

Faculty of Health Sciences (FOHS)
Syllabus for PhD Entrance Test (PET)

NURSING EDUCATION AND MANAGEMENT

Unit I: BIOPSYCHOSOCIAL PATHOLOGY AND APPROACH IN NURSING CARE ASPECT

- Pathophysiology and Psychodynamics of disease causation
- Life processes, homeostatic mechanism, biological and psycho-social dynamics in causation of disease.
- Common problems: Oxygen insufficiency, fluid and electrolyte imbalance, nutritional problems, haemorrhage and shock, altered body temperature, unconsciousness, sleep pattern and its disturbances, pain, sensory deprivation
- Treatment aspects: pharmacological and pre- post-operative care aspects
- Cardio Pulmonary Resuscitation
- End of life Care
- Crisis management
- Infection prevention (including HIV) and standard safety measures, bio-medical waste management
- Evidence based nursing practice; Best practices, Innovations in nursing
- Health Assessment- illness status of patients/clients(individuals, family, community), Identification of health illness problems, health behaviours, signs and symptoms of diseases in clients.
- Methods of collection, analysis and utilization of data relevant to nursing process
- Formulation of nursing care plans, health goals, Implementation, modification and evaluation of care

Unit II: NURSING PROCESS APPROACH IN ADMINISTRATION

- Concept of management, types and principles
- Vision and mission statements
- Philosophy, aims and objectives
- Functions of administration
- Planning and control
- Co- ordination and delegation
- Decision making – decentralization, basic goals of decentralization
- Current trends and issues in Nursing administration

- Theories and models of management and leadership
- Application to nursing service and education in manpower planning

Unit III: PLANNING PROCESS , APPROACH IN NURSING CARE ASPECTS AND NURSING SERVICE ADMINISTRATION IN INDIA

- Planning process: concept, principles
- Mission, philosophy, objectives
- Strategic planning
- Operational plans
- Management plans
- Programme Evaluation and Review Technique (PERT), Gantt chart, Management By Objectives (MBO)
- Process of change and change theory, application to nursing service and education
- Alternative modalities of care, alternative systems of health and complimentary therapies.
- Extended and expanded role of the nurse, in promotive, preventive, curative and restorative.
- SDG and MDG impacts on nursing practice and research
- Independent practice issues- Independent nurse-midwifery practitioner
- Collaboration issues and models-within and outside nursing.
- Models of Prevention
- Family nursing, Home nursing
- Gender sensitivity and women empowerment
- Disaster nursing
- Geriatric considerations in nursing
- Evidence based nursing practice- Best practices
- Trans-cultural nursing
- Futuristic nursing
- Indian Administrative system Vis a Vis health care delivery system: National, State and Local, Indian Constitution with levels of prevention
- Planning Processes: Five year plans, health committees on nursing care management
- National Health Policies- trends and its impacts

Unit IV: NURSING INFORMATICS AND REGULATORY MECHANISMS

- Nursing informatics- Trends in hospital and community
- Management Information and Evaluation System (MIES)
- E-nursing, Telemedicine, Telenursing

- Electronic Medical Records- Nursing records and reports
- Code of ethics and professional conduct
- Legal system : Types of law, tort law and liabilities
- Medico legal concepts and nursing practice
- Nursing regulatory mechanisms : licensure, renewal, accreditation
- Infection control
- Standard safety measures

Unit V: TEACHING – LEARNING PROCESS

- Concepts and definitions of teaching and learning, theories of teaching and learning, relationship between teaching and learning
- Educational aims and objectives; types, domains, levels, elements and writing of educational objectives Competency Based Education(CBE) and Outcome Based Education(OBE)
- Instructional design: Planning and designing the lesson, writing lesson plan: meaning, its need and importance, formats
- Instruction strategies – Lecture, discussion, demonstration, simulation, laboratory, seminar, panel, symposium, problem solving, Problem Based Learning (PBL), workshop, project, role- play (sociodrama), clinical teaching methods, Programmed Instruction, Self -Directed Learning(SDL), micro teaching, Computer Assisted Instruction(CAI), Computer Assisted Learning (CAL)

Unit VI: MEASUREMENT AND EVALUATION

- Instructional aids – types, uses, selection, preparation, utilization
 - Teacher’s role in procuring and managing instructional aids – Project and non-projected aids, multimedia, video-tele conferencing
 - Concept and nature of measurement and evaluation, meaning, process, purposes, problems in evaluation and measurement
 - Principles of assessment, formative and summative assessment- internal assessment external examination, advantages and disadvantages
 - Criterion and norm referenced evaluation
 - Meaning, characteristics, objectivity, validity, reliability, usability, norms, construction of tests
- a) Subjective and Objective evaluation - Essay, short answer questions and multiple choice questions
 - b) Rating scales, checklist, OSCE/OSPE(Objective Structured Clinical/Practical examination)
 - c) Differential scales, and summated scales, socio-metri, anecdotal record, attitude scale, critical incident technique
 - d) Question bank-preparation, validation, moderation by panel, utilization
- Developing a system for maintaining confidentiality
 - Tests of intelligence, aptitude, interest, personality,achievement, socio-economic status scale, tests for special mental, physical abilities and differently abled

Unit VII: ADMINISTRATION OF NURSING CURRICULUM

- Role of curriculum coordinator – planning, implementation and evaluation
- Evaluation of educational programs in nursing course and program
- Factors influencing faculty/ staff relationship and techniques of team work.
- Concept of faculty supervisor (dual) position-integration of theory and practical
- Curriculum research-impacts curriculum revision and development in nursing
- Different models of collaboration between education and service
- IEC
- Quality assurance in nursing

Unit VIII: NURSING RESEARCH PROCESS

- Classification of Nursing theories and development
- Research process
- Review of literature- Importance, purposes, sources, criteria for selection of resources and steps in reviewing literature
- Research Approaches and designs- Type: Quantitative and Qualitative
- Historical, survey and experimental –Characteristics, types, advantages and disadvantages
- Qualitative: Phenomenology, grounded theory, Ethnography
- Research problem: Identification of research problem, Formulation of problem statement and research objectives, variables, Hypothesis
- Sampling- Population and sample, Sampling techniques, Sample size, Probability and sampling error, Problems of sampling
- Tools and methods of Data collection; quantitative and qualitative
- Validity and reliability of tools
- Pilot Study
- Data analysis: quantitative and qualitative
- Reporting and utilizing research findings

Unit IX: LAWS AND ETHICS IN NURSING RESEARCH

- The law, morals and ethical Principles
- Negligence and malpractice
- Hospital policies and procedure
- Clinical protocols and practice standards
- Legal issues in nursing : negligence, malpractice, invasion of privacy, defamation
- Patients' rights and rights of special groups : children, women, HIV infected patients, differently abled and migrant population
- Code of ethics for Nurses in India
- International Code of Nursing ethics
- Ethical dilemma and decision making

Unit X: VITAL HEALTH STATISTICS AND USE OF HEALTH RELATED NURSING RESEARCH

- Application of statistics in health
- Health indicators
- Use of vital health statistics in epidemiological nursing research
- Ratios, Rates, Trends
- Census, family size, life expectancy, density of population
- Vital health statistics
- Concepts of causation of diseases and their screening
- Application of epidemiology in health care delivery, Health surveillance and health informatics
- Measures related to fertility, morbidity and mortality

Sample Questions

1. The correct sequence of steps of micro teaching is:
 - a. teach-feedback-replan-reteach-refeedback
 - b. teach-plan-replan-reteach-refeedback**
 - c. teach-feedback-plan-reteach-replan –refeedback
 - d. feedback-plan-teach-replan -retach-refeedback
2. Curriculum development process involves:
 - a. Design plan evaluate implement
 - b. Plan design implement evaluate
 - c. Design evaluate plan implement
 - d. Plan implement design evaluate
3. Evaluation of student's performance is based on law:
 - a. law of effect
 - b. law of motivation
 - c. Leadership law
 - d. Both a) and b)