AMU - 2016

A Detailed Analysis by Resonance

On 10th April 2016, AMU Medical Exam – 2016 was conducted by Aligarh Muslim University for admission of candidates in various medical under graduate courses such as BDS, MBBS, and Nursing in the University. This exam is conducted in 2 rounds and this was the first round also known as First Tier. The second tier will be conducted on 29 May, 2016.

DETAILS OF AMU – 2016

AMU Medical 2016 is a national level entrance exam conducted for admission to around 180 MBBS and BDS seats. Among the 180, 145 are MBBS seats in Jawaharlal Nehru Medical College and 35 are BDS seats in Dr. Ziauddin Ahmad Dental College. The admission to undergraduate medical and dental programmes will be strictly done on the basis of candidate's marks and rank scored in AMU Medical 2016 Exam.

AMU – 2016 was conducted in one paper consisting of 50 questions each from Physics and Chemistry, and 100 questions from Biology which consists of Zoology and Botany subjects. The exam was conducted on 10th April from 10:00 am to 01:00 pm.

Tier-2 will be held only in AMU Campus at Aligarh. In AMU MBBS BDS 2016 Tier-2, only 30% of the candidates will be allowed to appear in order of merit who appear in Tier-1 Test, in each category of general and internal candidates, subject to a maximum of 15000 candidates, which is the capacity of the University to accommodate. In case an exceedingly large number of candidates appear, the percentage may equitably be reduced, to keep the ceiling to a maximum of 15000 candidates

Given below is the subject wise detailed analysis of AMU-2016 question paper.

OVERALL MARKS DISTRIBUTION

The paper had 200 questions each worth 1 mark. All questions were objective type with single correct option. If we talk about subject wise, then there were 50 questions from Physics and Chemistry, and 100 questions were from Biology (Zoology and Botany sections of Biology).

SUBJECT	Class 11		Class 12		Total	
	No of Questions	Total Marks	No of Questions	Total Marks	No of Questions	Total Marks
Physics	25	25	25	25	50	50
Chemistry	15	15	35	35	35	35
Zoology	39	39	17	17	56	56
Botany	33	33	11	11	44	44
Grand Total	**112**	**112**	**88**	**88**	**200**	**200**

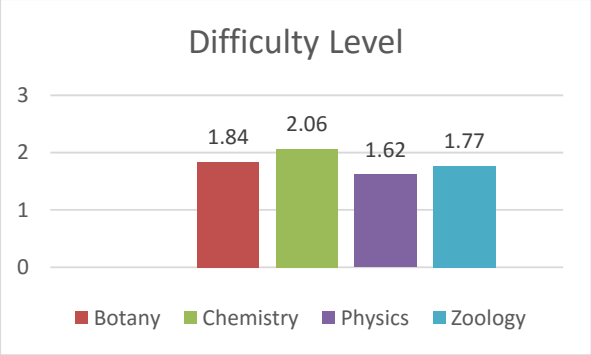
Overall Difficulty Level Analysis

In this analysis we have rated every question on a scale of 1 to 3. The ratings are done by expert faculty of Resonance. The individual ratings are then averaged to calculate overall difficulty level.

- 1: Easy
- 2: Moderate
- 3: Difficult

Subject	Difficulty Level
Physics	1.62
Chemistry	2.06
Zoology	1.77
Botany	1.84
Overall Average	**1.82**

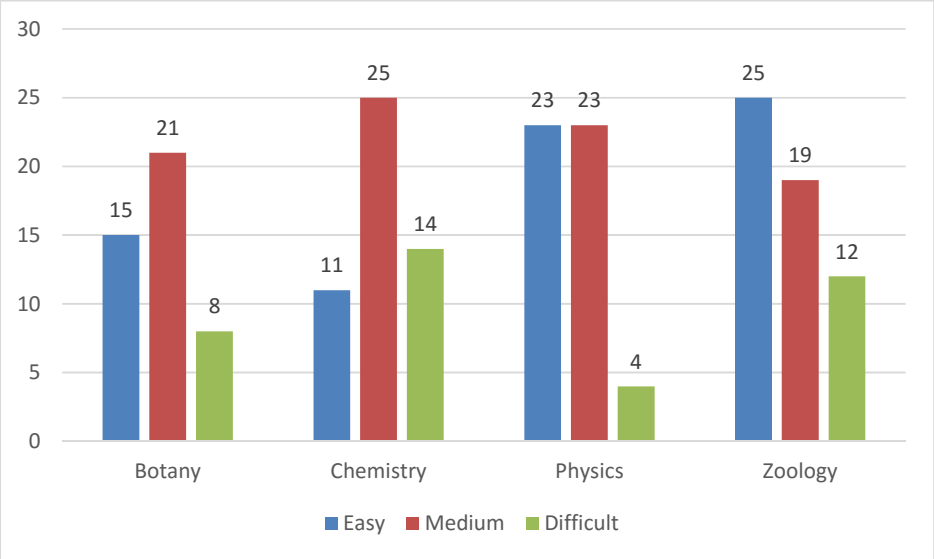
Difficulty Level Analysis: No of Questions



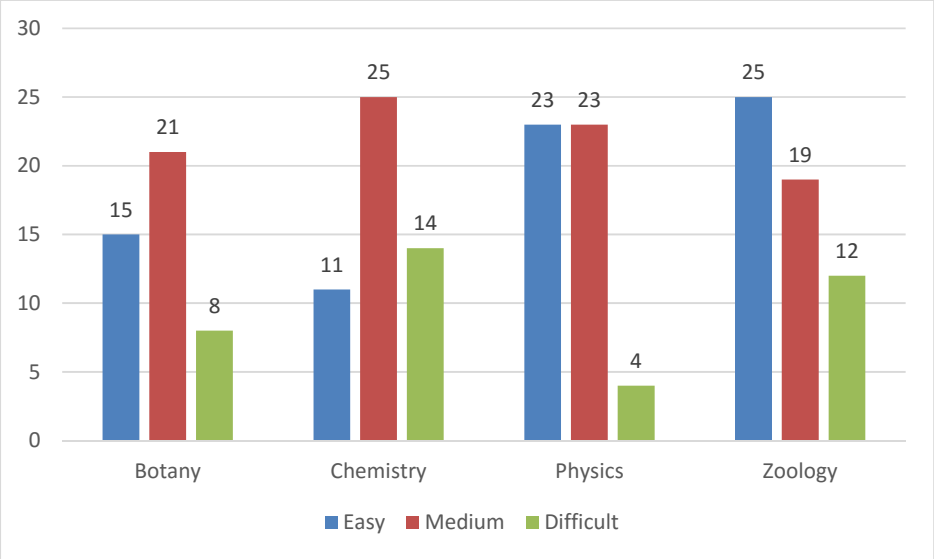
Subject	Easy Level		Medium Level		Difficult Level	
	No of Questions	Total Marks	No of Questions	Total Marks	No of Questions	Total Marks
Physics	23	23	23	23	04	04
Chemistry	11	11	25	25	14	14
Zoology	25	25	19	19	12	12
Botany	15	15	21	21	08	08
Grand Total	**74**	**74**	**88**	**88**	**38**	**38**

Resonance Experts feel that all Chemistry was at tougher side as compared to Biology and Physics was easiest among all. Around 74 marks can be considered easy overall, 88 marks are moderately difficult and 38 marks are considered difficult by Resonance Team.

Question Wise Difficulty Breakup



Marks Wise Difficulty Breakup



PHYSICS ANALYSIS

UNIT & TOPIC NAME	NO OF QUESTION	TOTAL MARKS	% WEIGHTAGE
Electrodynamics			
Alternating Current	1	1	2.00%
Capacitance	4	4	8.00%
Current Electricity	3	3	6.00%
Electro Magnetic Field	3	3	6.00%
Electro Magnetic Induction	1	1	2.00%
Electrostatics	1	1	2.00%
Electrodynamics Total	13	13	26.00%
Heat & Thermodynamics			
KTG & Thermodynamics	5	5	10.00%
Heat & Thermodynamics Total	5	5	10.00%
Mechanics			
Centre of Mass	1	1	2.00%
Circular Motion	1	1	2.00%
Error in Measurement	1	1	2.00%
Fluid Mechanics & Properties of Matter	1	1	2.00%
Friction	1	1	2.00%

Gravitation	2	2	4.00%
Mathematical Tools	1	1	2.00%
Projectile Motion	1	1	2.00%
Rectilinear Motion & Vectors	3	3	6.00%
Rigid Body Dynamics	1	1	2.00%
Unit & Dimension	1	1	2.00%
Work, Power & Energy	3	3	6.00%
Mechanics Total	17	17	34.00%
Modern Physics			
Electromagnetic waves & communication	2	2	4.00%
Modern Physics	5	5	10.00%
Semiconductors	2	2	4.00%
Modern Physics Total	9	9	18.00%
Optics			
Geometrical Optics & Physical Optics	2	2	4.00%
Wave Optics	1	1	2.00%
Optics Total	3	3	6.00%
SHM & Waves			
SHM	1	1	2.00%
Sound Waves	2	2	4.00%
SHM & Waves Total	3	3	6.00%
Physics Total	50	50	100.00%
Grand Total	50	50	100.00%

CHEMISTRY ANALYSIS

UNIT & TOPIC NAME	NO OF QUESTION	TOTAL MARKS	% WEIGHTAGE
Inorganic Chemistry-I			
chemical bonding	5	5	10.00%
p-block	2	2	4.00%
Periodic Table & Periodicity in Properties	1	1	2.00%
Inorganic Chemistry-I Total	8	8	16.00%
Inorganic Chemistry-II			
Coordination Compounds	2	2	4.00%
d-block & f-block Elements	3	3	6.00%
metallurgy	1	1	2.00%
Inorganic Chemistry-II Total	6	6	12.00%
Organic Chemistry-I			
General Organic Chemistry- II	3	3	6.00%
General Organic Chemistry-I	1	1	2.00%
Organic Chemistry-I Total	4	4	8.00%
Organic Chemistry-II			
Alkyl Hallide, Alcohol & Ether (Reaction Mechanism)	2	2	4.00%
biomolecules	5	5	10.00%
carbonyl compounds	2	2	4.00%
Environmental chemistry	1	1	2.00%
Hydrocarbon (Alkane, Alkene & Alkyne)	1	1	2.00%
Nitrogen Containing Organic Compounds	3	3	6.00%
Organic Chemistry-II Total	14	14	28.00%
Physical Chemistry-I			
Atomic Structure & Nuclear Chemistry	1	1	2.00%
Chemical Equilibrium	1	1	2.00%
ionic equilibrium	2	2	4.00%
mole concept	1	1	2.00%
Redox Reactions	1	1	2.00%

Physical Chemistry-I Total	6	6	12.00%
Physical Chemistry-II			
Chemical Kinetics	5	5	10.00%
Electrochemistry	1	1	2.00%
Solid State	1	1	2.00%
Solution & Colligative Properties	2	2	4.00%
surface chemistry	3	3	6.00%
Physical Chemistry-II Total	12	12	24.00%
Chemistry Total	50	50	100.00%
Grand Total	50	50	100.00%

BIOLOGY ANALYSIS

Zoology Analysis

UNIT & TOPIC NAME	NO OF QUESTION	TOTAL MARKS	% WEIGHTAGE
Animal Kingdom-1: Non-chordata			
Coelenterata	1	1	1.79%
Platyhelminthes & Aschelminthes	4	4	7.14%
Porifera	2	2	3.57%
Animal Kingdom-1: Non-chordata Total	7	7	12.50%
Animal Kingdom-2: Chordata			
Mammalia	1	1	1.79%
Pisces	1	1	1.79%
Animal Kingdom-2: Chordata Total	2	2	3.57%
Biology in Human welfare -- Human health and Disease			
Diseases caused by Helminths & Fungi	2	2	3.57%
Diseases caused by Protozoa	2	2	3.57%
Diseases caused by Virus	1	1	1.79%
Drug Addiction	1	1	1.79%

Introduction: Biology in Human welfare -- Human health and Disease	1	1	1.79%
Biology in Human welfare -- Human health and Disease Total	7	7	12.50%
Biology in Human welfare -- Microbes in human welfare			
Microbes in Production of Biogas	1	1	1.79%
Microbes Used in Household Production	1	1	1.79%
Microoganisms Used in Industrial Production	2	2	3.57%
Biology in Human welfare -- Microbes in human welfare Total	4	4	7.14%
Biomolecules			
Carbohydrates	1	1	1.79%
Enzymes	2	2	3.57%
Miscellaneous: Biomolecules	1	1	1.79%
Nucleic Acids	2	2	3.57%
Proteins	3	3	5.36%
Protoplasm	1	1	1.79%
Biomolecules Total	10	10	17.86%
Human Physiology: Body Fluids and Circulation			
Miscellaneous: Human Physiology: Body Fluids and Circulation	1	1	1.79%
Human Physiology: Body Fluids and Circulation Total	1	1	1.79%
Human Physiology: Breathing and Exchange of Gases			
Exchange and Transport of Gases	3	3	5.36%
Human Physiology: Breathing and Exchange of Gases Total	3	3	5.36%
Human Physiology: Chemical Coordination and Integration			
Hypothalamus & Pitutory Gland	1	1	1.79%

Pancreas	1	1	1.79%
Thyroid Gland	1	1	1.79%
Human Physiology: Chemical Coordination and Integration Total	3	3	5.36%
Human Physiology: Digestion and Absorption			
Digestive Glands	1	1	1.79%
Digestive System	1	1	1.79%
Gastro Intestinal hormones/Digestive enzymes	2	2	3.57%
Human Physiology: Digestion and Absorption Total	4	4	7.14%
Human Physiology: Locomotion and Movements			
Axial Skeleton	1	1	1.79%
Human Physiology: Locomotion and Movements Total	1	1	1.79%
Human Physiology: Neural Control and Coordination			
Brain & Spinal Cord	2	2	3.57%
CSF, Brain Covering, Brain Cavity	1	1	1.79%
Human Physiology: Neural Control and Coordination Total	3	3	5.36%
Human Reproduction and Reproductive Health			
Gametogenesis	1	1	1.79%
Infertility and Assisted Reproductive Techniques	1	1	1.79%
Male Reproductive System	1	1	1.79%
Placenta and Parturition	1	1	1.79%
Human Reproduction and Reproductive Health Total	4	4	7.14%
Origin and Evolution			
Evidences of Evolution	1	1	1.79%
Theories of Evolution	1	1	1.79%
Origin and Evolution Total	2	2	3.57%
Plant Diversity-Biological Classification			
Carbohydrates	1	1	1.79%
Plant Diversity-Biological Classification Total	1	1	1.79%

Structural Organisation in Animal			
Connective Tissue	1	1	1.79%
Earthworm	1	1	1.79%
Frog	2	2	3.57%
Structural Organisation in Animal Total	4	4	7.14%
Zoology Total	56	56	100.00%
Grand Total	56	56	100.00%

BOTANY ANALYSIS

UNIT & TOPIC NAME	NO OF QUESTION	TOTAL MARKS	% WEIGHTAGE
Application Biology-Plant Breeding			
Application Biology-Plant Breeding	1	1	2.27%
Application Biology-Plant Breeding Total	1	1	2.27%
Cell Biology-Cell: The basic unit of Life			
Cell membrane	1	1	2.27%
Vacuoles	1	1	2.27%
Cell Biology-Cell: The basic unit of Life Total	2	2	4.55%
Ecology- Biodiversity and Conservation			
Introduction, Level of biodiversity, Pattern of Biodiversity, Loss of biodiversity, Conservation of biodiversity	1	1	2.27%
Ecology- Biodiversity and Conservation Total	1	1	2.27%
Ecology- Ecosystem			
Ecological succession, BiogeoChemical & Sedimentary Cycles, Ecosystem services, Biomes	1	1	2.27%
Energy flow, Food chain, food web, Ecological pyramids	1	1	2.27%
Ecology- Ecosystem Total	2	2	4.55%
Ecology- Environmental Issues			
Types of pollutants, Types of pollution – Air pollution, acid rain,	2	2	4.55%

ozone deplation, water pollution, soil pollution, Noise pollution, Redioactive waste, Global warming - Green house effect, International efforts to reduce pollution.			
Ecology- Environmental Issues Total	2	2	4.55%
Ecology- Organisms and population			
Introduction, Abiotic factors, Responses to Abiotic factors, Ecological adaptations	2	2	4.55%
Population & Population interactions, Biotic community	1	1	2.27%
Ecology- Organisms and population Total	3	3	6.82%
Genetics- Molecular basis of inheritance			
Nucleic Acid (DNA, RNA, The search for genetic material and chargaffs rule)	1	1	2.27%
Regulation of gene expression, HGP and DNA fingerprinting	2	2	4.55%
Genetics- Molecular basis of inheritance Total	3	3	6.82%
Genetics- Principals of inheritance and variations			
Linkage, Crossing over, pedigree analysis, Genetic disorders, cytoplasmic inheritance	1	1	2.27%
Multiple allele, pleotropic gene, gene interaction, polygenic inheritance, Sex determination	1	1	2.27%
Genetics- Principals of inheritance and variations Total	2	2	4.55%
Plant Diversity-Biological Classification			
Introduction: Plant Diversity-Biological Classification	1	1	2.27%
Kingdom - Monera	2	2	4.55%
Kingdom - Protista	3	3	6.82%
Kingdom-Fungi	4	4	9.09%
Virus	1	1	2.27%
Plant Diversity-Biological Classification Total	11	11	25.00%
Plant Diversity-Kingdom Plantae			

Kingdom Plantae-Algae	1	1	2.27%
Plant Diversity-Kingdom Plantae Total	1	1	2.27%
Plant Morphology			
Flower	1	1	2.27%
Plant Morphology Total	1	1	2.27%
Plant Physiology I			
Kingdom-Fungi	1	1	2.27%
Plant Physiology I-Mineral Nutrition	8	8	18.18%
Plant Physiology I-Transport in Plants	1	1	2.27%
Plant Physiology I Total	10	10	22.73%
Plant Physiology II- Photosynthesis			
Introduction (Early experiments), site of Photosynthesis and Photosynthetic Pigments	1	1	2.27%
Light reaction and ETS	1	1	2.27%
Plant Physiology II- Photosynthesis Total	2	2	4.55%
Plant Physiology II- Plant growth and Development			
Discovering of PGR, Auxin, Gibberellins and Cytokinins	1	1	2.27%
Ethylene and Abscissic Acid	1	1	2.27%
Photoperiodism and Vernalisation	1	1	2.27%
Plant Physiology II- Plant growth and Development Total	3	3	6.82%
Botany Total	44	44	100.00%
Grand Total	44	44	100.00%

OVERALL REVIEW: