## **Khyber Medical University**

# **Second Year MBBS Chapters Distribution among Specified Modules**

## Block D

## **Modules: Neurosciences I and II**

"Create the Highest and Grandest VISION Possible for your LIFE, because you Become What YOU Believe"

## **Major Subjects**

## **Anatomy**

No. of Mcqs=38

Neurosciences-I	Neurosciences-II
(No. of Mcqs=21)	(No. of Mcqs=17)
Whole Neuroanatomy	Head and Neck
Mostly Used Book: Snell Clinical Neuroanatomy	Mostly Used Books: Snell's Anatomy(CH#12)+Netter's Atlas Or Greys Anatomy for Students(CH#8)
Important Chapters: 5,6,7,8,9,10,11,12,13,14,15,16,17 Less Important Chapters: 1,2,3,18 (Details Given At the end Of Tables)	
Recommended Sources: Dr. Najeeb Lectures Ninja nerd (those topics viz not covered by Najeeb )	Recommended Sources: 1. Dr. Adel Bondok (Youtube) 2. Kenhub Lectures

# Physiology

No. of Mcqs=45

Neurosciences-I	Neurosciences-II
(No. of Mcqs=27)	(No. of Mcqs=18)
Sensory Physiology & Motor Physiology	Special Senses
Guyton Chapters: Unit-IX(Ch#46-to-Ch#49) Unit-XI(Ch#55-to-Ch#62)	<b>Guyton Chapters:</b> Unit#-X(Ch#50-to-Ch#54)
Recommended Sources:	Recommended Sources:
Brainless Medicose (Youtube)	<ol> <li>Dr. Najeeb (Visual system 5 videos)</li> <li>Ninja Nerd</li> <li>Brainless Medicose (Youtube)</li> <li>Alila medical media (Youtube Animated videos)</li> </ol>

# Histology

No. of Mcqs=11

Пілсогоду	
Neurosciences-I	Neurosciences-II
(No. of Mcqs=6)	(No. of Mcqs=5)
Spinal cord, Cerebrum, Cere	Eye, Ear and Selective topics: 1. Parotid gland (page#193 ch#19) 2. Thyroid gland (page#156 ch#16) 3. Sub-mandibular gland (page#194 ch#19) 4. Sub-lingual gland (page#195 ch#19) 5. Tongue (page#292-294)
<b>Laiq Hussain's Chapters</b> : Ch#11 and 12	Laiq Hussain's Chapters: Ch#23 and 24 + page numbers mentioned in brackets with the selective topics)
Short book:	

# **Embryology**

No. of Mcqs=8

Neurosciences-I (No. of Mcqs=3)	Neurosciences-II (No. of Mcqs=5)
> Development of Nervous System	<ul> <li>Development of Head and neck including tongue and palate</li> <li>Development of Eye</li> <li>Development of Ear</li> </ul>
Langman's Embryology Chapters:	Langman's Embryology Chapters:
Ch#18	CH#17,CH#19 and CH#20
Recommended Lecture Sources:	Recommended lecture Sources:
Dr. Najeeb lectures	Brainless medicose
Brainless medicose	Random Animated videos on Youtube
Random Animated videos on Youtube	
Short book:	THE PARTY NAMED IN COLUMN TO SERVICE AND ADDRESS OF THE PARTY NAMED IN
Sharjeel (Mostly preferred) OR Firdous	

# Biochemistry

No. of ivices=5	
Neurosciences-I (No. of Mcqs=2)	Neurosciences-II (No. of Mcqs=3)
Neurotransmitters	Nucleotide Metabolism
Prostaglandins	DNA & Chromosomal Organization
Brain and Nervous tissue Metabolism	DNA Replication
(Can be covered from Physiology)	Transcription
CSF Composition (Can be covered from	Translation (Protein Synthesis)
Physiology. It is also present in Satya)	Mutation
	DNA Damage and Repair
	Biotechnology (PCR, RFLP)
Pankaja Naik Chapters (5 <sup>th</sup> Edition):	Pankaja Naik Chapters (5 <sup>th</sup> Edition):
Ch#33	Ch#14, Ch#18, Ch#19, Ch#20 &\$
ProstaglandinsCh#3, Page#49	Ch#22 (CPR &RFLP Imp topics)
Satyanarayana Chapters:	Satyanarayana Chapters:
ProstaglandinsCh#32	Ch#17, Ch#24, Ch#25, 27(CPR &RFLP Imp
<b>Note:</b> Neurotransmitter Chapter is not included in	topics)
Satyanarayana	

# **Minor Subjects**

Neurosciences-I	Neurosciences-II
General Medicine ( 1 Mcqs ):	General Medicine ( 1 Mcqs ):
> Peripheral Neuropathies	➤ Bell's Palsy
➤ Hemi-Section of Spinal cord (Brown Sequard	Ocular Nerve Palsies
Syndrome+Paraplegia)	
> Stroke	
> Parkinson's Disease	
> Epilepsy	
> Hydrocephalus	
Pharmacology (1 Mcqs):	ENT (1 Mcqs):
<ul> <li>Drugs acting on Sympathetic Nervous System</li> </ul>	Lump in the Neck
Drugs acting on Parasympathetic Nervous	Sinusitis
System	Hearing Loss
Drugs used in Parkinson's Disease	
Forensic Medicine (1 Mcqs):	Pediatric Surgery(1 Mcqs):
> Brain Death	Cleft Palate
Community Medicine (0 Mcqs):	Community Medicine (0 Mcqs):
Risk factors of cerebrovascular Diseases	Prevention of Blindness
Pathology (1 Mcqs):	Ophthalmology (1 Mcqs):
Alzheimer's Disease	Blindness
> Inflammation of brain	
Radiology (0 Mcqs):	
Neuroradiological CT Scans	
Neuroradiological MRI Scans	
Neurosurgery (0 Mcqs):	
➤ Brain injuries	
➤ Brain & spinal cord tumours	



#### DETAILED GUIDELINES:

Let me clear one thing that by no means I call these the most recommended and best resources to cover your curriculum of Block D. There are a lot of different resources other than these and many different ways to cover your curriculum. Everyone has their own strategy for studying and preparing for exam. These are those which I (and those from which I took help in preparing this content) followed. Just pick and follow those portions or resources from this content with which you are comfortable I.e. from which you can gain more knowledge in less time. You can follow who's ever strategy you want or make your own strategy. Just remember! The end result always depends upon the proper execution of the plans and honesty towards your hard work. May Allah be with all of us!

In General, you should keep and manage your study in such a way that you can easily revise it for papers. Second Year course lengthy, So keep this in mind.

Block D is the most time consuming, so Don't get worried if it costs you time.

#### **Neuroanatomy:**

First of all go for neuroanatomy as it builds your concepts for neurophysiology and a little bit for head and neck, but remember neuroanatomy and neurophysiology are very closely related but they are not the same thing. For neuroanatomy use "Snell's neuroanatomy" with Dr Najeeb (must watch videos and note down important points from his lectures), a few topics like cerebral cortex and basal ganglia are not covered by Dr. Najeeb watch Ninja nerd for that. Watching Dr. Najeeb will take time but trust me its worthy.

#### Chapter 1, 2 and 3 -----> Basics

You can cover them in one day. These chapters can also cover histology portion of Neurosciences-I

Related Dr. Najeeb Lectures: Introduction to Neuroanatomy (02 videos) and Histology of Nervous System

#### Chapter 4 -----> Ascending & Descending Tracts

This is most important chapter. If you understand this chapter well a lot of concepts in neuroanatomy and neurophysiology will easy for you. Must do the clinicals of this chapter especially upper and lower motor neuron lesions, they are super doper important not only for theory exam but also for practicals and viva.

Related Dr. Najeeb Lectures: Ascending tracts (04 videos), Descending tracts (03 videos),

And for clinicals Brown Sequerd Syndrome And

UMN and LMN Lesion.

You can also watch his spinal cord Lesion videos if you want to Study in depth.

#### Chapter 05 -----> Brainstem

This Chapter has two portions.

The first Portion is Skull Osteology; watch Dr. Adel Bondok videos or Viren Kariya Videos on Youtube. The Foramina and the Structures passing from it are very important, memorize them well.

The Second Portion consists of three topics; medulla, pons and Midbrain. For this portion watch Dr. Najeeb Lectures and then practice book diagrams and tables.

Related Dr. Najeeb Lectures: Brainstem Basics = 03 videos

Medulla = 04 videos Pons = 02 videos

Midbrain = 02 videos

> Chapter 06 -----> Cerebellum

Related Dr. Najeeb Lectures: Cerebellum=03 videos.

> Chapter 07 and 08 -----> Cerebrum

Watch Kenhub videos for sulci and gyri. Cerebrum is not covered by Dr. Najeeb so watch Ninja nerd or some random videos on Youtube. Use Netter's Atlas for Diagrams.

> Chapter 09 -----> Reticular formation n limbic system.

Can be easily understood by reading book, you can watch Youtube videos also.

> Chapter 10 -----> Basal Ganglia

Read book; use Netter's Atlas for diagrams.

Related Dr. Najeeb Lectures: Basal Ganglia = 03 videos.

> Chapter 11 ----> Cranial Nerves

This chap is also in Snell's Gross anatomy in Head n neck section. Here in neuroanatomy these are a bit long but in gross anatomy they are shortened. If you are doing head n neck from Greys or Short Snell then must do cranial nerves in neuroanatomy otherwise you can study them from Snell Gross anatomy. Najeeb videos are quite long, so Ninja nerd is a better alternate. Cranial Nerves are very important so give special attention to them. I myself followed the following order for learning Cranial nerves:

- Watch dr. Najeeb Cranial Nerves (Basic Concepts) 03 videos
- II. Watch Ninja nerd cranial nerve video (you can watch dr. najeeb but that's quite lengthy.)
- III. Read Snell's Neuroanatomy book (you can use snell's gross anatomy)
- IV. Memorize table in Snell's Neuroanatomy book.

Most important cranial nerves -----> Trigeminal (V), Facial (VII), Vagus (X).

Note: Najeeb Cranial nerves clinical correlate videos are very detailed so skip them, read the clinicals in snells neuroanatomy which are easy to understand and are very short.

#### Chapter 12 and 13 -----> Thalamus, Hypothalamus

Do memorize thalamic and hypothalamic nuclei with their function from the tables given in the book.

Dr. Najeeb related lectures: Diencephalon = Najeeb's 03 videos

Thalamus n hypothalamus = 04, 04 videos each.

#### Chapter 14 -----> Autonomic NS

This topic is also present in neurophysiology. Dr. Najeeb videos are very long (07 videos) so to watch Ninja nerd is a very good alternate. I myself watched Ninja nerd and skipped this chapter here and covered it from neurophysiology but I will recommend you to study both from snell neuroanatomy and Guyton if you have time as both have some differences.

#### Chapter 15 n 16 -----> meninges, ventricular System CSF

These chapters will help you in understanding the same topics in head n neck anatomy. Watch DR. Najeeb videos and study book. You can use Netter's Atlas for diagrams too. Related Dr. Najeeb Lectures; meninges = 2 videos

> CSF and Ventricular System = 5 videos Blood Brain Barrier = 2 videos

#### > Chapter 17 -----> Brain blood supply

Study from book but must correlate with diagrams either from book. Netter or google. Related Dr. Najeeb Lectures: Brain Blood Supply = 02 videos

#### Chapter 18 -----> Development of NS

Skip this Chapter as it will be covered in Langeman.

Related Dr. Najeeb Lectures: Development of Nervous System = 02 Videos

#### Those Dr. Najeeb Videos which are not necessary i.e. you should skip:

Epilepsy (04 videos)

Bulbar & Pseudobulbar Palsy (02)

Anatomy of Cavernous Sinus & Cavernous Sinus Syndrome (06),

Catecholamines Synthesis (04),

Autonomic NS (07)

All the Cranial Nerves related videos except basic concepts if you doing them from Ninja Nerd.

#### **Head n Neck:**

Head n Neck Anatomy has only 17 mcgs and the course is quite long. So most of the students use short book (Short Snell is mostly preferred) or they go for Grey's Anatomy instead of Snell, but I will not recommend short book in start of session as in OSPE you have

to give viva in head n neck and also there are many models of head n neck also. The best strategy would be to use either Snell's Gross anatomy Or Greys Anatomy and write important points on your short book so in preps you will revise it quit easily from short book. Watch Dr Adel Bondok (Youtube ) for head and neck, he makes it quite simple. Kenhub videos are also helpful.

#### **Neurophysiology:**

For neurophysiology use Guyton. Neurophysiology course is very long. Study of neuroanatomy (along with Dr. Najeeb lectures) will give you an overview and will build some of your concepts. As neurophysiology is the backbone of Block D (45 mcgs) give special attention to it. Guyton has covered up the concepts nicely. If you got confused in some point watch Brainless Medicose or Ninja Nerd.

#### Histology:

For histology just give a read to Laiq Hussain and add important points to Firdous and do correction in few statements (especially various epithelia types e.g. oral cavity lining epithelium). Then a day before exam revise it from Firdous. You shouldn't ignore histology carrying upto 11 marks and 2-3 slides in OSPE. This is for all blocks.

DiForie's Histology is also a good alternate.

## **Embryology:**

For Embryology watch Dr. Najeeb for CNS Development and study Langeman, while for head and neck watch random videos on Youtube, use Sharjeel (short book) with added points from lectures. You can also use Langeman for head n neck but that's a bit lengthy. Making your own notes will also be helpful.

## **Biochemistry:**

- For Neurotransmitters use Pankaja Naik as Satya lacks this chapter. No need for lectures. For Prostaglandins use either Pankaja Naik or Satya.
- For Nucleotide Metabolism watch Brainless Medico if you are studying Lippincott Otherwise go for Ninja Nerd or any other Youtube channel along with Pankaja Naik/Satya.
- For Genetics watch ninja nerd or if you have time watch kaplan. Use book of your
- Note that you shouldn't give biochemistry a lot of time as it's only worth 5 marks, but remember you have to give a 10 marks viva in it.
- One of the possible strategy for biochem is to do past paper mcgs (ten doctor) and do mcgs given at the end of various books like pankaja naik and Chatterjee etc only.

## Minor/Side Subjects + PRIME (For All Blocks):

There are two approaches to deal with these.

- 1. Just forget about these and then go to the paper unprepared with the hopes of just relying on guesses. This is what most of the medical students do (including me).
- 2. Recommended approach: Give attention to these side subjects from day 1.

#### Resources:

- Lecture slides of your respective medical college. (Get them through your CRs)
- The side subjects PDF files which our worthy colleagues have compiled from different resources for our convenience. (Link of Google drive is provided)
- ➤ Watch a YouTube video for every topic of the side subjects before studying it to have an introduction.

#### Note:

Mostly the Mcqs are somewhat related to our course so we can easily answer them. Always have "some" margin for educated guesses. They'll be on point Insha Allah.

All these topics will be taught to you in detail in your upcoming years. So don't worry about it if you cannot get a good understanding of these. These are just an obligation of the modular system we are bound to follow.

Google Drive link to get the compiled pdfs and lectures for side subjects from here: https://drive.google.com/drive/mobile/folders/1DR0xxiZ9aSXp7sB8M-IZhqoxQ5mNKg84?usp=sharing

(Visit our Facebook page if you have difficulty in copying this link).

# Recommended YouTube channels for 2nd year MBBS: Togeth.

#### Physiology:

- 1. Dr najeeb
- 2. Ninja Nerd
- 3. Brainless Medicose
- 4. Alila medical media (Short Animated videos )

#### Anatomy:

- 1. Anatomy zone
- 2. Dr. Adel Bondok
- Kenhub
- 4. Viren karya (for osteology)
- 5. Noted Anatomist

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#### **Biochemistry:**

- 1. Ninja nerd
- 2. Dr Mungli
- 3. Dr.Rajesh jambulkar
- 4. Brainless Medicose

#### **Embryology:**

- 1. Brainless medicos
- 2. Life in the womb Dr rose.
- 3. Dr Minas
- 4. Selfless medicos

For any question or further detail feel free to inbox our page or email us at: modularmedicalcircle1@gmail.com

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## Sources From Which Help Was Taken:

- 1. Second Year guidelines by Mehran Ali Khan (Batch 2k25 NMC)
- 2. Second Year guidelines by Trend Posting Medics
- 3. Second Year guidelines by Junaid Imran (Batch 2k24 KMC)

