

# ARYABHATTA KNOWLEDGE UNIVERSITY, PATNA

M.D. / M.S.

{Course Structure & Working Syllabus}

(EFFECTIVE FOR EXAMINATION TO BE HELD IN 2012)



आर्यभट्ट ज्ञान विश्वविद्यालय  
ARYABHATTA KNOWLEDGE UNIVERSITY



# ARYABHATTA KNOWLEDGE UNIVERSITY, PATNA

<b>Paper Code</b>	<b>Paper</b>	<b>Subject Name</b>	<b><u>ANATOMY</u></b>
<b>213001</b>	<b>Paper I</b>	<b>Morphology and gross general Anatomy above diaphragm with applied and concerning embryology and histology</b>	
<b>213002</b>	<b>Paper II</b>	<b>Morphology and gross anatomy below the diaphragm with applied and concerning embryology and histology</b>	
<b>213003</b>	<b>Paper III</b>	<b>Neuro-anatomy with applied</b>	
<b>213004</b>	<b>Paper IV</b>	<b>Recent advances &amp; evolution &amp; Genetics</b>	



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<b>Paper Code</b>	<b>Paper</b>	<b>Subject Name</b>	<b><u>PHYSIOLOGY</u></b>
<b>232001</b>	<b>Paper I</b>	<b>General physiology, including History of Physiology</b>	
<b>232002</b>	<b>Paper II</b>	<b>Systemic physiology (system providing transport, nutrition and energy) including comparative physiology)</b>	
<b>232003</b>	<b>Paper III</b>	<b>System physiology including cellular physiology, regulation and neural control</b>	
<b>232004</b>	<b>Paper IV</b>	<b>Applied physiology including recent advances</b>	



# ARYABHATTA KNOWLEDGE UNIVERSITY, PATNA

<b>Paper Code</b>	<b>Paper</b>	<b>Subject Name</b>	<b><u>BIO-CHEMISTRY</u></b>
<b>214001</b>	<b>Paper I</b>	<b>General Bio-chemistry, bio-statics, bio-chemical technique</b>	
<b>214002</b>	<b>Paper II</b>	<b>Cell physiology, molecular Biology, and Human genetics</b>	
<b>214003</b>	<b>Paper III</b>	<b>Intermediary metabolism, macro and micro nutrients, inborn errors of metabolism</b>	
<b>214004</b>	<b>Paper IV</b>	<b>Recent advances in Bio-chemistry</b> <ul style="list-style-type: none"><li>- <b>Clinical Bio-chemistry</b></li><li>- <b>Human nutrition, endocrinology and immunology</b></li></ul>	



# ARYABHATTA KNOWLEDGE UNIVERSITY, PATNA

<b>Paper Code</b>	<b>Paper</b>	<b>Subject Name</b>	<b><u>PATHOLGY</u></b>
<b>228001</b>	<b>Paper I</b>	<b>General including special Pathology</b>	
<b>228002</b>	<b>Paper II</b>	<b>Systemic including chemical pathology and Histo-Pathology</b>	
<b>228003</b>	<b>Paper III</b>	<b>Clinical Pathology including Haematology and Blood transfusion</b>	
<b>228004</b>	<b>Paper IV</b>	<b>Recent advances in Pathology including comparative Pathology</b>	



# ARYABHATTA KNOWLEDGE UNIVERSITY, PATNA

<b>Paper Code</b>	<b>Paper</b>	<b>Subject Name</b>	<b><u>MICROBIOLOGY</u></b>
<b>226001</b>	<b>Paper I</b>	<b>General Microbiology and Immunology</b>	
<b>226002</b>	<b>Paper II</b>	<b>Systemic Bacteriology and Mycology</b>	
<b>226003</b>	<b>Paper III</b>	<b>Virology and Parasitology</b>	
<b>226004</b>	<b>Paper IV</b>	<b>Recent advances and applied Microbiology</b>	



## ARYABHATTA KNOWLEDGE UNIVERSITY, PATNA

<b>Paper Code</b>	<b>Paper</b>	<b>Subject Name</b>	<b><u>PHARMACOLOGY</u></b>
<b>230001</b>	<b>Paper I</b>	<b>General Pharmacology and applied Pharmacology</b>	
<b>230002</b>	<b>Paper II</b>	<b>Bioassay and experimental Pharmacology</b>	
<b>230003</b>	<b>Paper III</b>	<b>Systemic Pharmacology, Chemotherapy &amp; Pharmacological therapeutics.</b>	
<b>230004</b>	<b>Paper IV</b>	<b>Recent advances in Clinical and therapeutic Pharmacology</b>	



# ARYABHATTA KNOWLEDGE UNIVERSITY, PATNA

<b>Paper Code</b>	<b>Paper</b>	<b>Subject Name</b>	<b><u>FORENSIC MEDICINE (FMT)</u></b>
<b>219001</b>	<b>Paper I</b>	<b>Basic science in Anatomy and Physiology and other allied subjects as applied aspect of Clinical Forensic Medicine. Basic of diseases in clinical medicines.</b>	
<b>219002</b>	<b>Paper II</b>	<b>Forensic Medicine including Medical jurisprudence including Clinical Forensic medicine</b>	
<b>219003</b>	<b>Paper III</b>	<b>Forensic Medicine including Forensic Pathology and Forensic Toxicology</b>	
<b>219004</b>	<b>Paper IV</b>	<b>Description of post-mortem report and recent advances in Forensic Medicine</b>	





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<b>Paper Code</b>	<b>Paper</b>	<b>Subject Name</b>	<b><u>COMMUNITY MEDICINE (PSM)</u></b>
216001	Paper I	Basic & public Health Scheme, nutrition and medical & health statistics. Concept in Community Medicine & principle & practice of epidemiology.	
216002	Paper II	Epidemiology of communicable and non communicable diseases, tropical medicine, and health services management including organization and management of rural health scheme principle & practice of health administration.	
216003	Paper III	Environmental Health, occupational health, demography, family planning and maternity and child health, industrial hygiene	
216004	Paper IV	Pathology, microbiology in relation to social and preventive medicines- Recent advances social & behavioural sciences. Mental Health & Education.	



# ARYABHATTA KNOWLEDGE UNIVERSITY, PATNA

<b>Paper Code</b>	<b>Paper</b>	<b>Subject Name</b>	<b><u>MS - OPHTHALMOLOGY (EYE)</u></b>
<b>243001</b>	<b>Paper I</b>	<b>Applied basic science (Anatomy, physiology, pharmacology, pathology) related to ophthalmology</b>	
<b>243002</b>	<b>Paper II</b>	<b>Diseases of eye and ocular manifestation with systemic diseases</b>	
<b>243003</b>	<b>Paper III</b>	<b>Operative techniques in ophthalmological surgery</b>	
<b>243004</b>	<b>Paper IV</b>	<b>Recent advances in Ophthalmology</b>	



# ARYABHATTA KNOWLEDGE UNIVERSITY, PATNA

<b>Paper Code</b>	<b>Paper</b>	<b>Subject Name</b>	<b><u>MD - GENERAL MEDICINE</u></b>
<b>220001</b>	<b>Paper I</b>	<b>Applied basic Medical Science (Anatomy, Physiology, Pathology, Microbiology and Pharmacology) Immunology National Program and preventive strategies. Impact of medical diseases on pregnancy, Dermatology &amp; Psychiatric, Nutrition, Immune system &amp; disease Molecular Cell biology &amp; genetic disease.</b>	
<b>220002</b>	<b>Paper II</b>	<b>General Medicine</b> a. Intensive Care Medicine b. Rheumatology & Bone Disease c. Infectious diseases, Tropical Medicines and STD d. Environmental Medicine e. Drug Therapy and Poisoning	
<b>220003</b>	<b>Paper III</b>	<b>Systemic Disease</b> a. GIT b. Liver, Biliary and Pancreatic Diseases c. Malignant disease d. Renal diseases e. Cardio-vascular & Respiratory diseases f. Endocrine & Diabetic and other metabolic diseases g. Neurological diseases	
<b>220004</b>	<b>Paper IV</b>	<b>Recent advances as related to Medicine</b>	



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<b>Paper Code</b>	<b>Paper</b>	<b>Subject Name</b>	<b><u>MS - ENT</u></b>
<b>241001</b>	<b>Paper I</b>	<b>Anatomy, Physiology, Pathology, Microbiology, Biochemistry &amp; acoustic as related to ENT</b>	
<b>241002</b>	<b>Paper II</b>	<b>Diseases of Ear, Nose and Throat</b>	
<b>241003</b>	<b>Paper III</b>	<b>Recent operative technique applied to ear, nose and throat treatment</b>	
<b>241004</b>	<b>Paper IV</b>	<b>Recent advances in ENT</b>	



## ARYABHATTA KNOWLEDGE UNIVERSITY, PATNA

<b>Paper Code</b>	<b>Paper</b>	<b>Subject Name</b>	<b><u>MS - GENERAL SURGERY</u></b>
<b>242001</b>	<b>Paper I</b>	<b>Applied basic sciences in relation of General Surgery, Urology, Gastroenterology Breast, Endocrines</b>	
<b>242002</b>	<b>Paper II</b>	<b>General Surgery and Surgical diseases of organs above the diaphragm including pre-operative and post operative treatment</b>	
<b>242003</b>	<b>Paper III</b>	<b>General Surgery and Surgical diseases of organs below the diaphragm including pre-operative and post operative treatment</b>	
<b>242004</b>	<b>Paper IV</b>	<b>Recent advances in Surgery related to General Surgery</b>	



# ARYABHATTA KNOWLEDGE UNIVERSITY, PATNA

<b>Paper Code</b>	<b>Paper</b>	<b>Subject Name</b>	<b><u>MS - ORTHOPAEDICS SURGERY</u></b>
<b>244001</b>	<b>Paper I</b>	<b>Applied basic science (Anatomy, Physiology, Pathology, Pharmacology &amp; Therapeutics) related to orthopaedic diseases and surgery</b>	
<b>244001</b>	<b>Paper II</b>	<b>General orthopaedic surgery &amp; (pre &amp; post operative management)</b>	
<b>244001</b>	<b>Paper III</b>	<b>General Surgery applied to orthopaedic surgery with pre &amp; post operative management</b>	
<b>244001</b>	<b>Paper IV</b>	<b>Recent advances in orthopaedics</b>	



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<b>Paper Code</b>	<b>Paper</b>	<b>Subject Name</b>	<b><u>MS - OBSTETRICS &amp; GYNAECOLOGY</u></b>
<b>245001</b>	<b>Paper I</b>	<b>Basic Medical Science- Anatomy, Physiology, Pathology, Pharmacology etc related to Obst. &amp; Gynae</b>	
<b>245002</b>	<b>Paper II</b>	<b>Gynecology</b>	
<b>245003</b>	<b>Paper III</b>	<b>Obstetrics</b>	
<b>245004</b>	<b>Paper IV</b>	<b>Recent advances related to Obst. &amp; Gynae &amp; community obstetrics.</b>	



## ARYABHATTA KNOWLEDGE UNIVERSITY, PATNA

<b>Paper Code</b>	<b>Paper</b>	<b>Subject Name</b>	<b><u>MD - ANAESTHESIA</u></b>
<b>211001</b>	<b>Paper I</b>	<b>Applied basic science, Anatomy, Physiology, Parmakinetics, Pre-medication, difficult air way- related to anaesthesia</b>	
<b>211002</b>	<b>Paper II</b>	<b>a) Method &amp; technique of anaesthesia and complication with their management b) Pharmacology of drugs used in Anaesthesia. c) Pre-operative and post operative assessment and proper care of the Pt</b>	
<b>211003</b>	<b>Paper III</b>	<b>Clinical Anaesthesia with relation to special regime &amp; disease complication &amp; management.</b>	
<b>211004</b>	<b>Paper IV</b>	<b>Recent advances and critical case management</b>	





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<b>Paper Code</b>	<b>Paper</b>	<b>Subject Name</b>	<b><u>MD – PAEDIATRICS</u></b>
<b>229001</b>	<b>Paper I</b>	<b>Applied Basic Science, Anatomy, Physiology &amp; Pharmacology as related to Pediatrics.</b>	
<b>229002</b>	<b>Paper II</b>	<b>Social and Preventive Pediatrics neonatal disorders and child psychology.</b>	
<b>229003</b>	<b>Paper III</b>	<b>(a) General Medicine as applied to Pediatrics &amp; community pediatrics. (b) Therapeutics in relation to diseases of children.</b>	
<b>229004</b>	<b>Paper IV</b>	<b>Recent advances in Pediatrics &amp; community Pediatrics.</b>	



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<b>Paper Code</b>	<b>Paper</b>	<b>Subject Name</b>	<b><u>MD - RADIO-DIAGNOSIS</u></b>
<b>234001</b>	<b>Paper I</b>	<b>Applied basic science including isotopes and Radio-Physics related to Radiology.</b>	
<b>234002</b>	<b>Paper II</b>	<b>Radio-diagnosis related to General Medicines and Surgery contents above the diaphragm, Bones and joints.</b>	
<b>234003</b>	<b>Paper III</b>	<b>General Paper in Radiology, - Radio-diagnosis of the content below the diaphragm.</b>	
<b>234004</b>	<b>Paper IV</b>	<b>Recent advances in Radio-diagnosis and Technique.</b>	



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<b>Paper Code</b>	<b>Paper</b>	<b>Subject Name</b>	<b><u>MD – SKIN &amp; VD</u></b>
<b>217001</b>	<b>Paper I</b>	<b>Basis Science of Skin, S.T.D, Leprosy (Anatomy, Physiology Biochemistry and Pharmacology.</b>	
<b>217002</b>	<b>Paper II</b>	<b>Disease of skin STD &amp; Leprosy, Therapeutic in relation to diseases, of Skin.</b>	
<b>217003</b>	<b>Paper III</b>	<b>Histopathology of Skin, STD, Leprosy Diseases. - Dermatosurgegery Cosmetology.</b>	
<b>217004</b>	<b>Paper IV</b>	<b>Recent advances of skin diseases, STD&amp;Leprosy.</b>	



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<b>Paper Code</b>	<b>Paper</b>	<b>Subject Name</b>	<b><u>PHYSICAL MIDICINE &amp; REHABILITATION</u> <u>(PMR)</u></b>
<b>231001</b>	<b>Paper I</b>	<b>Basis Science – Anatomy, Physiology Pathology, Pharmacology and Biochemistry as applied to Physical Medicine and Rehabilitation.</b>	
<b>231002</b>	<b>Paper II</b>	<b>Medical sciences applied to physical medicines &amp; rehabilitation including surgical aspect.</b>	
<b>231003</b>	<b>Paper III</b>	<b>Physical Medicine, Rheumatology and Rehabilitation including recent advances.</b>	
<b>231004</b>	<b>Paper IV</b>	<b>Rehabilitation in specialized subjects, prosthetics, orthotics vocational guidance.</b>	



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<b>Paper Code</b>	<b>Paper</b>	<b>Subject Name</b>	<b><u>MD - PSYCHIATRY</u></b>
<b>233001</b>	<b>Paper I</b>	<b>Psychological Medicines, chemical psychiatrics including management and therapeutics.</b>	
<b>233002</b>	<b>Paper II</b>	<b>Disease of Nervous system, organic psychiatry</b>	
<b>233003</b>	<b>Paper III</b>	<b>Pathology and pharmacology in relation to psychological medicine, psycho-pathology psychometry.</b>	
<b>233004</b>	<b>Paper IV</b>	<b>Anatomy and physiology in relation to psychological medicines. Basic clinical psychology are Behavioural sciences.</b>	



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<b>Paper Code</b>	<b>Paper</b>	<b>Subject Name</b>	<b><u>MD - RADIOTHERAPY</u></b>
<b>235001</b>	<b>Paper I</b>	<b>Principles of Racliation therapy- Tele therapy- Brachy-therapy Principles of Radiation Physics and their clinical application. - Radiation protection.</b>	
<b>235002</b>	<b>Paper II</b>	<b>Pathology and pathogenesis of Malignancies, Pathological classification, staging &amp; their importance in treatment.</b>	
<b>235003</b>	<b>Paper III</b>	<b>Clinical aspects of Malignancies.</b>	
<b>235004</b>	<b>Paper IV</b>	<b>Recent advances in Malignancies.</b>	



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<b>Paper Code</b>	<b>Paper</b>	<b>Subject Name</b>	<b><u>PLASTIC SURGERY M.CH</u></b>
<b>240001</b>	<b>Paper I</b>	<b>Surgical anatomy, physiology, biochemistry, pharmacology as applied to plastic surgery.</b>	
<b>240002</b>	<b>Paper II</b>	<b>General Surgery as applied to plastic surgery.</b>	
<b>240003</b>	<b>Paper III</b>	<b>Orthopaedic surgery &amp; ENT as applied to plastic surgery.</b>	
<b>240004</b>	<b>Paper IV</b>	<b>Recent advances in modern method of plastic surgery.</b>	