification is missing	P#177-185 Ch#5  Buspirone: P#240	Ch# 22 pg#188 (Whole Chapter)
3	CNS stimulants	Ch 15 p#194 [WC]	P#234 [Ch#5]	
4	Respiratory analeptics (Doxapram, Nikethamide)			
5	Methyl xanthine/Theophylline, Caffeine, Theobromine)	Ch 15 pg 194		Ch#20 pg#175
6	Sibutramine			
7	Depression [Monoamine hypothesis] Antidepressants [Classification] SSRIs (Selective Serotonin Reuptake Inhibitors) TCAs (Tricyclic Antidepressants) MAOIs (Monoamine Oxidase Inhibitors) Serotonin syndrome, Hypertensive Cheese reaction, St John's Wort,	Chp#10 pg#128 [Whole chapter]	P#240-246 [Ch#5]	Ch#30 pg#249 [Whole Chapter]
11	procedure of switching-over from one category of			

	antidepressants to another one			
12	“Augmentation” of antidepressant therapy			
13	Electroconvulsive Therapy (ECT) for depression			
14	Psychoses (Schizophrenia, Dopamine hypothesis), Antipsychotics (Antischizophrenic) Bipolar affective disorder (Manic Depressive illness+Mood stabilization) Mood-stabilizing drugs	Chp 11 pg 139 [Whole Chapter]	P#235-240 [Ch#5]	Ch#29 P#241 [Whole Chapter]
15	Lithium carbonate	Ch 10 pg 136	P#246-248 Ch#5	
16	Alcohols	Ch#44 p:586 [deficient]	P#203-206 [ch#5]	Ch#23 p:196[WC]
17	Opioids (Morphine, Diamorphine, Codeine, Pethidine, Methadone, Pentazocine, Buprenorphine, Dextromethorphan) Tramadol	Ch 14 pg 180 [Whole chapter]	P#217-228 [ch#5]	Ch 31 pg 257 [whole chapter]
18	Drugs of abuse			Ch:32 p:266 [WC]
19	Anti-seizure drugs (Anti-epileptics): Carbamazepine, Phenytoin, Valproate, Ethosuximide, Phenobarbitone, Benzodiazepine, Lamotrigine, Topiramate and others [new antiepileptic drugs] management of status epilepticus	Ch 12 pg 148 [Whole Chapter]	P#206-216 [Ch#5]	Ch 24 pg 203 [Whole Chapter]
20	General anaesthetics	Page#161-173 [Ch#13]	P#185-194 Ch#5	Ch 25 pg 212 [Whole Chapter]
21	Inhaled anaesthetics (N <sub>2</sub> O, Halothane, Isoflurane, Sevoflurane, Desflurane)			
22	IV anaesthetics (Thiopentone, Propofol,			

	Etomidate, Ketamine, Midazolam, Fentanyl)			
23	Pre-anaesthetic medications	Ch 13 pg 176		
24	Obstetric analgesia			
25	Drugs for Parkinsonism: Levodopa (with Carbidopa), Bromocriptine, Selegiline, Apomorphine	P#105-112 [Ch#8]	P#228-234 [Ch#5]	Ch 28 pg 233 [whole chapter]
26	Drug-induced Parkinsonism			
27	Migraine and Cluster headaches: Triptans (Sumatriptan and others), Ergot alkaloids, Ergotamine	P#498 Ch#37	P#253-257 [Ch#5]	P#149 Ch#16
28	Local anaesthetics (Lignocaine and others)	P#174-177 [Ch#13]	P#194-203 [Ch#5]	Ch#26 pg#220 [Whole Chapter]

**Pathology/Microbiology (Mcqs=22)**

Topics	Robbins [10 <sup>th</sup> Edition]	Pathoma [2022 Ed]	Goljan [5 <sup>th</sup> Edition]
Hypoxia, Ischemia, and infarction	Ch#23 p#852-857	Chp # 17 page 184	Chp #2 page 14+39
Intracranial Hemorrhage	Ch#23 p#852-857	Chp # 17 page186	Chp # 26 page 788
Strokes Syndromes	Ch#23 p#852-857	Chp # 17 page 185	Chp # 26 page 789
Subarachnoid Hemorrhage (SAH)	Ch#23 p#852-857	Chp # 17 page186	Chp # 26 page 794
Neurodegenerative disorders: Alzheimer`s disease, Parkinson`s disease, Huntington`s Disease and Spinocerebellar ataxias. Motor Neuron disease	Ch#23 page#874-880	Ch#17 P#187	
Meningitis	Ch#23 P#862-870	Chp # 17 page 183	Chp # 26 page 796
Encephalitis	Ch#23 P#862-870	Not present	Chp # 26 page 798
Brain abscess	Ch#23 P#862-870	Not present	Chp # 26 page 798
Cerebral Toxoplasmosis		Not present	Chp # 26 page 801
Tumours of CNS: i. Gliomas ii. Embryonal neoplasm iii. Meningioma iv. Other neoplasms	Chp#23 page#881-887	Chp # 17 page 191	Chp # 26 page 811

Multiple Sclerosis and other demyelinating disorders of CNS	Ch#23 page#870-873	Chp # 17 page 188	Chp # 26 page 798
Patterns and Types of Peripheral Nerves Injury	Ch#22page#835-838	Not present	
Acute and Chronic Demyelinating Neuropathies	Ch#22 page#835-838	Chp # 17 page 187	Chp # 26 page 798
Myasthenia Gravis	Chp#22 page#839	Chp # 18 page 202	Chp # 26 page 731
Tumors of Peripheral nerve (Neurofibromatosis)	Chp#22 page#846-847	Not present	Chp # 26 page 816-17

### Forensic Medicine (Mcqs=18)

Topics	Parikh (9 <sup>th</sup> edition)	Jamiat
Classification of neurotoxins	<i>Not present</i>	pg 179 [Ch 15]
Cerebral Poisons- Somniferous Poisons: Morphine, Opium, Heroin	Ch#48 page#617-621 [WC]	Ch#15 P#229 & Page: 248+249+245
Inebriant Poisons: Ethyl Alcohol, Methyl Alcohol	Ch#50 page#629-642 [WC]	Ch#15 P#229 & Page:237+247
Sedative & Hypnotics: Chloral hydrate, Barbiturates	Ch#51 Page#643 646 [WC]	Page: 241+239
Fuels, Stimulants: Agrochemical poisons, Kerosene	Ch#52 & 53 Page 647-659 [WC]	Page 222-224 +246
Hallucinogens: LSD Stimulants: Amphetamines	Ch#63 & 64 Page#695-700 [WC]	P#244+237
Drug Dependence	Chp 49 page 622-628 [WC]	Not present
Insanity and relationship to criminal charges, also (McNaghten rule, Durhams Rule & Impulse etc)	page 478-480 (Chp 33) [ignore the Indian law statements given in the text]	Ch#14
Forensic Psychiatry (definitions & Terminologies)	page 459-469 [Chp 33]	Ch#14
Mental Health Act		
Will (Testamentary Capacity & Valid Will)	Page 475-477 [Chp 33]	Ch#14
Civil and criminal responsibility of mentally ill patients	Page 475-477 [Chp 33]	Not present
Deliriant Poisons: Dhatura, Hyocyanus Nigra, Cannabis Indica	Chp 54 Page 660-665 [WC]	Chp 16 pg 219-220+228, & Page#243+245+240
Head Injury ( +Skull Fracture, hemorrhage, Injuries)	Page#299-313 [Chp 20]	P#66-74 [ch#6]
vertebral and spinal injuries	Page#314-316 [Chp 20]	Not presnt
Neurotoxins: spinal poison	CH#55 Page#666-668	Chp 16 P#220-222

Snake bite Neurotoxins	P#599 {Chp 45}	Scattered in text
Botulism Toxins	page#609-610 [Chp 47]	Not present
Neurotoxins: Peripheral Poison	CH#56 Page#669-670	Not present

### Community Medicine (Mcqs=27)

Topics	Excel 13 <sup>th</sup> edition	Hayat	
Epidemiology	Ch#3 page#23 & onwards [whole chapter]	Chp 2 pg 7	<b>Do Epidemiology Whole Chapter</b>
Study design		Ch 2 Pg 26	
Measures of mortality and morbidity		Chp 2 Pg 11 + 15	
Screening		Chp 2 Pg 20	
Mental health	Chp 23 page 339	Chp 27 pg 405	
Biostatistics: <ul style="list-style-type: none"> <li>• Introduction</li> <li>• Data and Variable Types</li> <li>• Sampling</li> <li>• Biases in epidemiological Studies</li> </ul>	Chp 8 page 151 [whole chapter]	Chp 3 pg 41 + 63	<b>Do Whole Chapter of Biostatistics:</b> All these topics are in this chapter of the respective books
Measures of Central Tendency	Pg 157	Ch 3 Pg 51	
Measures of Dispersion	Pg 158	Ch 3 Pg 54	
Normal Distribution(Percentile& Interquartile Range)	Pg 162	Ch 3 Pg 57-58	
Confidence Interval, Confidence level, Standard error		Ch 3Pg69	
P-Value, Critical Region, Rejection Region, Alpha Beta	Pg 162 + 163	Ch 3 Pg 71-72	
Errors Z-Test & its Application, Types / Shapes of Frequency Distribution	Page 154 + 161	Ch 3 Pg 76	
"t"-Test & its Application	Pg 161	Ch 3 Pg 74	
Chi Square Test & its Application	Pg 160	Ch 3 Pg 72	
Correlation, Regression			
Practical Problems in Biostatistics			
Non-communicable diseases: Strokes	Pg 127-128		
Rabies	Pg 86	Pg 155	



**Medicine [mcqs=11]**

Topics	Step up 6 <sup>th</sup> Edition	Irfan masood
Alzheimer`s disease and Dementias	Chp 5 page 216-218	Ch 13 pg 618
Stroke	Chp 5 page 205	
Seizures	Chp 5 page 231	Ch 13 pg 587-598
Parkinson`s Disease	Chp 5 page 212	Ch 13 pg 623
Meningitis	Chp10 page 372	Ch 13 pg 631
Multiple Sclerosis	Chp 5 page 222	Ch 13 pg 612
Transverse Myelitis	Chp 5 page 227	Ch 13 pg 616
Caries Spine		
Guillain Barre Syndrome(GBS)	Chp 5 page 223	Ch 13 pg 647
Neuropathies		
Myasthenia Gravis	Chp 5 page 224	Ch 13 pg 650

**Psychiatry [mcqs=09]**

Topics	Resource
Sleep Disorders	
Non-Organic Insomnia	
Sleep Wake Cycle Disorders	
Depressive Disorders	
Bipolar Affective Disorder	
Suicide	
Anxiety Disorders	
Dissociative Disorders	
Stress related Disorders	
Somatoform Disorders	
Atypical Depression and Seasonal Affective Disorder	
Personality Disorders	
Psychotic Disorders (Organic & Non-Organic Psychosis)	
Schizophrenias (Psychotherapy & Electroconvulsive therapy and Rehabilitation)	
Delusional Disorders	
Substance Abuse Disorder	
Chronic daily headache	

**Note:** Use Kaplan or First Aid for Psychiatry. See Minor subjects notes by Asif Shah, SMC.

<b>Neurosurgery [Mcqs=02]</b>	
<b>Topics</b>	<b>Resources</b>
Stroke & Sub-Arachnoid Hemorrhage Management	
Neurodegenerative Disorders: i. Alzheimer`s Disease ii. Parkinson`s Disease iii. Huntington`s Disease & Spin-Cerebellar Ataxias	
Motor Neuron disease	
Traumatic Paraplegia Management	
Spinal Tumors	
<b>Pediatrics [Mcqs=05]</b>	
<b>Topics</b>	<b>Resources</b>
Cerebellar Ataxias (Friedreich,s Ataxia)	
Meningitis(Pyogenic& TB MeningitisInChild & Neonate)	
Hereditary Neuropathies	
<b>Anesthesia [Mcqs=03]</b>	
<b>Topics</b>	<b>Resources</b>
Introduction to the subject	
General anaesthesia	
Neuroaxis block ( Spinal, Epidural, Caudal Block)	
Regional Anesthesia (Terminologies)	
Preoperative Evaluation and Risk Assessment	
Monitoring in Anesthesia ( Invasive & Non Invasive)	
<b>Family Medicine [Mcqs=01]</b>	
<b>Topics</b>	<b>Resources</b>
Rabies Prophylaxis(Immunization )	
<b>PRIME/MEDICAL EDUCATION/RESEARCH [Mcqs=02]</b>	
Conflict resolution	
Data analysis	
<b>Orthopaedics [ ]Mcqs=0</b>	
Management of traumatic paraplegia	
Peripheral nerve injury	

**NOTE:**

1. At the start of each column book edition is mentioned. Kindly tally your book accordingly. If you have another edition and the page numbers here does not match your book, kindly take help from chapter numbers.
2. For minor subjects see Asif Shah, SMC notes shared on our page.

**Fourth Year MBBS Subject Wise Recommended Books:**

**A) Pathology:**

1. Pathoma + BnB ± First Aid (Recommended)
2. Robbins (unnecessarily lengthy)

**B) Pharmacology:**

1. Kaplan + First Aid ± Sketchy (recommended)
2. Lippincott/Tara (KMU exam focused)

**C) Microbiology:**

1. Sketchy ± First aid
2. Faiz/Levinson microbiology (only for the more studios peeps)

**D) Forensic:**

1. Parikh [Major portion is poisons which is not good in Jamiat]

**E) Community medicine:**

1. Excell ± 2. Hayat

**F) Ent:**

1. Dingra + Naseem Sherzad (recommended combination)
2. Iqbal Hussain Udaipurwala + Naseem Sherzad

**G) Eye:**

1. Jatoi + Naseem Sherzad

**H) Psychiatry:**

1. BnB + First Aid + Dirty Medicine [youtube]

**I) Medicine:**

1. Step-up
2. Kaplan

**J) Surgery:**

1. Abdul Wahab Dogger

**K) Gynaecology:**

1. Kaplan
2. Lecture slides



**Block J [Fourth Year MBBS] Recommended Lecture Resources**

**A) Pathology**

- Neurology from:
  1. Pathoma lectures + notes
  2. First Aid
  3. BnB
  4. Dirty medicine YouTube channel
- Microbiology from:
  1. Sketchy lectures

**B) Pharmacology:**

- CNS and Psychiatry drugs from
  1. Kaplan
  2. First Aid
  3. Sketchy
  4. Speedy Pharmacology YouTube channel

**C) Psychiatry:**

1. BnB lectures + notes
2. First Aid
3. Dirty Medicine YouTube channel

**D) Forensic:**

- CNS poisons from Parikh

**E) Community medicine:**

- Epidemiology from
  1. BnB
  2. First Aid
  3. Excellent + Selfless medicose YouTube channel
- Biostatistics from
  1. BnB
  2. First Aid
  3. Hayat book
  4. Randy Neil YouTube channel

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