

Contents

Preliminary Pages

Reviewer's List v

Preface vii

Acknowledgments viii

Recent Papers 2024–2022

AIIMS Mangalagiri (Associate Professor-Reader) 2024 xix

RAK MSc Nursing 2023 xxiv

J&K Board MSc Nursing Entrance 2023 xxx

AIIMS Mangalagiri (Associate Professor) 2023 xxxv

AIIMS Bibinagar (Associate Professor) 2023 xxxix

AIIMS Bibinagar (Nursing Tutor) 2023 xliv

AIIMS Deoghar (Nursing Tutor) 2022 xlviii

Rajasthan University of Health Sciences MSc Nursing Entrance 2022 liii

Clinical Case-Based Questions

(Fundamentals of Nursing) lix

(Medical Surgical Nursing) lxiii

(Psychiatric Nursing) lxix

(Obstetric and Gynecological Nursing) lxxiii

(Pediatric Nursing) lxxvi

Section A

Subject Wise Synopsis, IBQs & MCQ's

Nursing Research

Synopsis

Introduction 3

Definition 3

Steps in the Quantitative Research Process 3

Steps in the Qualitative Research Process 3

Research Process 3

Review of Literature 4

Literature Search in PubMed 4

Objectives 5

Hypothesis 6

Research Designs 6

Non-Experimental or Observational Research Designs 9

Cross Sectional vs Longitudinal Research Designs 10

Mixed Method Research 11

Risk of Bias in Research 11

Internal and External Validity of a Research Study 12

Major Types of Data Collection Methods 13

Sample and Sampling Technique 15

Ethics in Research 17

Reporting Guidelines for Research 17

Plagiarism in Research 18

Ghost Writing 18

Data Analysis and Interpretation 18

Numerical Data Properties and Measures 20

Histogram 22

Line Diagram 22

Pie Charts 22

Application of Inferential Statistics 23

Parametric and Non-Parametric Test 24

Parametric Tests 24

Non-Parametric Tests 24

Regression Analysis 26

Analysis of Qualitative Data 26

Qualitative Data Analysis Softwares 26

Multiple Choice Questions 28

Nursing Education

Synopsis

Education 57

Indian Nursing Council (INC) 59

Nursing Programs in India 59

Nursing Education in India 60

International Council of Nurses (ICN) 60

State Nursing Councils in India 60

Trained Nurses Association of India (TNAI) 60

Curriculum 60

Master Plan 61

Course Plan 61

Unit Plan 61

Lesson Plan 61

Format of Lesson Plan 62

Educational Objectives 62

Audio-Visual Aid 63

Maxims of Teaching 64

Pedagogy vs Andragogy 64

Principles of Teaching 64

Evaluation 66

Formula to Calculate Difficulty and

Discrimination Index of an Item 67

Educational Learning Theories 69

Innovative Methods of Teaching 69

Simulation in Clinical Nursing Education 71

Guidance and Counseling 71

Continuing Nursing Education (CNE) 71

In-Service Education 71

Johari Window 72

Accreditation in Higher Education 72

National Education Policy (2020) 72

Multiple Choice Questions 74

Nursing Administration

Synopsis

Nursing Management 85

Nursing Administration 87

Management Theories 87

Bureaucracy or Organizational Theories 88

Motivational Theories 88

Legal and Ethical Issues in Nursing 89

Quality Assurance and Management in Nursing 90

Nursing Audit 92

Regulatory Bodies 92

Accreditation 93

Planning 95

Project Management Tool 96

Decision Making 96

Problem Solving 97

Organization 97

Coordination 100

Conflict Resolution 100

Staffing 101

Job Analysis 103

Discipline and Grievance 103

Directing 104

Collective Bargaining 107

Group Dynamics 107

Material Management 108

Budget 109

Multiple Choice Questions 111

Fundamentals of Nursing

Synopsis

History of Nursing	129
Nursing Education	129
Legal and Ethical Aspects in Nursing	129
Professional Values	130
Admission and Discharge	130
Nursing Process	131
Documentation and Reporting	132
Vital Signs	132
Health Assessment	135
Types of Nursing Modalities	140
Medical and Surgical Asepsis— Terminologies	141
Basic Principles of Surgical Asepsis	141
Methods of Sterilization and Disinfection	144
Specimen Collection	145
Comfort Devices	148
Bed Making	148
Personal Hygiene	149
Care of Skin/Bathing	149
Back Massage	150
Chest Physiotherapy	150
Pressure Ulcers	151
Various Positions	153
Hot and Cold Application	153
Drug Administration	155
Basic Life Support	156
Oxygen Therapy	157
Key Nursing Roles in Important Procedures	159
Enema	160
Suture	160
Triage	161
Intravenous Fluid Administration Drop Rate Calculation	161
Insulin Syringe Preparation (Mixing Regular with NPH)	161
Hemoglobin	162
Coagulation Studies	162
Renal Function	163
Liver Function Test (Normal Values)	163
Pulmonary Function Test	163
Endocrine Function	163
Blood Sugar Profile	163
Cardiac Markers	164
Urine Routine and Microscopy	164
Cerebrospinal Fluid (CSF)	164
Neurological Values	164
Arterial Blood Gas Values (ABG)	164
Image-Based Questions	167
Multiple Choice Questions	169

Advanced Nursing Practice and Genetics

Synopsis

Nursing theories	205
Summary of Nursing Theories	205
Invasive and Non-invasive Ventilation Mode	209
Fluid and Electrolyte	209
Acid-Base Balance	213
Edema	213
Alternative Modalities of Care	213
Care of Death and Dying	214
Genetics	215
Common Genetic Disorders	221
Prenatal Diagnostic Genetic Testing	224
Genetic Counselling	225
Multiple Choice Questions	227
Medical Surgical Nursing/ Adult Health Nursing	
Synopsis	
Cardiovascular System	237
Anatomic and Physiologic Overview of Heart	237
Diagnostic Tests	241
Disorders of Cardiovascular System	245
Coronary Artery Diseases	246
Nursing Care of Patient Undergoing CABG (Coronary Artery Bypass Graft)	247
Other Diseases of Heart	248
Arterial Diseases	249
Hematology	251
Anatomy and Physiology of Hematologic System	251
Blood Groups and Blood Types	253
Blood Coagulation	254
Hematological Diseases and Disorders	254
Blood Transfusion	257
Critical Care Nursing	258
Stress	258
Shock	258
Anaphylaxis	260
Fluid Imbalances	260
Edema	261
Understanding Acid-Base Imbalance	261
Causes of Other Acid-Base Disorders	261
Electrolytes	262
Hemorrhage	262

Emergency Nursing - Prioritization of Care	263
Priorities of Care and Triage Categories	263
Common Equipment in Critical Care Area	263
Stages of Death and Dying (Kubler-Ross Stages of Dying)	265
Pain	265
Nervous System	266
Anatomy and Physiology of Nervous System	266
Classification of Nervous System	266
Assessment and Diagnostic Tests	271
Seizure Disorders	274
Stroke	275
Head Trauma/Head Injury	275
Spinal Cord Injuries	277
Meningitis	277
Encephalitis	278
Brain Abscess	278
Multiple Sclerosis	278
Myasthenia Gravis	279
Guillain-Barré Syndrome	279
Trigeminal Neuralgia	279
Bell's Palsy	279
Parkinson's Disease	280
Alzheimer's Disease	280
Huntington's Disease	280
Amyotrophic Lateral Sclerosis (ALS)	280
Brain Tumor	280
Neurocysticercosis	281
Oncology	281
Cancer	281
Few Common Cancers	282
Bone Marrow Transplantation (BMT)	288
Renal System	288
Anatomy and Physiology of Renal System	288
Functions of Kidney	291
Investigations	292
Disorders of Renal System	293
Renal Transplant	298
Miscellaneous Urinary Diseases	298
Musculoskeletal System	299
Anatomy and Physiology of Musculoskeletal System	299
Classification of Bones	300
Review Points	300
Anatomy of Bone	302
Types of Joints in Human Body	303
Vertebral Column	303
Diagnostic Evaluation	304

Disorders of Musculoskeletal System	304
Orthopedic Surgeries	308
Crutches	309
Gout	309
Tendinitis	310
Bursitis	310
Osteoarthritis	310
Rheumatoid Arthritis	310
Osteomyelitis	311
Osteoporosis	311
Osteomalacia	311
Paget's Disease	311
Rhabdomyolysis	311
Spinal Column Deformities	311
Prolapsed Intervertebral Disc	312
Amputation of the Lower Extremity	312
Pott's Disease	313
Carpal Tunnel Syndrome	313
Disorders of Lower Limb	313
Gastrointestinal and Hepatobiliary System	314
Gastrointestinal System	314
Hepatic Biliary System	326
Inflammation	331
Wound Healing	332
Prevention and Care of Pressure Ulcer	332
Gangrene	332
Immune System	333
Ent System	333
Anatomy and Physiology of Eye	336
Integumentary System	340
Respiratory System	343
Endocrine System	346
Male Reproductive System	351
Preoperative Nursing Care	353
Intraoperative Period: Nursing Responsibility	354
Common Positions Used during Surgeries	354
Sutures	357
Surgical Needles	358

Image-Based Questions 372

Multiple Choice Questions 387

Pharmacology

Synopsis

Key Terminologies	511
Conversion Equivalence of Weight	512
Conversion Equivalence of Volume	512
Antimicrobial Agents	513
Cardiac Drugs	514

Drugs Acting on Central Nervous System	515
Sedative and Hypnotics	516
Anticonvulsants	516
Analgesics	517
Anti-Gout Agents	517
Sympathomimetic (Adrenergic) Drugs	517
Cholinergic Drugs	517
Drugs Affecting the Respiratory System	518
Drugs Acting on Gastrointestinal Tract	518
Insulin	518
Oral Hypoglycemic (Antidiabetic) Agents	519
Adrenocorticosteroids and Analogues	519
Thyroid Drugs	519
Antithyroid Drugs	519
Diuretics	520
Antitubercular Drugs	520
Anticancer Drugs	521
Anticoagulants	521
Thrombolytic Medications	521
Antiplatelet Drugs	521
Specific Antidotes against Poisoning	521
Diseases and Drugs of Choices	522
Adverse Effects of Some Common Drugs	523
Drug Safety during Pregnancy	523
Drug Safety during Breastfeeding	524
Image-Based Questions	527
Multiple Choice Questions	528

Community Health Nursing

Synopsis

Levels of Prevention	545
Health Care Delivery System in India	546
Health for All	547
National Health Mission (NHM)	548
Demographic Trends of India	550
Vital Statistics	551
Health Policy and Planning	553
Epidemiology	554
Stages of Infection	556
Immunity	557
Vaccinations and Vaccines	558
Cold Chain	560
National Immunization Schedule	561
Disease Transmission	562
Communicable Diseases	564
Food Poisoning	568
Sexually Transmitted Diseases (STDs)	568
HIV and Aids	569
Parasitic Infections	569
Zoonoses	570
Tuberculosis	570
Occupational Diseases	571
Contraceptive Methods	572
Perinatal Care	575
Nutrition and Health	577
Water Purification Methods	578
International Health Organizations	578
Disaster Management	579
Recent High Impact Viral Diseases	580
Important Tables and Charts	581
Image-Based Questions	590
Multiple Choice Questions	592

Psychiatric Nursing

Synopsis

Introduction	625
Mental Health	625
Mental Illness	625
Theories of Personality Development	625
Defense Mechanism	627
Phases of Nurse-Patient Therapeutic Relationship	628
Neurotransmitters	629
Psychosocial Therapies	629
ICD 10 Classification of Psychiatric Disorders	631
ICD 11 Key Features	631
General Psychopathology	631
Organic Mental Disorders	633
Substance Use Disorders	634
Schizophrenia	635
Mood Disorders	636
Somatoform Disorders	637
Personality Disorders	637
Stress and Adaptation	638
Phobia	638
Obsessive Compulsive Disorder (OCD)	640
Adjustment Disorder	640
Eating Disorders	640
Sleep Disorders	640
Seasonal Affective Disorder (SAD)	641
Sexual Disorders	641
Attention Deficit Hyperactive Disorder (ADHD)	641
Mental Retardation (Intellectual Disability)	641
Learning Disabilities and Disorders (Specific Learning Disorder)	642
Electroconvulsive Therapy (ECT)	642
Psychopharmacology	643
Deaddiction Drugs/Antabuse Drugs	645

National Mental Health Programme (NMHP)	645
Crisis and Crisis Intervention	645
Glossary of Common Terminologies	646
Image-Based Questions	652
Multiple Choice Questions	653

Obstetric and Gynecological Nursing

Synopsis

Anatomy of Female Reproductive System	677
Anatomy of Breast	679
Menstrual Cycle	679
Fundamentals of Reproduction	680
Principal Events of Embryonic and Fetal Development	681
The Placenta and Fetal Membranes	682
Umbilical Cord	682
Amniotic Fluid	682
Fetal Circulation	683
Anatomy and Types of Female Pelvis	683
Fetal Skull	685
Assessment	686
Physiological and Emotional Changes during Prenatal Period	686
Diagnosis/Signs of Pregnancy	687
Estimation of EDD and Gestational Age	688
Screening Tests during Pregnancy	688
Antenatal Assessment of Fetal Well-Being	689
Fetus in utero (Lie, Presentation and Position)	689
Abdominal Examination (Leopold Maneuver)	691
Different Positions and Presentations during Labor	691
Normal Mechanism of Labor	693
Partograph	694
Pharmacology in OBG	694
Maternal Analgesia	694
Assisted Deliveries	695
Operative OBG	696
Postpartum Nursing Care	697
Common Disorders of Pregnancy	697
Common Gynecological Disorders	704
HIV in Pregnancy	705
Gonorrhea, Syphilis and Pelvic Inflammatory Disease	706
Cervical Cancer Screening	706
Anemia in Pregnancy	706
GTPAL	707

Image-Based Questions	714
Multiple Choice Questions	717

Pediatric Nursing

Synopsis

Growth and Development	739
Growth Chart	741
Developmental Milestones in First Two Years of Life	741
Theories of Growth and Development	742
Essential Newborn Care	742
Kangaroo Mother Care (KMC)	744
High Risk Newborn	745
Newborn Resuscitation	745
Common Respiratory Conditions in Newborns	746
Feeding in Children	746
Jaundice	747
Neonatal Care	748
Birth Injuries	748
Integrated Management of Neonatal and Childhood Illness (1995)	749
Baby-Friendly Hospital Initiative	750
Child Welfare Programs	750
Child Welfare Milestones	750
Types of Play among Children	751
Protein Energy Undernutrition	751
Respiratory Disorders	752
Disorders of GI System	753
Umbilical Cord Anomalies	757
Disorders of Hepatic System	757
Disorders of Cardiovascular System	758
Disorders of Genitourinary System	760
Disorders of Central Nervous System	762
Orthopedic Problems in Children	763
Disorders of Eye	767
Pediatric Emergency	767
Genetic Disorders	769
Behavioral Disorders in Children	769
Challenged Children	769
Drugs in Pediatrics	769
Common Pediatric Nursing Procedures	769

Image-Based Questions	776
Multiple Choice Questions	779

Biochemistry and Nutrition

Synopsis

Biochemistry	811
Introduction	811
The Cell	811
Transport Mechanisms	812

pH, Buffers and Acid-Base Balance, Acid Base Imbalance	813
Enzymes and Coenzymes	813
Carbohydrates	814
Lipids	815
Proteins	816
Vitamins, Minerals and Electrolytes	817
Vitamins: Functions, Sources and Deficiency Diseases	818
Nutrition	820
Calorie	820
Metabolism	820
Classification of Foods	820
Food Preservation Methods	820
Common Adulterants Used in Food Materials	821
Tests to Detect Common Adulteration	821

Multiple Choice Questions	822
----------------------------------	-----

Microbiology

Synopsis

Historical Perspectives of Microbiology	833
The Normal Bacterial Flora of Human Body	833
Staining Techniques	833
Types of Microscope	834
Culture Media	834
General Guidelines for Collecting Culture Specimen	835
Classification of Bacteria	835
Diagnostic Tests Done	836
Virus	837
Fungus	837
Parasites	837

Multiple Choice Questions	840
----------------------------------	-----

Introduction to Computer and Nursing Informatics

Synopsis

Basic Key Terms	849
History of Computers	849
Generations of Computers	849
Classification of Computers	850
Hardware and Software	850
Structure and Parts of Computer	850
Uses of Computers in Healthcare System	851
Computer Networking	854
Methods of Internet Access	854
Web/Internet Key Terminologies	855
Multiple Choice Questions	856

Section B

Previous Year Papers

1. AIIMS Mangalagiri Tutor/Clinical Instructor, August 2022 [867](#)
2. AIIMS Mangalagiri (Lecturer) 2022 [872](#)
3. AIIMS Mangalagiri (Professor cum Principal) 2022 [876](#)
4. RAK MSc Nursing 2022 [880](#)
5. Chhattisgarh MSc Nursing 2022 (Recall) [886](#)
6. AIIMS MSc Nursing 2022 [890](#)
7. West Bengal University of Health Sciences MSc Nursing 2022 [894](#)
8. West Bengal University of Health Sciences MSc Nursing 2021 [898](#)
9. Rajasthan University of Health Sciences MSc Nursing 2021 [902](#)
10. North Eastern Indira Gandhi Regional Institute of Health and Medical Sciences MSc Nursing 2021 [906](#)
11. Hemwati Nandan Bahuguna Uttarakhand Medical Education University MSc Nursing 2021 [910](#)
12. Rajasthan University of Health Sciences MSc Nursing 2019 [916](#)
13. Rajasthan University of Health Sciences MSc Nursing 2018 [920](#)

Papers in Nursing Next Live (Under Target High Package)

14. RAK MSc Nursing 2018 ([In App](#))
15. Rajasthan University of Health Sciences MSc Nursing 2017 ([In App](#))
16. RAK MSc Nursing 2017 ([In App](#))
17. Rajasthan University of Health Sciences MSc Nursing 2016 ([In App](#))
18. Rajasthan University of Health Sciences MSc Nursing 2015 ([In App](#))
19. Rajasthan University of Health Sciences MSc Nursing 2014 ([In App](#))