STUDY GUIDE BEHAVIORAL SCIENCES

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BEHAVIORAL SCIENCES DEPARTMENT IN A GLANCE

Behavioral Sciences is the dynamic, exciting science in which knowledge of human Psychology, Sociology, Anthropology, Neuroscience and Neuroanatomy and Neurophysiology is applied to the study of the human beings and their behavior and how they interact with their social and cultural environment. This includes human society with all its composition and evolution of human psychology and sociology. It has revolutionized our understanding of and provides a backbone to modern psychology and other medical sciences.

Behavioral Sciences Department at AFM&DC has a unique approach to the human sciences that cultivates critical thinking as well as depth of knowledge by exposing its students to the full spectrum of modern Neurophysiology and Neuropsychology. The comprehensive teaching and assessment plan is strategically designed according to the UHS and PMC syllabi and guidelines to achieve maximum results.

The strength of Behavioral Sciences Department is its conductive environment and committed staff. The vibrant teaching staff is highly qualified with post graduates degrees and certifications along with vast teaching experience. The department's aim is establishment of research culture and encouragement of student participation in it.

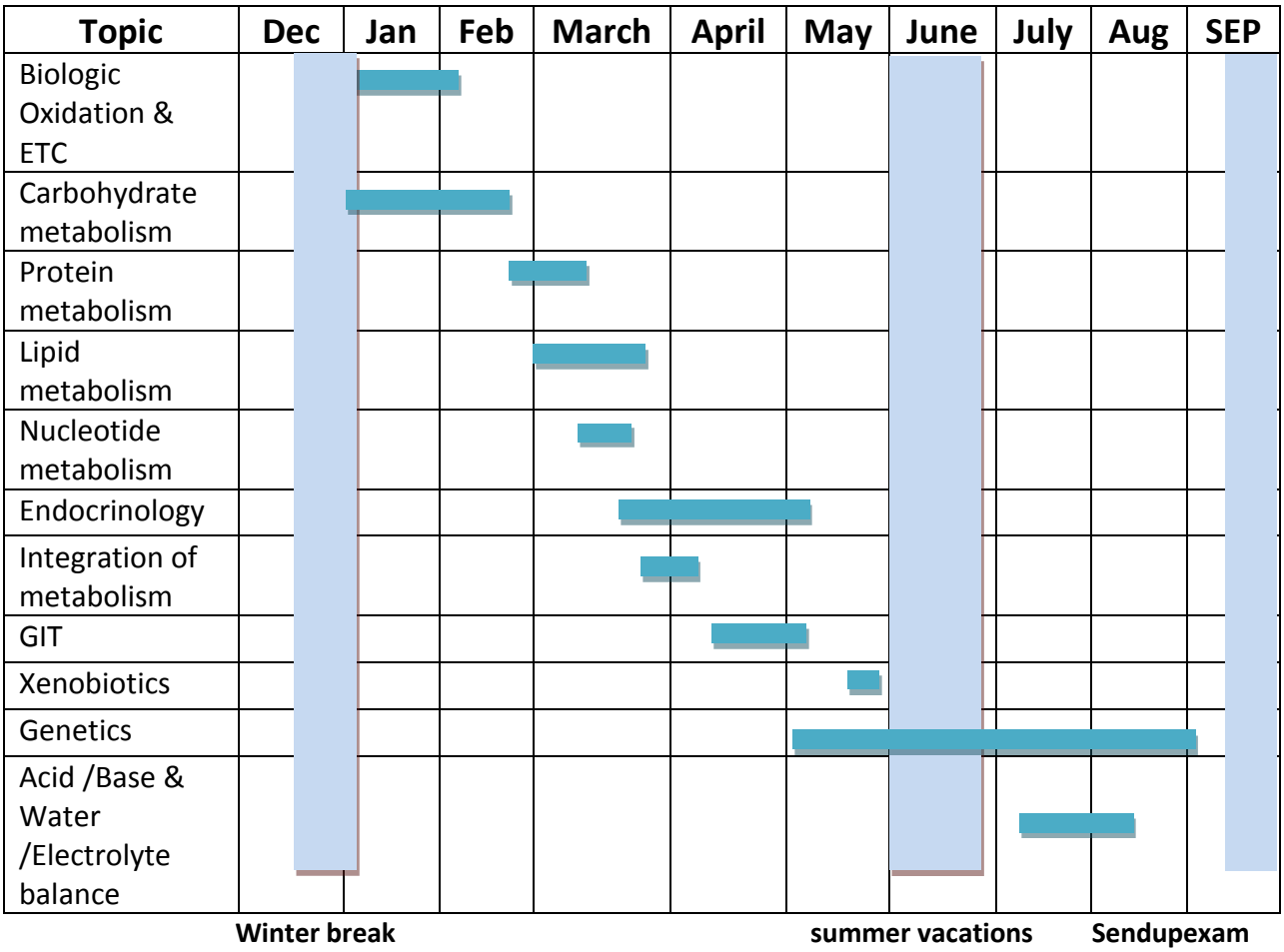
The department follows a proficient and result oriented teaching and assessment plan which includes new and interesting teaching strategies. Learning is made easy by increasing interactive student teacher sessions. Students are evaluated in cognitive, psychomotor and applied domains by conduction of regular formative and summative assessments like multiple choice questions, quizzes, written tests, assignments, presentations and OSPE and oral viva. At the end of each academic year a university standard send-up examination is conducted.

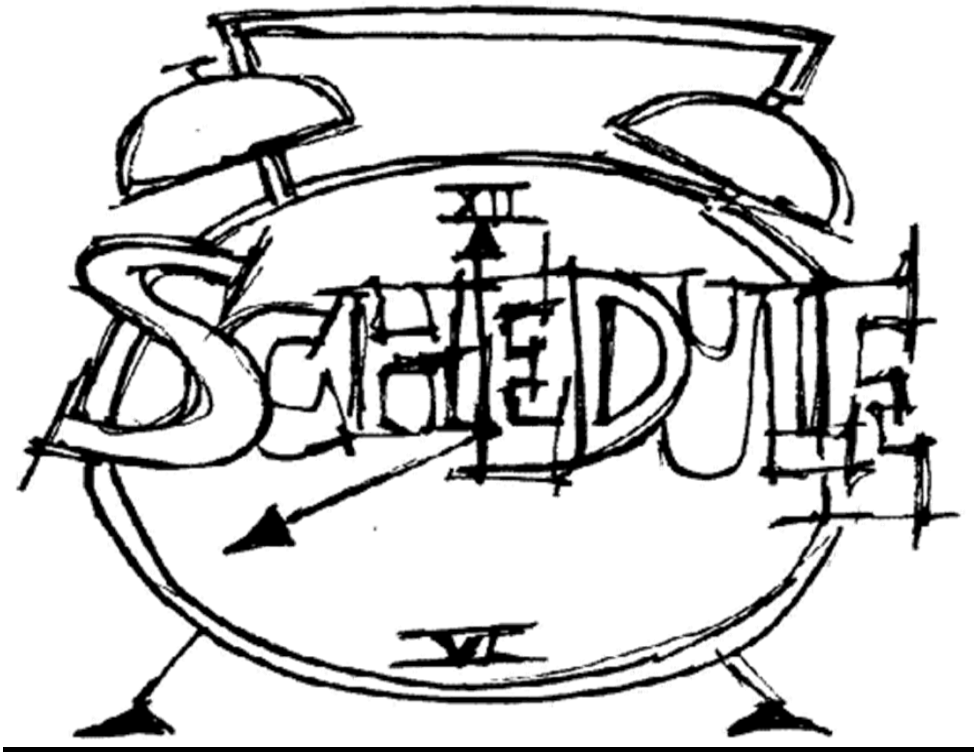
BEHAVIORAL SCIENCES DEPARTMENT TEAM- AFMDC

Positions	Name
Head of Department	Assistant Professor Dr Subhan Ullah
Assistant Professor	Dr Subhan Ullah
Senior Registrar	
Demonstrators	

TIME LINE for SYLABUS COMPLETION

GHANTT CHART of SECOND YEAR LECTURES





TIME TABLE 3rd Year MBBS

Date	1	2	3	4	5	6
	08:00-09:00	09:00-10:00	10:00-11:00	11:00-12:45	12:45-13:15	13:15-15:00
Monday						
Tuesday	Lec. BS	Lec BS				
Wednesday						
Thursday						
Friday	Lec BS					

LEARNING OBJECTIVES OF BEHAVIORAL SCIENCES

THIRD YEAR M.B.B.S

TOPIC	SUBTOPICS	LEARNING OBJECTIVES
Introduction To Behavioral Sciences	**Holistic Medicine versus Traditional Allopathic Medicine.**	● Discuss health and health models. Detailed description and comparison if traditional allopathic model versus Holistic model.
	Non Pharmacological Interventions in Clinical Paractice.	● Discuss psychological interventions which are non-pharmacological in nature and how they are employed in common clinical problems.
		● Identify Communicatiin problems and techniques to improve them
		● Explain Empathy in Medical settings.
		● Describe methods of Breaking bad news and why comparatively BPS model is considered best in the Clinical Settings..
		● Identify Areas of Conflicts and Strategies of conflict Resolution.
	Disaster Management	● Elaborate the model of Disaster Management.
MEDICAL ETHICS AND PROFESSIONALISM	**Principles of Medical Ethics.**	● Discuss Pillars of Medical Ethics and how they are incorporated into our medical profession. ● Describe the Hippocrate Oath.
	Informed Consent and Confidentiality.	● Discuss the informed Consent and how it 8s taken.
		● Identify the importance of Confidentiality.
	Conditions when Confidentiality is breached.	● Discuss the conditions in which confidentiality can be breached and its legal implications.
		● Explain the entrance of amino acids into TCA cycle.

		● Highlight the Legal and ethical aspects of informed Consent and Confidentiality.
	Ethical Dilemmas in a Doctors Life.	● Explain the different Ethical issues doctor may face in his clinical life. ● Discuss the relations of doctors with media, pharma industry, research methods, and wit
PRINCIPLES OF PSYCHOLOGY	**Learning**	● Describe the Learning and its theories.
		● Elaborate type of learning, classical conditioning and Ooerant Conditioning.
	Metacognition	● Define metacognition, its definition and how it affects reading. ● What is Extra Sensory Perception?
	Thinking	● Discuss the stages of thinking and what types of thinking are.
		● Describe qualities of a critical Thinker.
	Perception	● Discuss the Perception and how it affects human life. ● Outline the different parameters of Perception and qualities of Perception. ● Discuss disorders of Perception and how theyvare identified.
	Motivation	● Highlight the significance of Motivation and how Motivation affects human behaviour. ● Discuss profiles of self actualizers.
	Intelligence	● Describe intelligence and how it is calculated and psychological scales to measure intelligence. ● Explain different ways to improve your intelligence.
	Emotional Intelligence	● Elaborate the identification, understanding and regulation of emotional intelligence. ● How emotional intelligence is a good predictor of success.

	Neurophysioligical basis of Behavior	● Discuss the synthesis, transport and psychological effects of hormones.
		● Explain the effects of different Neurotransmitters in human brain. ● Neuroanatomical structures and their correlates in human behaviours.
SOCIOLOGY AND ANTHROPOLOGY	**Protein turnover**	● Highlight the process of protein turnover in the body. ● Discuss nitrogen balance.
	Amino acid degradation	● Explain the removal of nitrogen from amino acids by transamination and deamination. ● Identify the sources of ammonia in the body. ● Discuss the fate of ammonia. ● Describe the reactions and regulation of urea cycle.
		● Give an overview of amphibolic intermediates formed from the carbon skeletons of amino acids.
		● Outline the concept of glucogenic and ketogenic amino acids. ● Discuss metabolism of individual amino acids like glycine, cysteine, arginine, proline, phenylalanine, tyrosine, histidine, tryptophan and methionine.
		● Describe the metabolism of epinephrine and norepinephrine, creatine, creatinine, histamine, gamma aminobutyrate, serotonin, melatonin and melanin.
	Clinical diseases	● Identify ammonia toxicity. ● Highlight the diorders of the urea cycle. ● Outline the causes and salient features of important metabolic defects in amino acids metabolism like phenylketonuria, maple syrup urine disease, histidinemia,

		alkaptonuria, cystathioninuria, homocystinuria, hyperprolinemia, cystinuria, cystinosis, tyrosinemias and albinism.
Psychosocial Aspects if Health and Disease		● Highlight basic concepts of intermediary metabolism. ● Give an Introduction to anabolic and catabolic pathways.
		● Give an overview of regulation and integration of various metabolic pathways.
Psychosocial Aspeects of Medical dusorders.		● Discuss the de novo synthesis of purines and pyrimidines.
		● Identify Salvage pathways. ● Describe degradation of purine and pyrimidine nucleotides.
		● Explain disorders associated with purine and pyrimidine metabolism like adenosine deaminase deficiency, gout, purine nucleoside phosphorylase deficiency, Lesch Nyhan syndorme.
Aging, Death and Dying.	**DNA Replication**	● Identify the structural basis of cellular information. ● Discuss the reactions of DNA replication in eukaryotes and prokaryotes.
		● Discuss types of damage to DNA and DNA repair.
	Transcription	● Describe the steps in the transcription of eukaryotic and prokaryotic genes. ● Explain reverse transcription in retroviruses.
		● Describe post transcriptional modifications (processing) of RNA.

		● Explain AIDS
	Translation	● Identify the genetic code and components required for translation. ● Outline composition of eukaryotic and prokaryotic ribosomes. ● Discuss steps in pro
	Regulation of gene expression	● Discuss the regulation of gene expression in prokaryotes and eukaryotes. ● Highlight gene amplification.
		● Identify oncogenes and their role in carcinogenesis. ● Highlight the mechanism of activation of protooncogenes. ● Elaborate the mechanism of action of oncogenes, oncogen
Psychology and Media		● Discuss different ways media and psychology are related. ● How to interact with media in Medical settings. ● Media and doctors in a changing environment.

TEXTBOOKS AND REFERENCES

- OXFORD Handbook of Psychiatry 4th Edition
- Handbook of Behavioral Sciences by MowaddatvH Rana 3rd Edition.
- Diagnostics and Statistical Manual of Mental Disorders 5th Edition DSM- 5
- BRS Behavioral Sciences 7th Edition by Barbara Fadem.
- Atkinson and Hilgards Introduction to Psychology 6th Edition

TABLE OF SPECIFICATIONS FOR BEHAVIORAL SCIENCES

Theory Paper Second Professional

CONTENTS			
1.	Introduction to Behavioral Sciences		
2.	Health and Bio-Psycho-Social Model and Non Pharmacological Interventions in Clinical Practice		
3.	Medical Ethics and Professionalism.		
4.	Psychology in Medical Practice.		
5.	Principles of Psychology		
6.	Neurobiological Basis of Behavior.		
7.	Sociology and Anthropology.		
8.	Psychosocial Aspects of Health and Disease.		
9.	Psychosocial Assessment.		
10.	Psychosocial issues in Health care Settings		
11.	Stress and its Management.	0.5	2
TOTAL ITEMS		**05 SEQs**	**45 MCQs**
TOTAL MARKS		**45 Marks**	**45 Marks**

25% of MCQs and SEQs should be clinically oriented or problem- based.

10% *marks are allocated for 'Internal Assessment'*

Total marks for theory paper: SEQ+ MCQ + Internal Assessment = 45 +45+10=***100 Marks***

ORAL AND PRACTICAL EXAMINATION 3RD PROFESSIONAL

Oral and practical examination carries 90 marks.

EXAMINATION COMPONENT		MARKS
A	**Internal Assessment**	10
B	**OSPE** a) Observed stations 5 (45Marks) b) Interview Psychosocial Assessment (45Marks)	05
		50
		22
		13


Thank You