

Fifth Semester B.Sc. Nursing (2022) Examination,
(Phase - III) Winter - 2024

EDUCATIONAL TECHNOLOGY / NURSING EDUCATION

Total Duration : Section A + B = 3 Hours

Section B Marks : 63

SECTION - B

- Instructions :**
- 1) Use black ball point pen only.
 - 2) Do not write anything on the blank portion of the question paper. If written anything, such type of act will be considered as an attempt to resort to unfair means.
 - 3) All questions are compulsory.
 - 4) The number to the right indicates full marks.
 - 5) Draw diagrams wherever necessary.
 - 6) Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the stipulated frame. The Question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As it is only for the placement sake, the distribution has been done.
 - 7) Use a common answerbook for all Sections.

2. Essay / Situation Type (Solve any 2 out of 3) : [2×15=30]

- a) Define classroom management. Write the principles of classroom management. Elaborate one classroom management strategy in detail.
- b) Define curriculum. What are the types of curriculum? Write down the factors influencing curriculum development.
- c) Define learning. Enlist the characteristics of learning. Describe the steps in learning process.

3. Short Notes (Solve any 5 out of 6) : [5×5=25]

- a) Essay type Questions
- b) Observation checklist
- c) OSCE
- d) Adult learning
- e) Electronic mediated learning
- f) Teacher-student relationship

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4. Very Short Notes (Solve any 4 out of 5) :

- a) Common Ethical Standards for students.
- b) List four principles of lesson planning.
- c) List four qualities of a good counselor.
- d) Enumerate four aims of education.
- e) Characteristics of effective clinical teacher.





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Fifth Semester B.Sc. Nursing (2022)

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**EDUCATIONAL TECHNOLOGY/NURSING
EDUCATION**

(ANSWER KEY)

Section B

Q.No. 2. ESSAY / SITUATION TYPE.

a) Define classroom management. Write the principles of classroom management. Elaborate one classroom management strategy in detail.

Ans:

-It refers to the strategies, techniques, and approaches that teachers used to create Positive and Productive learning environment within the classroom.

-It involves establishing & Maintaining a Conductive Atmosphere Where teaching to learning can takes Place effectively.

-Effective teaching and learning Cannot take place in a poorly Managed Classroom.

●Definition:

The action taken by the teachers to create & Maintain a learning environment Conductive for Successful instruction.

- Evertson and weinstein

OR

-It defined as a teacher's Method for Maintaining order in the Classroom that is conducive to Student achievement.

●Principles of classroom management:

- 1.Be aware of all Actions & Activities in the classroom.
- 2.Reinforce Positive behaviour.
- 3.Clear expectations- (behaviour, Participation, Academic Performance.
- 4.positive relationships.
- 5.Consistency.
- 6.Physical & Emotional Classroom environment.
- 7.Engagement & Active learning.
- 8.Effective Communication (Instruction le feedback).
- 9.Continuous learning.
10. Physical arrangement of chairs that facilitates interactive teaching learning Process.

●Elaborate one classroom management strategy in detail:

It used to help maintain student focus and create student consistency around class expectations.

This classroom management strategy focuses on maintaining student focus and creating consistency around class expectations. It involves establishing clear rules, routines, and procedures that help students understand what is expected of them at all times.

☆Key Aspects of the Strategy:

1. Clear and Consistent Expectations:

Teachers should explicitly communicate classroom rules and behavioural expectations. Expectations should be reinforced regularly to ensure consistency.

2. Structured Routines:

Implementing predictable routines (e.g., how to enter the classroom, transition between activities, or submit assignments) helps minimize distractions and keeps students on task.

Consistency in daily procedures reduces uncertainty and fosters a sense of security among students.

3. Engagement Strategies:

Using active learning techniques, such as group work, discussions, and interactive activities, keeps students engaged and reduces off-task behaviour.

Frequent check-ins and formative assessments help maintain focus.

4. Positive Reinforcement and Consequences:

Reinforcing positive behaviours through praise, rewards, or privileges encourages students to adhere to expectations.

Consistent consequences for rule-breaking help reinforce the importance of classroom norms.

5. Visual and Verbal Reminders:

Displaying class rules, schedules, or behaviour charts in the classroom serves as a visual cue for students.

Teachers can use verbal prompts and reminders to refocus students when needed.

By implementing this strategy, educators create a stable learning environment where students know what is expected of them, making it easier for them to focus and succeed academically.

b) Define curriculum. What are the types of curriculum? Write down the factors influencing curriculum development.

Ans: A curriculum can be called a Plan for learning.

Term curriculum is derived from latin word currere" which means running course'.

It is a tool in the hands of the artist (teacher) to Mould his Material (Pupils) a/e to his aim & objectives in his studies (School).

●Definition:

A curriculum is a systematic arrangement of the sum total of selected experiences Planned by a school for a defined group of students to attain the aims of a Particular educational Programs".

-Florence Nightingale

OR

The curriculum is defined as all the experiences Children have under the guidance of teachers.

-Caswell & Campbell.

• Types of Curriculum:

1.Overt, Explicit, written Curriculums:

These are the formal documents that explains the instructional organization.

In nursing, curriculum appearance in national and State documents like, national and State standards, curriculum guides, course of study.

2.Societal curriculum:

Informal curriculum of family, peer groups, neighbourhood, Churches, Organizations, occupations.

It includes powerful effects of social media.

3.Hidden curriculum:

It refers to the unspoken unwritten, unofficial that Students learn in school/college.

Ex-Children learn appropriate Ways to act at school.

4.Null curriculum:

It is developed not for teaching but for giving Message to Students.

Ex – environmental education, gender/sex Education, life &education, Career Planning &education.

5.Phantom Curriculum:

It is used for schools to give Students valuable knowledge in teaching Media.

It includes different types of Media often Provides clan discussion, relevant examples.

6.Concomittent curriculum:

It is based on home class-room Methods.

Ex-temple, Mosque, Church in the context of religious expressions, lessons on values, ethics or morals.

7.Electronic curriculum:

It by using the internet for information or through using e- forms of Communication.

Ex: (Wikipedia, YouTube).

8.Assessed curriculum:

A concerns about testing & evaluating teachers who use Paper le Pencil tests, practical exams.

9.Subject-Oriented Curriculum:

In this, Student given to a specific subject and student have to implementing in their theoretical exams.

10.Experience based curriculum:

Student nurse Posted in clinical for practicing their skills in the clinical environment.

●Factors influencing curriculum development:

1) Educational Philosophy and Goals:

The underlying philosophy of education (e.g., progressivism, essentialism, constructivism) affects the approach to curriculum development.

National educational goals and objectives dictate curriculum priorities, such as preparing students for the workforce or fostering critical thinking.

2) Learner Characteristics:

Students' age, cognitive abilities, learning styles, interests, and socio-economic backgrounds influence curriculum content and teaching methods.

Special education needs and inclusive education also shape curriculum modifications.

3) Teachers and Educators:

The expertise, experience, and teaching styles of educators play a crucial role in curriculum development.

Teachers' ability to integrate new teaching strategies, use technology, and manage classroom diversity affects curriculum effectiveness.

4) Subject Matter and Knowledge Base:

The curriculum must align with advancements in subject knowledge and disciplines.

Interdisciplinary approaches and new research findings often necessitate curriculum updates.

5) School Resources and Infrastructure:

Availability of textbooks, laboratories, technology, and financial resources determines what can be realistically included in the curriculum.

Schools in well-funded areas can adopt more innovative curricula, while resource-limited schools may need simplified versions.

6) Assessment and Evaluation Systems:

Standardized testing and assessment criteria influence what is taught and how it is delivered.

Formative and summative assessments help refine curriculum effectiveness.

7) Societal Needs and Culture:

The curriculum must reflect societal values, traditions, and expectations.

Cultural diversity and multilingual education influence curriculum content and teaching approaches.

8) Economical Factors:

A country's economic status affects investment in education and curriculum priorities.

Workforce demands shape vocational and technical education curricula to prepare students for employment.

9) Technological Advancements:

Digital tools, artificial intelligence, and e-learning platforms reshape curriculum development.

The integration of ICT in education requires curriculum updates to include digital literacy and STEM subjects.

10) Political and Government Policies:

Government regulations, education acts, and political ideologies influence curriculum policies and reforms.

National and international education frameworks, such as UNESCO guidelines, affect curriculum decisions.

11) Globalization and International Influences:

Global educational trends, international benchmarks (e.g., PISA rankings), and migration impact curriculum design.

12) Parental and Community Involvement:

Parents' expectations, involvement in school boards, and community partnerships shape curriculum decisions.

Public opinion on moral, ethical, and social issues influences curriculum changes.

C) Define learning. Enlist the characteristics of learning. Describe the steps in learning process.

Ans: Learning is a key process and is necessary for all educational process.

●Definition:

learning is acquisition of knowledge, habits and attitudes, it involves new Way of doing things in order to overcome obstacles or to adjust to new situations. It enables the Person to satisfy interests to attain goals.

- crow and Crow

OR

It is a Process of acquiring - knowledge, skills le values through experience, study/instruction. It involves a range of Cognitive, affective & Behavioural Changes that an individual's increased knowledge, understanding or Competence is Particular area.

●Characteristics of learning:

1. Lifelong Learning –

Nursing requires continuous education to keep up with evolving medical knowledge, technology, and best practices.

2. Experiential Learning

– Hands-on experiences, such as clinical rotations and simulations, help students apply theoretical knowledge to real-world patient care.

3. Evidence-Based Practice –

Learning in nursing is grounded in scientific research and best practices to ensure safe and effective patient care.

4. Critical Thinking and Problem-Solving –

Nurses must develop strong decision-making skills to assess patient needs, prioritize care, and respond to emergencies.

5. Patient-Centred Approach –

Learning emphasizes empathy, communication, and cultural competence to provide holistic, individualized care.

6. Interdisciplinary Collaboration –

Nurses learn to work with doctors, therapists, pharmacists, and other healthcare professionals to provide comprehensive care.

7. Ethical and Professional Development –

Nursing education, ethical principles, accountability, and professional behaviour.

8. Technology Integration –

Learning includes using electronic health records, telehealth, and other digital tools to enhance patient care.

9. Assessment and Reflection –

Nurses regularly evaluate their learning through exams, feedback, and self-reflection to improve their practice.

10. Competency-Based Education –

Nursing programs focus on skill mastery rather than just knowledge acquisition, ensuring students are prepared for real-world practice.

●**Describe the steps in learning process:**

1. Motivation & Readiness:

Learners must be motivated and prepared to engage in the learning process.

Factors like interest, prior knowledge, and self-efficacy influence readiness to learn.

2. Perception & Attention:

Learners focus on relevant information and filter out distractions.

Teaching methods such as interactive discussions and visual aids enhance engagement.

3. Acquisition of Knowledge:

Information is introduced through lectures, readings, simulations, or hands-on experiences.

Active learning strategies, such as case studies and problem-solving exercises, promote deeper understanding.

4. Understanding & Comprehension:

Learners process new knowledge, relate it to prior experiences, and clarify misconceptions.

Concept mapping and group discussions help reinforce understanding.

5. Application & Practice:

Knowledge is applied in real-life settings, such as clinical simulations or patient care.

Repetitive practice builds competence and confidence in nursing skills.

6. Feedback & Assessment:

Learners receive feedback from instructors, peers, or self-evaluation.

Assessments (e.g., exams, skill check-offs, clinical evaluations) measure progress and identify areas for improvement.

7. Retention & Memory Consolidation:

Information is stored in long-term memory through repetition, reflection, and practice.

Reviewing material and applying it in different contexts enhances retention.

8. Transfer of Learning:

Learners generalize knowledge and apply it to new situations, ensuring adaptability in nursing practice.

Critical thinking and problem-solving help in transferring learning to real-world patient care.

9. Reflection & Continuous Improvement:

Nurses engage in self-reflection to assess their learning and professional growth.

Lifelong learning and professional development are emphasized to keep up with healthcare advancements.

Q.No.3. Short notes.

a) Essay type questions

Ans: These are commonly used Methods for assessing student learning.

These are a type of Constructed response.

It Provides written responses in the form of an essay.

•Definition:

-An essay is defined as it is a composition, usually in prose which may be a few hundred words or of book length & which discusses, formally or informally, a topic or a variety of topics.

J.A. cuddon

•Types of essay questions:

There are two types of essay questions These are;

1. Open ended essay
2. Closed ended essay

1. Open Ended Essays:

The Student's response is unrestricted here, discuss the various theories of human development that have been talked about this semester.

Students are free to take as much time as you need.

Write many Pages as like and organize Answers.

2. Closed ended questions:

Students response is restricted here, eg- Compare and Contrast two of the basic theories of human development that have been discussed this semester.

limit responses to five written Pages.

•Advantages:

1. Encourages Critical Thinking –

Students must analyse, evaluate, and synthesize information rather than just recalling facts.

2. Assesses Depth of Knowledge –

Allows instructors to gauge students' understanding of concepts in-depth rather than through surface-level memorization.

3.Promotes Clinical Reasoning –

Nursing students can apply theoretical knowledge to practical scenarios, improving decision-making skills.

4.Develops Communication Skills –

Writing essays helps students articulate their thoughts clearly, which is crucial for patient documentation and professional communication.

5. Encourages Integration of Knowledge –

Students link various concepts across subjects (e.g., anatomy, physiology, and ethics) to provide well-rounded responses.

6. Allows Individual Expression –

Unlike multiple-choice questions, essays enable students to present their perspectives and justify their reasoning.

7. Reduces Guesswork –

Unlike objective tests, where students might guess answers, essays require a demonstration of understanding.

8. Assesses Problem-Solving Skills –

Open-ended questions require students to think critically about patient care scenarios and propose solutions.

●Disadvantages:

1. Time-Consuming to Answer –

Writing essays takes longer than answering multiple-choice or short-answer questions, limiting the number of topics that can be covered in an exam.

2.Difficult to Grade Objectively –

Essays are subjective, and different evaluators may interpret responses differently, leading to potential grading inconsistencies.

3. Limited Content Coverage –

Since essays require detailed responses, exams can only assess a few topics, potentially leaving out other important areas of nursing knowledge.

4. Requires Strong Writing Skills –

Some students may struggle with written expression, even if they understand the nursing concepts, leading to lower scores not reflective of their actual knowledge.

5. Grading is Time-Intensive –

Instructors must spend considerable time reading and evaluating responses, which can delay feedback to students.

6. Prone to Student Misinterpretation –

Students may misunderstand the question and provide irrelevant information, which can negatively impact their grades.

b) Observation checklist

Ans: It is the most commonly used in instruments for Performance evaluations.

It is the assessment and evaluation of Psycho Motor domain

It involves directly observing. the learner's actions, techniques. & overall Performances.

●**Definition:**

A checklist is defined as it is a simple instrument consisting prepared list of expected items of Performance and attributes, which are Checked by evaluator known as checklist.

●**Characteristics:**

- observe one respondent at one Time.
- The observer should be trained on how to observe, what to observe.
- Define the items clearly.
- Arrange the items in sequence.
- try out on a few people.
- Revised based on own experiences.
- Make the number of quantity needed.

●Steps:

Step 1: Define Learning Objectives:

- »Identify the skills and competencies students must demonstrate.
- »Align checklist items with nursing curriculum and clinical learning outcomes.

Step 2: Develop the Checklist Criteria:

- »List specific, observable actions (e.g., "Performs hand hygiene before patient contact").
- »Organize criteria into key nursing competency areas such as:
 1. Patient care skills
 2. Communication and professionalism
 3. Clinical judgment and decision-making
 4. Documentation and reporting
 5. Emergency response

Step 3: Choose an Evaluation Method:

- »Use a rating scale (e.g., "Competent," "Needs Improvement," "Not Performed").
- »Consider numerical scoring (e.g., 1 = Poor, 5 = Excellent).
- »Allow space for comments and feedback.

Step 4: Train Faculty and Evaluators:

- »Ensure instructors understand the checklist criteria and scoring system.
- »Standardize assessment methods to maintain fairness and objectivity.

Step 5: Conduct Observations in Clinical or Simulation Settings:

- »Observe students as they perform tasks in real or simulated patient care scenarios.
- »Use the checklist to document strengths and areas needing improvement.

Step 6: Provide Feedback and Recommendations:

- »Discuss performance with the student immediately after observation.
- »Highlight strengths and suggest areas for improvement.
- »Offer guidance on how to enhance skills.

●Advantages:

- Objective assessment
- Comprehensive evaluation.

- Specific feedback
- Consistency
- Structured observation
- Documentation

● **Disadvantages:**

- limited Contextual information
- Difficulty assessing Complex Skills
- observer bias
- Time to resource intensive

c) **OSCE**

Ans:

Objective Structured Clinical Examination (OSCE) is a Widely used clinical assessment and evaluation tool in nursing Education.

It is designed to Student's clinical skills, knowledge and competence in a Standardized & objective Manner.

OSCE Consists of Multiple Stations or scenarios Where Students Perform specific tasks or Interact with simulated Patients.

● **History:**

The OSCE was 1st developed at the University of Dundee, Scotland in the early 1970 by Dr. Ronald Harden & his Colleagues.

● **Goals and purposes:**

- To assessment of clinical Skills
- Evaluation of communication Skills.
- Assessment of decision-making re critical thinking.
- Allows feedback for improvement.
- Simulation of real-world Practice.
- Evaluates multiple domains of Competence.

● **OSCE Station:**

-It is the region where the skills are demonstrated by the Candidate.

- The observer Checks & Put tick Mark against the skill shown is Checklist.

● **Types of stations:**

1. Procedure station:

Student is expected to Perform a decided task in front of an observer who observe the student
While doing the task be gives Marks as per Provided Checklist.

2. Response station:

- Student is expected to respond to certain questions, either based on Previous Procedure station or chosen separately to evaluate areas of knowledge.

3. Question Station:

- To test the knowledge Port of the skills tested in Prior station.
-Combine response stations and question stations called couplet Station.

4. Rest Station:

-Then Stations are meant to give a break to the Students.

●**Guidelines for arranging a perfect OSCE:**

- clearly define objectives.
- Plan Station rotation.
- Develop authentic scenarios.
- Standardize Station Material.
- Train standardized Patients
- Develop Clear assessment criteria.
- Train assessors.
- Provide orientation to Students.
- Provide feedback.
- Evaluate the OSCE process.

●**Advantages:**

- Provides an opportunity to test a student's ability to integrate knowledge, Clinical skills.
- Assess wide range of skills.
- allowing students to apply theoretical knowledge in Practical.

●**Disadvantages:**

- Time consuming & costly.
- There is a risk of observer fatigue.
- It requires extensive Planning & Preparation.
- It is difficult without a team effort.

d) Adult learning:

Ans:

Adult learning in nursing education focuses on the principles and methods that help adult learners—primarily nurses—acquire knowledge and skills effectively.

Since nursing is a dynamic profession that requires continuous education, understanding how adults learn is crucial for developing effective training programs, continuing education courses, and academic curricula.

•Types of adult learning:

1. Self-directed learning –

Adults prefer autonomy and control over their education. In nursing, this means they take responsibility for advancing their skills.

2. Problem-based learning –

They prefer learning that helps solve real-world challenges.

3. Transformational Learning:

Encourages critical reflection, allowing nurses to shift their perspectives and develop new insights. Helps in adapting to new healthcare challenges and ethical dilemmas.

4. Experiential Learning:

Learning is a cycle involving concrete experience, reflective observation, abstract conceptualization, and active experimentation.

Used in clinical simulations and hands-on training.

5. Problem-Based Learning (PBL) –

Uses real-world clinical cases to promote critical thinking.

Case Studies – Helps nurses analyse and apply theoretical knowledge to patient care.

6. Collaborative Learning:

Mentorship Programs – Pairing experienced nurses with new learners.

Group Discussions – Encourages peer learning and knowledge sharing.

Interdisciplinary Education – Learning alongside other healthcare professionals fosters teamwork.

7. Reflective Learning:

Journaling and Reflection Papers – Encourage self-analysis of clinical experiences.

● **Challenges in Adult Learning for Nurses:**

- Despite the benefits, adult nursing education faces some challenges:
- Time Constraints – Nurses often juggle work, family, and education.
- Financial Barriers – Tuition fees and learning materials can be expensive.
- Technological Adaptation – Some learners may struggle with new digital learning platforms.
- Fear of Returning to School – Nurses who have been away from academic settings may feel anxious.

● **Overcoming Barriers to Adult Learning in Nursing:**

- To enhance learning effectiveness.
- Flexible Learning Models – Blended learning (online + in-person) accommodates busy schedules.
- Workplace Support – Employers offering tuition assistance and study leave.
- Personalized Learning Plans – Tailoring education to individual career goals.
- Encouraging a Growth Mind-set – Promoting lifelong learning as a professional value.

e) Electronic Mediated learning:

Ans: Electronic mediated learning (EML) refers to the use of digital technologies, online platforms, and virtual tools to enhance learning experiences.

With advancements in technology, nursing education has increasingly adopted electronic learning methods to provide flexible, engaging, and interactive learning opportunities for students and professionals.

■ **Key Components of Electronic Mediated Learning in Nursing:**

A. Online Learning Platforms:

- Learning Management Systems (LMS): Platforms like Moodle, Blackboard, and Canvas allow nurses to access course materials, submit assignments, and engage in discussions.
- Massive Open Online Courses (MOOCs): Platforms like Coursera and edX offer nursing courses from universities worldwide.

B. Virtual Simulations and Augmented Reality (AR) in Nursing:

- High-fidelity simulations: Use of virtual reality (VR) and AR for hands-on practice in a risk-free environment.
- 3D Anatomy and Physiology Models: Interactive models help nurses visualize complex biological structures.
- Virtual Patients: AI-driven simulated patients help nurses practice clinical decision-making.

C. Mobile Learning (mLearning):

- Nursing Apps: Apps like Medscape, Epocrates, and Up-to-date provide quick access to medical knowledge.
- E-books and Podcasts: Allow nurses to learn on the go.
- Micro learning Modules: Short, focused lessons delivered via smartphones improve knowledge retention.

D. Teleconferencing and Webinars:

- Zoom, Microsoft Teams, and Google Meet: Facilitate virtual lectures and group discussions.
- Live Webinars and Recorded Lectures: Enable continuous professional development and global knowledge exchange.

E. Artificial Intelligence (AI) and Adaptive Learning:

- Personalized Learning Paths: AI analyses learning patterns to tailor content to individual needs.
- Chatbot's for Tutoring: AI-driven assistants help answer student queries in real time.

■ **Benefits of Electronic Mediated Learning:**

- Flexibility: Allows nurses to learn at their own pace, anytime and anywhere.
- Increased Engagement: Interactive multimedia content enhances motivation and knowledge retention.
- Cost-Effectiveness: Reduces the need for physical resources, travel, and printed materials.
- Improved Access to Expertise: Enables global collaboration and access to renowned nursing educators.
- Safe Clinical Training: Simulations allow nurses to practice skills without endangering real patients.

■ **Challenges of Electronic Mediated Learning in Nursing:**

- **Technology Access and Digital Literacy:** Not all students have access to reliable internet and digital devices.
 - **Lack of Hands-on Experience:** Some nursing skills require direct patient interaction.
 - **Self-Discipline and Motivation:** Online learning requires strong time management skills.
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- **Privacy and Security Concerns:** Patient data in virtual clinical simulations must be protected.

■ **Strategies for Effective Implementation:**

- **Blended Learning Approach:** Combining online learning with in-person clinical practice.
- **Faculty Training:** Educators need training on digital tools and online teaching methods.
- **Technical Support:** Ensuring 24/7 IT support for students and faculty.
- **Engagement Strategies:** Interactive content, gamification, and virtual mentorship programs.

d) Teacher-student relationship:

Ans: The teacher-student relationship in nursing education plays a crucial role in shaping competent, compassionate, and skilled nurses.

This relationship extends beyond traditional classroom instruction, influencing students' professional development, critical thinking, ethical behaviour, and clinical competence.

■ **Importance of the Teacher-Student Relationship:**

- Enhances Learning Outcomes:

A supportive teacher-student relationship fosters an engaging and motivating learning environment.

- Develops Professionalism:

Teachers serve as role models for ethical behaviour, empathy, and professionalism in nursing.

- Promotes Critical Thinking:

Encouraging students to ask questions and engage in discussions helps build analytical and problem-solving skills.

- Encourages Lifelong Learning:

A positive relationship fosters curiosity and a commitment to continuous professional development.

- Improves Confidence and Competence:

Supportive guidance from teachers helps students gain confidence in their skills and knowledge.

- Reduces Anxiety and Stress:

Nursing students often experience high stress due to academic pressure and clinical practice, a good teacher-student relationship provides emotional and psychological support.

■ **Characteristics of an Effective Teacher-Student Relationship:**

a. Mutual Respect and Trust:

Teachers should respect students' perspectives and encourage open communication.

Trust is built when teachers provide consistent support, constructive feedback, and fair evaluation.

b. Effective Communication:

Clear and open communication helps students understand complex nursing concepts.

Active listening ensures students' concerns are addressed appropriately.

c. Empathy and Emotional Support:

Teachers should be aware of the emotional challenges students face, especially during clinical training.

Providing encouragement and understanding enhances students' well-being and motivation.

d. Role Modelling Professionalism:

Teachers should demonstrate ethical behaviour, patient-centered care, and teamwork to achieve professionalism in students.

e. Constructive Feedback and Encouragement:

Providing timely and constructive feedback helps students improve their skills.

Fosters self-confidence and motivation.

■ **Approaches to Enhancing the Teacher-Student Relationship:**

a. Student-Centered Teaching:

Using interactive teaching strategies, such as case studies, simulations, and problem-based learning.

Encouraging student participation in discussions and decision-making.

b. Mentorship and Guidance:

Teachers should act as mentors, guiding students academically and professionally.
Providing career advice and emotional support strengthens the relationship.

c. Support in Clinical Training:

Teachers should ensure students receive hands-on experience while maintaining a safe learning environment.

Encouraging reflective practice helps students learn from their experiences.

d. Individualized Attention:

Recognizing and addressing the diverse learning needs of students.

Providing additional support to struggling students.

e. Encouraging Self-Directed Learning:

Encouraging students to take responsibility for their learning.

Providing resources and guidance for independent study.

■ Challenges in the Teacher-Student Relationship:

a. Large Class Sizes:

Difficulty in providing individualized attention.

Solutions: Small group discussions, mentorship programs.

b. Time Constraints:

Teachers balancing teaching, research, and clinical responsibilities.

Solutions: Efficient scheduling, online resources.

c. Cultural and Generational Differences:

Differences in communication styles and learning preferences.

Solutions: Cultural sensitivity training, adapting teaching methods.

d. Student Anxiety and Fear of Clinical Practice:

Students may feel overwhelmed in real patient care settings.

Solutions: Gradual exposure, supportive supervision.

■ Impact of a Strong Teacher-Student Relationship:

- Higher Academic Success:

Engaged students perform better academically.

- Better Clinical Skills:

Supportive teachers help students become competent nurses.

- Stronger Professional Identity:

Students develop confidence and a sense of belonging in the nursing profession.

- Increased Retention Rates:

A positive learning experience reduces student dropout rates.

4. Very Short Notes

a) Common Ethical Standards for students.

Ans: Nursing students are expected to adhere to ethical principles that align with professional nursing standards.

- Respect for Human Dignity and Autonomy:

Treat all patients with dignity and respect, regardless of their background, beliefs, or conditions. Obtain informed consent before participating in patient care.

- Confidentiality and Privacy:

Maintain patient confidentiality in accordance with laws or similar regulations in other countries. Do not share patient information with unauthorized individuals, including on social media. Use patient information only for educational purposes within ethical and legal guidelines.

- Honesty and Integrity:

Be truthful in all academic and clinical work, including assignments, documentation, and exams. Report any errors or mistakes honestly and take responsibility for correcting them.

- Accountability and Responsibility:

Take responsibility for one's actions in both academic and clinical settings. Follow institutional policies and guidelines in educational and healthcare settings.

- Professionalism in Behaviour and Attitude:

Maintain a respectful and professional attitude toward patients, faculty, healthcare staff, and peers. Avoid disruptive behaviour, harassment, or discrimination in academic and clinical environments.

- Non-Maleficence:

Provide compassionate care to patients without causing harm. Avoid negligence and ensure safe clinical practices.

- Justice:

Treat all patients equally, regardless of race, gender, socioeconomic status, or other factors. Avoid discrimination in patient care.

b) List four principles of lesson planning.

Ans:

Effective lesson planning ensures that students acquire both theoretical knowledge and practical skills essential for patient care.

1. Learner-Centered Approach:

The lesson should be designed based on the students' learning needs, prior knowledge, and skill levels.

Active learning strategies (e.g., case studies, simulations) should be incorporated to engage students effectively.

2. Goal-Oriented and Outcome-Based:

Learning objectives should be clearly defined, measurable, and aligned with nursing competencies. The lesson should focus on preparing students for both theoretical understanding and practical application in clinical settings.

3. Integration of Theory and Practice:

Lessons should connect theoretical concepts with real-world nursing practice.

Clinical scenarios, problem-solving exercises, and hands-on demonstrations should be included to enhance skill development.

4. Evaluation and Feedback:

Formative and summative assessments should be incorporated to measure student progress.

Constructive feedback should be provided to help students improve their understanding and skills.

c) List four qualities of a good counsellor.

Ans: A good counsellor plays a vital role in supporting students' academic, emotional, and professional development.

1. Empathy and Active Listening:

A good counsellor understands students' emotions, challenges, and concerns.

Actively listens without judgment, providing a safe space for students to express themselves.

2. Strong communication Skills:

Clearly conveys guidance, support, and constructive feedback.

Uses appropriate verbal and non-verbal communication to foster trust.

3. Confidentiality and Ethical Integrity:

Maintains student privacy and follows ethical guidelines in counselling

Builds trust by handling sensitive information responsibly.

4. Problem-Solving and Guidance Skills:

Helps students navigate academic, personal, and professional challenges.

Provides practical solutions and encourages self-reflection for growth.

d) Enumerate four aims of education:

Ans: Education serves as a foundation for personal growth, societal development, and professional success.

1. Knowledge and Intellectual Development:

Enhances critical thinking, problem-solving, and decision-making skills.

Provides a strong foundation in various subjects to promote lifelong learning.

2. Character and Moral Development:

Instills ethical values, integrity, and social responsibility.

Encourages respect, empathy, and good citizenship.

3. Vocational and Professional Preparation:

Equips individuals with skills and competencies for career success.

Prepares students to contribute effectively to society and the workforce.

4. Social and Cultural Development:

Promotes understanding, cooperation, and harmony among diverse communities.

Encourages civic engagement and cultural appreciation.

e) Characteristics of effective clinical teacher.

Ans: An effective clinical teacher plays a crucial role in shaping competent and confident nursing students.

1. Clinical Expertise and Competence:

Has strong practical knowledge and skills in nursing.

Demonstrates evidence-based practice and critical thinking in patient care.

Serves as a role model for professional and ethical nursing behaviour.

2. Effective Communication Skills:

Clearly explains concepts, procedures, and expectations to students.

Uses active listening and provides constructive feedback.

Encourages open dialogue and questions to enhance learning.

3. Teaching and Mentoring Ability:

Adapts teaching methods to suit different learning styles.

Provides step-by-step guidance for skill development.

Uses real-life scenarios and case-based learning to enhance understanding.

4. Encourages Critical Thinking and Problem-Solving:

Challenges students to think independently and make informed decisions.

Guides students in applying theoretical knowledge to clinical practice.

Promotes reflective practice for continuous improvement.

5. Patience and Approachability:

Creates a supportive and non-intimidating learning environment.

Understands students' challenges and provides reassurance.

6. Professionalism and Ethical Role Modelling:

Demonstrates integrity, respect, and responsibility in patient care.

Instills professionalism, teamwork, and accountability in students.

7. Provide Constructive Feedback:

Identifies students' strengths and areas for improvement.

Provides timely, specific, and supportive feedback.

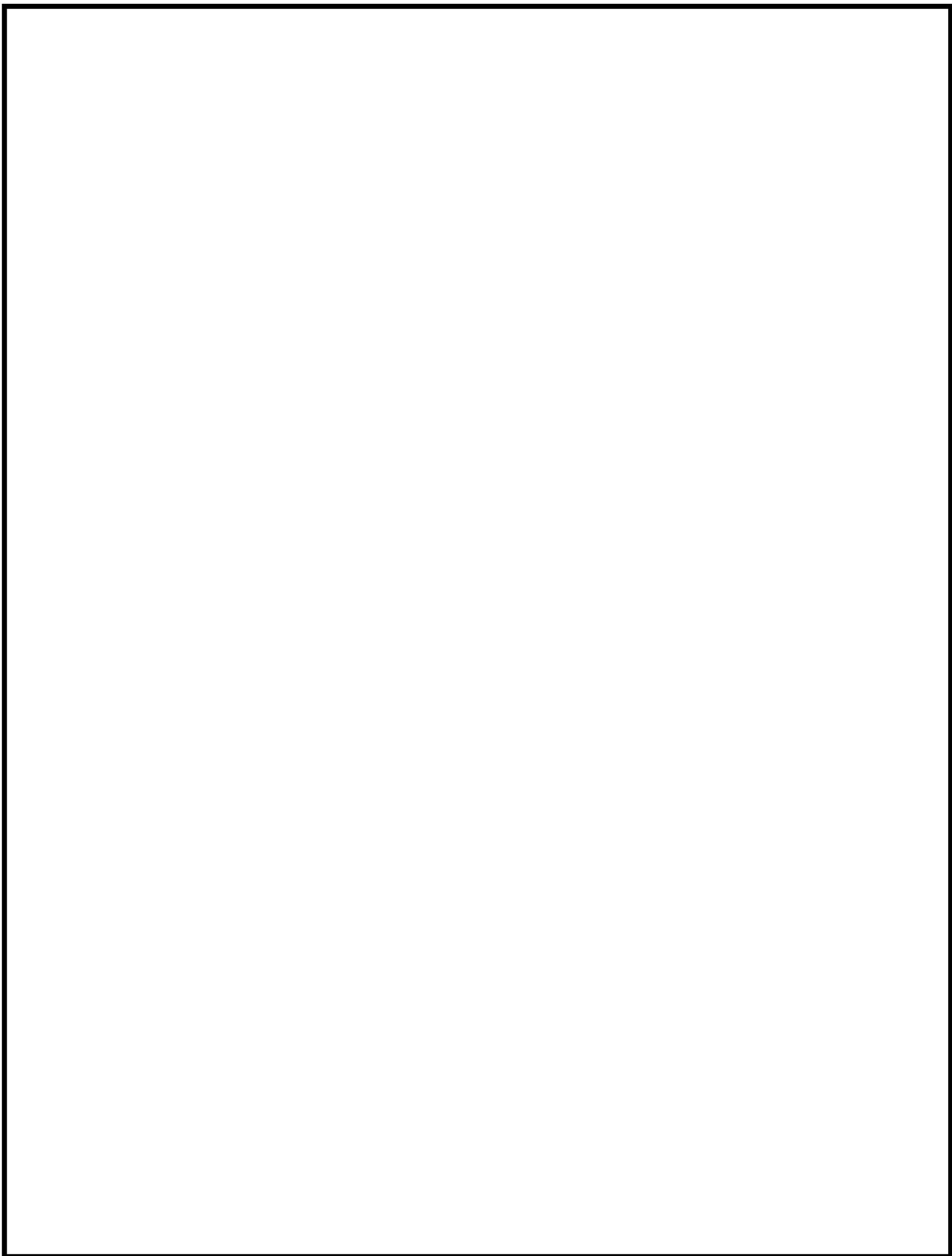
Encourages self-reflection and continuous learning.

8. Adaptability and Flexibility:

Adjusts teaching strategies based on students' needs and progress.

Responds effectively to unexpected clinical situations.

☆☆☆



SEMESTER I B.SC NURSING EXAMINATION, SUMMER 2025

APPLIED SOCIOLOGY & APPLIED PSYCHOLOGY

ANSWER KEY

SECTION – 'B'

(APPLIED SOCIOLOGY)

Q.2 LONG ANSWER QUESTIONS (ANY ONE OUT OF TWO)

Ans a) Substance abuse :

It refers to the harmful or hazardous use of psychoactive substances, including alcohol and illicit drugs. It involves a pattern of use that leads to significant problems or distress, such as health issues, failure to meet responsibilities, or legal and social problems.

Substance abuse can lead to **addiction**, a chronic disease characterized by compulsive drug seeking and use, despite harmful consequences

Commonly Abused Substances:

1. **Alcohol**
 - The most widely abused legal substance.
 - Leads to liver damage, impaired judgment, and dependency.
2. **Tobacco/Nicotine**
 - Found in cigarettes and other tobacco products.
 - Highly addictive and linked to cancer, heart disease, and respiratory illness.
3. **Cannabis (Marijuana)**
 - Often perceived as less harmful but can affect brain development and mental health.
4. **Prescription Medications**
 - **Opioids** (e.g., oxycodone, morphine): Used for pain but highly addictive.
 - **Benzodiazepines** (e.g., Xanax, Valium): Used for anxiety/sleep, but misuse can lead to dependence.
 - **Stimulants** (e.g., Adderall, Ritalin): Used for ADHD; abuse leads to heart issues and dependency.
5. **Cocaine**
 - A powerful stimulant; leads to increased heart rate, paranoia, and heart attack risk.
6. **Heroin**
 - An illegal opioid; highly addictive and associated with high overdose risk.
7. **Inhalants**
 - Substances like glue, paint thinner, and aerosols inhaled for a high; can cause brain and organ damage.

8. Hallucinogens

- Includes LSD, psilocybin (magic mushrooms), and PCP. These alter perception and can trigger mental health issues. Causes of Substance Abuse

Factors of substance abuse :

1. Biological Causes

Genetic predisposition: Family history of addiction increases risk.

Brain chemistry: Some individuals may naturally have lower dopamine levels, making substances more appealing.

Mental health disorders: Conditions like depression, anxiety, or PTSD often co-occur with substance abuse.

2. Psychological Causes

- **Stress and trauma:** Substances may be used to cope with stress, abuse, or trauma.
- **Low self-esteem or emotional pain:** Drugs or alcohol might be used to escape reality.
- **Personality traits:** Impulsivity and sensation-seeking behaviors increase risk.

3. Social and Environmental Causes

- **Peer pressure:** Especially common among adolescents and young adults.
- **Family environment:** Dysfunctional homes, lack of supervision, or parental substance abuse.
- **Availability:** Easy access to drugs or alcohol increases likelihood of use.
- **Cultural norms:** In some cultures, substance use is more accepted or even encouraged.

Ans b) Social change :

: It refers to the transformation of societal structures, behaviors, or values over time, often driven by factors like cultural shifts, technological advancements, economic changes, and social movements. It can occur gradually or rapidly, affecting areas such as law, social norms, and individual behaviors.

Factors Affecting Social Change:

1. **Cultural Factors** – Shifts in values and ideologies.
2. **Technological Advancements** – Innovations that reshape society (e.g., the internet).
3. **Economic Factors** – Economic conditions that influence social structures.
4. **Political Factors** – Changes in governance or laws.
5. **Demographics** – Population changes like migration or aging.
6. **Social Movements** – Collective efforts for societal change (e.g., civil rights).
7. **Environmental Changes** – Climate change or natural disasters.
8. **Exposure to Other Societies** – Interaction leading to new ideas and practices.

Role of Nurses as Change Agents:

- **Advocacy** – Representing patients and marginalized groups to influence policy.
- **Health Education** – Promoting wellness and disease prevention.
- **Public Health** – Leading community health initiatives.
- **Policy Influence** – Advocating for healthcare reforms.
- **Leadership** – Shaping healthcare environments for better patient care.
- **Empowering Communities** – Enhancing health literacy and access.

Q.3 SHORT ANSWER QUESTIONS (ANY THREE OUT OF FOUR)

Ans a) Characteristics of Primary and Secondary Groups :

Sociologist **Charles Horton Cooley** introduced the concepts of **primary** and **secondary groups** to distinguish between different types of social relationships.

1. Primary Group

A **primary group** is a small, close-knit, and emotionally bonded group where relationships are personal, deep, and long-lasting.

Characteristics:

1.Intimate and Personal Relationships

- Members share close, face-to-face interactions.
- Strong emotional ties and affection are common.

2. Small Size

- Usually consists of a few individuals (e.g., family or close friends).

3. Long Duration

- Relationships are often lifelong or long-term.

4. Emotional Depth

- Deep concern for each other's well-being and happiness.

5. Informal Structure

- No formal rules or roles; based on mutual understanding.

6. Influence on Personality

- Strongly shapes the values, behavior, and identity of individuals.

7. Examples:

- Family, childhood friends, romantic partners.

2. Secondary Group

Definition:

A **secondary group** is a larger, more impersonal group formed around a specific goal or activity, where relationships are formal and temporary.

Characteristics:

1. **Impersonal and Goal-Oriented Relationships**
 - Interaction is based on roles and responsibilities rather than emotions.
2. **Large Size**
 - Can include many members (e.g., classmates, co-workers).
3. **Short or Limited Duration**
 - Relationships exist as long as the group serves its function.
4. **Formal Structure**
 - Clearly defined roles, norms, and hierarchy.
5. **Limited Emotional Connection**
 - Emotional involvement is minimal or absent.
6. **Task-Oriented Interaction**
 - Focused on achieving a specific objective or purpose.
7. **Examples:**
 - Schools, companies, political parties, professional organizations.

Ans b) Difference between society and community:

Basis of Comparison	Society	Community
1. Definition	A society is a large group of people sharing a common culture, laws, and institutions.	A community is a smaller group of people connected by shared interests, values, or location.
2. Size	Large in scale, often covering regions or entire nations.	Small in scale, such as a village, neighborhood, or group with shared goals.
3. Structure	Formal and organized with systems like government, education, and economy.	Informal, often built on personal relationships and social bonds.
4. Relationship among members	Indirect and impersonal; people may not know each other personally.	Direct and personal; members usually know and interact with each other.
5. Nature of bond	Based on legal, political, and economic institutions.	Based on emotional ties, shared identity, and common goals.
6. Purpose	Maintains order, governance, and development on a large scale.	Encourages cooperation, belonging, and mutual support among members.
7. Geographical boundary	Can be spread over vast areas (e.g., national or global).	Usually confined to a specific area or shared interest group.
8. Diversity	Includes people from various	Members often share similar

	communities, cultures, and backgrounds.	culture, language, or lifestyle.
9. Duration	Long-lasting and continuous through generations.	May be temporary or permanent depending on shared interest or location.
10. Examples	Indian society, American society, global society.	School community, village community, online gaming community.

Ans c) Culture: It refers to the way of life of a group of people, including their customs, traditions, language, art, beliefs, and values. It plays a major role in shaping human identity and society. Culture shows both **diversity** and **uniformity**, which together reflect the richness and unity of human experience.

1. Diversity of Culture:

- **Meaning:**
Cultural diversity means the existence of many different cultures within a society or across the world.
- **Causes of Cultural Diversity:**
 - Geographical differences (climate, landforms, resources)
 - Historical background (wars, colonization, migration)
 - Religion, language, customs, and traditions
 - Economic activities and lifestyles
- **Examples:**
 - India has diverse cultures like Punjabi, Bengali, Tamil, Gujarati, etc., each with unique festivals, clothing, food, and language.
 - Globally, cultures like Japanese, African, Arab, and Latin American vary widely.
- **Importance:**
Cultural diversity promotes tolerance, creativity, and mutual respect. It helps societies learn from each other and enrich their traditions.

2. Uniformity of Culture:

- **Meaning:**
Cultural uniformity refers to the common elements that are shared across cultures or within a society.
- **Causes of Cultural Uniformity:**
 - Globalization and modern communication (e.g., the internet, media)
 - Education systems and shared values
 - National identity and symbols
 - Legal systems and economic policies
- **Examples:**
 - In India, despite cultural differences, people share a common national identity, constitution, and democratic values.
 - Globally, the use of technology (like smartphones) and clothing styles (like jeans) show cultural uniformity.

- **Importance:**
Cultural uniformity creates unity, national integration, and helps maintain order in society.

Ans d) Social problems: are issues that affect a large number of people in a society and disrupt social harmony and functioning. They arise from various economic, political, cultural, and personal factors.

Below are the major causes of social problems:

1. Poverty

- Lack of basic needs like food, shelter, and education leads to problems such as child labor, crime, and malnutrition.
- Poor people often struggle to access healthcare and opportunities.

2. Unemployment

- When people do not have jobs, it creates financial stress, frustration, and sometimes leads to illegal activities.
- It increases dependency and lowers the standard of living.

3. Illiteracy and Lack of Education

- Without proper education, people are unaware of their rights and responsibilities.
- Illiteracy limits job opportunities and can contribute to superstitions and discrimination.

4. Inequality

- Social and economic inequality based on caste, class, gender, or religion causes discrimination and injustice.
- It can lead to social unrest and violence.

5. Rapid Urbanization

- Overcrowding in cities leads to housing shortages, slums, pollution, and increased crime rates.
- Public services often cannot keep up with fast-growing population.

6. Corruption

- Misuse of power by officials causes injustice and delays in the delivery of services.
- It reduces public trust in institutions and leads to unfair systems.

7. Family and Social Disintegration

- Broken families, lack of parental care, or domestic violence contribute to issues like juvenile delinquency and drug abuse.

8. Cultural and Moral Decline

- Loss of traditional values and lack of social responsibility can cause disrespect, intolerance, and selfish behavior.

Q.4 SHORT ANSWER QUESTIONS (ANY THREE OUT OF FOUR)

Ans a) Meaning:

Cultural lag refers to the delay or gap between changes in material culture (technology, inventions) and non-material culture (values, beliefs, laws, customs). When technology or society advances faster than people's attitudes and norms can adapt, it creates imbalance or conflict.

Definition:

According to sociologist **William Fielding Ogburn**,

"Cultural lag is the period of maladjustment when the non-material culture is still struggling to adapt to new material conditions."

Ans b) Meaning:

Sociology is the study of human society, social behavior, and social relationships. It examines how people interact with each other, how societies are structured, and how social institutions (like family, education, religion) function and change over time.

Definition:

- According to **Auguste Comte** (the father of sociology):
"Sociology is the science of society."
- According to **Max Weber**:
"Sociology is the study of social action."

Ans c) Types of Abuse :

1. **Physical Abuse** – Causing bodily harm (e.g., hitting, kicking).
2. **Emotional/Psychological Abuse** – Hurting someone's feelings or mental health through threats or manipulation.
3. **Verbal Abuse** – Using harsh or insulting words.
4. **Sexual Abuse** – Any unwanted or forced sexual activity.
5. **Financial Abuse** – Controlling or misusing someone's money.
6. **Neglect** – Failing to provide basic care or support.
7. **Digital Abuse** – Using technology to harass or harm someone (e.g., cyberbullying).
8. **Domestic Abuse** – Abuse within a household or family.
9. **Elder Abuse** – Mistreating older people, often by caregivers.
10. **Child Abuse** – Any harm or neglect toward children.

Ans d) Basic Needs of a Family :

1. **Food** – For health and nutrition.
2. **Clothing** – For protection and comfort.
3. **Shelter** – A safe place to live.
4. **Health Care** – Medical support for well-being.
5. **Education** – Learning and development.
6. **Emotional Support** – Love and care.
7. **Safety** – Protection from harm.
8. **Income** – Money for daily needs.
9. **Clean Water** – For drinking and hygiene.
10. **Rest & Recreation** – Relaxation and family bonding.

SECTION – ‘B’

(APPLIED PSYCHOLOGY)

Q.5 LONG ANSWER QUESTIONS (ANY ONE OUT OF TWO)

Ans a) Definition of Learning:

Learning is the process of acquiring new knowledge, skills, behaviors, or attitudes through experience, study, or practice. It results in a relatively permanent change in behavior.

According to Crow & Crow:

"Learning is the acquisition of habits, knowledge, and attitudes. It involves new ways of doing things."

Types of Perceptual Learning:

Perceptual learning is the process of learning to recognize stimuli through the senses (sight, sound, touch, etc.).

1. **Visual Learning** – Learning through observing visual cues (e.g., shapes, colors, patterns).
2. **Auditory Learning** – Learning through sounds, speech, or music.
3. **Tactile Learning** – Learning through touch or physical interaction.
4. **Olfactory Learning** – Learning through smells (e.g., identifying food or danger).
5. **Gustatory Learning** – Learning through taste (e.g., recognizing flavors).
6. **Kinesthetic Learning** – Learning through movement and body coordination.

Laws of Learning (by Edward Thorndike):

Thorndike proposed **three main laws of learning**, based on his experiments.

1. Law of Readiness:

Learning occurs best when a person is mentally and physically prepared.

- **Example:** A student who is well-rested and interested in learning will grasp a new math topic faster than a tired or distracted student.

2. Law of Exercise (Practice):

The more a response is practiced, the stronger the learning. Repetition strengthens the connection between stimulus and response.

- **Example:** A child learns to ride a bicycle better with daily practice.

3. Law of Effect:

Behaviors followed by satisfying results are likely to be repeated, while those followed by discomfort are not.

- **Example:** If a student gets praised for answering correctly, they are more likely to participate again.

Ans b) Definition of Personality:

Personality refers to the unique and stable set of behaviors, thoughts, emotions, and characteristics that define an individual.

According to Gordon Allport:

"Personality is the dynamic organization within the individual of those psychophysical systems that determine his unique adjustments to the environment."

In simple terms, **personality** is what makes a person think, feel, and behave in a particular way, making them different from others.

2. Psychoanalytical Theory of Personality Development (by Sigmund Freud):

Sigmund Freud, the father of psychoanalysis, proposed one of the most influential theories of personality development. According to him, personality is shaped by **unconscious motives and early childhood experiences**.

Freud's Structure of Personality:

Freud divided personality into **three components**:

1. Id

- Present from birth.
- Operates on the **pleasure principle** — seeks immediate gratification.
- Contains basic instincts and urges (e.g., hunger, aggression, sex).
- Example: A hungry baby crying until fed.

2. Ego

- Develops later to mediate between the id and the real world.
- Operates on the **reality principle**.
- Makes realistic and socially acceptable decisions.
- Example: A child waits for lunch instead of snatching food.

3. Superego

- Develops last (around age 5).
- Represents **morality, conscience, and social norms**.
- Judges right and wrong; creates guilt when we act against morals.
- Example: Feeling guilty for lying.

Freud's Stages of Psychosexual Development:

Stage	Age	Focus Area	Key Task/Conflict
Oral	0–1 year	Mouth	Sucking, eating — develops trust
Anal	1–3 years	Anus	Toilet training — develops control
Phallic	3–6 years	Genitals	Identifying with same-sex parent (Oedipus complex)
Latency	6–12 years	Dormant sexual energy	Focus on school and friendships
Genital	12+ years	Genitals (mature)	Developing healthy adult relationships

Q.6 SHORT ANSWER QUESTIONS (ANY THREE OUT OF FOUR)

Ans a) Grief is a natural emotional response to loss — such as the death of a loved one, a breakup, or any major life change. Psychiatrist **Elisabeth Kübler-Ross** identified **five stages of grief**, which people often go through, though not always in the same order.

1. Denial

- **Meaning:** Refusing to accept the reality of the loss.
- **Example:** "This can't be happening."
- Denial acts as a defense mechanism to help absorb the shock.

2. Anger

- **Meaning:** Feelings of frustration, helplessness, and rage.
- **Example:** "Why did this happen to me?"
- Anger may be directed at oneself, others, or even the lost person.

3. Bargaining

- **Meaning:** Attempting to make deals or promises in exchange for reversing the loss.
- **Example:** "If I pray harder, maybe things will go back to normal."
- It reflects the desire to regain control.

4. Depression

- **Meaning:** Deep sadness and realization of the full impact of the loss.
- **Example:** "I miss them so much. What's the point now?"
- This stage involves withdrawal, crying, and loss of interest.

5. Acceptance

- **Meaning:** Coming to terms with the loss and beginning to move forward.
- **Example:** "It's painful, but I will be okay."
- Acceptance does not mean forgetting, but finding peace.

Ans b) Perception : It is the process by which we interpret sensory information to understand our environment. Several factors influence how we perceive things:

1. Past Experiences

- Previous experiences shape how we interpret current situations.
- Example: A person once bitten by a dog may perceive all dogs as dangerous.

2. Attention

- What we focus on affects perception. We tend to notice things we are interested in or expecting.
- Example: A hungry person may notice food-related stimuli more easily.

3. Motivation and Needs

- Our desires and needs can influence what we perceive.
- Example: A thirsty person may notice water-related images faster.

4. Emotions

- Feelings like fear, happiness, or anger can affect perception.
- Example: A frightened person may misinterpret a shadow as a threat.

5. Cultural and Social Background

- Our upbringing, beliefs, and culture shape how we interpret things.
- Example: Different cultures may interpret gestures or colors differently.

6. Expectations

- What we expect to see can influence what we actually perceive.
- Example: Expecting a friend in a crowd may lead you to “see” them, even if they aren't there.

7. Context or Environment

- The setting in which something appears affects how we perceive it.
- Example: The same word may be understood differently depending on tone or situation.

Ans c) Definition of Aptitude:

Aptitude is the natural ability or potential of an individual to learn or perform a specific task or skill efficiently in the future.

According to Freeman:

"Aptitude is a combination of characteristics indicative of an individual's capacity to acquire (with training) some specific knowledge, skill, or set of organized responses."

In simple words, **aptitude** refers to how easily a person can learn or succeed in a particular area, such as math, music, language, or nursing.

Nursing Implications of Aptitude:

Aptitude plays an important role in the nursing profession, as it influences how effectively a nurse can perform her duties

1. Selection and Recruitment

- **Aptitude tests** can help identify candidates best suited for the nursing profession.
- Helps in choosing individuals with the right attitude, communication skills, empathy, and technical ability.

2. Training and Education

- Understanding a student's aptitude helps in **personalizing training**.
- Students with higher clinical aptitude can be given advanced training earlier.

3. Career Specialization

- Nurses with strong aptitudes in certain areas (e.g., pediatrics, surgical care) can be guided toward **specialized roles**.
 - This improves job satisfaction and effectiveness.
4. Improved Patient Care
- Nurses with good aptitude for observation, critical thinking, and communication can provide **better care** and respond quickly to emergencies.
5. Stress and Job Performance
- If aptitude and job role are mismatched, it may lead to **stress, errors, and low confidence**.
 - Matching aptitude to job tasks promotes efficiency and reduces burnout.

Ans d) Psychological assessment: is the process of collecting, evaluating, and interpreting information about an individual's behavior, personality, cognitive abilities, and emotional functioning using various tools and techniques.

A nurse plays a vital role in the **psychological assessment** of patients by helping to evaluate their mental, emotional, and behavioral health.

Key responsibilities include:

1. Observation

- Observing the patient's behavior, mood, speech, and appearance during routine care.

2. Data Collection

- Gathering relevant information such as medical history, emotional issues, family background, and stress factors.

3. Communication

- Using effective and empathetic communication to build trust and encourage the patient to express thoughts and feelings.

4. Administering Screening Tools

- Assisting in or conducting simple mental health screening tests (e.g., depression or anxiety scales) under supervision.

5. Reporting and Documentation

- Recording behavioral observations and test results accurately for the mental health team.

6. Supporting the Mental Health Team

- Assisting psychologists or psychiatrists during interviews or assessments.

7. Ensuring a Safe Environment

- Creating a calm and non-threatening environment for accurate assessment and patient comfort.

Q.7 SHORT ANSWER QUESTIONS (ANY THREE OUT OF FOUR)

Ans a) Errors in thinking:

- **Overgeneralization** – Drawing broad conclusions from one event.
- **Black-and-white thinking** – Seeing things as all good or all bad.
- **Catastrophizing** – Expecting the worst.
- **Personalization** – Blaming yourself for everything.
- **Mind reading** – Assuming what others think.
- **Fortune telling** – Predicting failure without evidence.
- **Emotional reasoning** – Thinking feelings are facts.
- **Labeling** – Using negative names for yourself or others.
- **Discounting the positive** – Ignoring your successes.
- **Should statements** – Using rigid rules and “shoulds.”

Ans b) Aspects of etiquette:

- **Respect** – Treat others with kindness and consideration.
- **Politeness** – Use courteous language (please, thank you, sorry).
- **Punctuality** – Be on time for meetings or events.
- **Good grooming** – Maintain personal hygiene and dress appropriately.
- **Table manners** – Follow proper behavior while eating.
- **Communication** – Speak clearly, listen actively, and avoid interrupting.
- **Body language** – Use appropriate gestures and eye contact.
- **Digital manners** – Use phones and social media respectfully.
- **Respect for privacy** – Don't intrude into others' personal matters.
- **Gratitude** – Show appreciation for help and kindness.

Ans c) Effects of mental conditions on bodily functioning :

- **Fatigue** – Constant tiredness due to stress or depression.
- **Sleep problems** – Insomnia or oversleeping.
- **Appetite changes** – Overeating or loss of appetite.
- **Weakened immunity** – More prone to infections.
- **Body aches** – Headaches, muscle pain, or stomach issues.
- **Heart issues** – Increased heart rate or high blood pressure.
- **Breathing problems** – Rapid or shallow breathing during anxiety.
- **Digestive issues** – Nausea, constipation, or diarrhea.
- **Hormonal imbalance** – Affects menstrual cycle or energy levels.
- **Slow healing** – Stress can delay recovery from illness or injury.

Ans d) Role of attitude in health and sickness:

1. **Positive attitude** boosts immunity, speeds healing, and reduces stress.
2. **Optimism** helps in coping with illness and improves recovery.
3. **Negative attitude** can worsen symptoms and delay healing.
4. **Motivation** from a good attitude encourages healthy habits.
5. **Emotional resilience** helps manage chronic conditions better.
6. **Stress reduction** through positive thinking improves overall health.

NURSING MANAGEMENT AND LEADERSHIP
SIXTH SEMESTER BSC.NURSING
TIME: 3 HRS
MAX. MARKS: 12.00
VERSION:
QUESTION BOOKLET SR.NO.

SECTION A

QUE 1) .Multiple choice question.

1. The following is not essential requisite for a budget preparation
 - a. Period of budget
 - b. forecasting
 - c. accounting
 - d. Line of organization
2. The name goleman is famous for
 - a. Intelligence theory
 - b. Emotional intelligence
 - c. Spiritual intelligence
 - d. social intelligence
3. National accreditation board of hospital was conducted in the year
 - a. 2006
 - b. 2001
 - c. 2010
 - d. 2003
4. The overall plan of rotation of each occurs which shows study block clinical block examination etc. Are
 - a. Rotation plan
 - b. Lesson plan
 - c. Master plan
 - d. Unit plan
5. The tendency to overrate a subordinate performance is
 - a. Halo effect.
 - b. Pitchfork effect
 - c. Horn effect
 - d. Multi rater feedback
6. The type of evaluation that occur during development and implementation of curriculum is
 - a. Curriculum planning
 - b. Evaluation
 - c. Curriculum vitae
 - d. Audit
7. Defamation is the forms of spoken words is
 - a. Libel
 - b. Both
 - c. Slander
 - d. None
8. Consumer protection act was enacted in parliament in the year
 - a. 1992
 - b. 1986
 - c. 1982
 - d. 1972
9. The process of gaining control to ensure one power is
 - a. Empowerment
 - b. Decision making
 - c. Politics
 - d. Mentoring
10. The hierarchy of authority or formal line of authority moves from higher level to lower level is known as
 - a. Centralization
 - b. Decentralization
 - c. Scalar chain of commands
 - d. Communication.
11. The systematic comparison in financial for monetary terms of all cost and benefits is
 - a. cost
 - b. Cost benefit analysis
 - c. Benefit
 - d. analysis
12. Who proposed the famous 14 principles of management?
 - a. Elton mayo
 - b. Adam smith
 - c. Henry fayol
 - d. Henry I. Gantt

QUE 2) Essay /situation type (short ant 2 out of 3)

- I)a)Define performance appraisal
- b) List the tools used for performance appraisal
- c) Prepare a model performance appraisal to evaluate staff nurses.

II) a) Define supervision

- b) List the technique and methods of supervision
- c) Discuss role and responsibility of nurse in writing reports

III) a)Define staffing .

- b)List the staffing norms and patient classification system .
- c) Discuss role and responsibility of nurse in writing reports

QUE 3.) Short answer questions (solve any 5 out of 6)

1. Importance of in-service education programme.
2. Currents trends and issues in nursing education
3. Explain the consumer protection act
4. Principles of management by fayol.
5. Explain collective bargaining in nursing with examples
6. Importance of the Indian nursing council in clinical area.

Que 4.) Very short notes (solve any 4 out of 5)

- a) Process of auditing.
- b)Classification of hospital with examples
- c) List four common methods of recruitment of staff nurses
- d) Difference between centralized vs decentralized
- e) Write the importance of nursing rounds

NURSING MANAGEMENT AND LEADERSHIP
SIXTH SEMESTER BSC.NURSING
TIME: 3 HRS
MAX. MARKS: 12.00
VERSION:
QUESTION BOOKLET SR.NO.

SECTION A

QUE 1) Multiple choice question.

11. The following is not essential requisite for a budget preparation

- a. Period of budget b. forecasting c. accounting d. Line of organization

Ans. Forecasting

12. The name goleman is famous for

- b. Intelligence theory b. Emotional intelligence c. Spiritual intelligence
d. social intelligence

Ans. Emotional intelligence

13. National accreditation board of hospital was conducted in the year

- b. 2006 b. 2001 c. 2010 d. 2003

Ans. 2006

14. The overall plan of rotation of each occurs which shows study block clinical block examination etc. Are

- b. Rotation plan b. Lesson plan c. Master plan d. Unit plan

Ans. Master plan

15. The tendency to overrate a subordinate performance is

- b. Halo effect. b. Pitchfork effect c. Horn effect d. Multi rater feedback

Ans. Halo effect

16. The type of evaluation that occur during development and implementation of curriculum is

- b. Curriculum planning b. Evaluation c. Curriculum vitae d. Audit

Ans. Evaluation

17. Defamation is the forms of spoken words is

- b. Libel b. Both c. Slander d. None

Ans. Slanders

18. Consumer protection act was enacted in parliament in the year
b. 1992 b. 1986 c. 1982 d. 1972

Ans. 1986

19. The process of gaining control to ensure one power is
b. Empowerment b. Decision making c. Politics d. Mentoring

Ans. Empowerment

20. The hierarchy of authority or formal line of authority moves from higher level to lower level is known as
b. Centralization b. Decentralization c. Scalar chain of commands
d. Communication.

Ans . Scalar chain of commands

11. The systematic comparison in financial for monetary terms of all cost and benefits is
a. cost b. Cost benefit analysis c. Benefit d. analysis

Ans . Cost benefit analysis

- 12 . Who proposed the famous 14 principles of management?
b. Elton mayo b. Adam smith c. Henry fayol d. Henry I. Gantt

Ans . Henry fayol

QUE 2) Essay /situation type (short ant 2 out of 3)

a)Define performance appraisal .

Performance appraisal is the systematic process organizations use to evaluate and assess employee job performance. Performance appraisals are also called performance evaluations, performance reviews, development discussions, or employee appraisals.

b)List the tools used for performance appraisal .

there are several tools that can be used for performance appraisal. Some commonly used tools include:

1. **Rating scales:** This tool involves using a scale to rate employees on various performance dimensions. It can be a numerical scale (e.g., 1-5) or a descriptive scale (e.g., poor, fair, good, excellent).
2. **Checklists:** Checklists are used to assess whether an employee has completed specific tasks or met certain criteria. They can be useful for evaluating specific job responsibilities or skills.

3. **Behaviourally anchored rating scales (BARS):** BARS combine the advantages of rating scales and critical incidents. They involve rating employees on specific behaviours that are anchored to performance levels.
4. **360-degree feedback:** This tool involves gathering feedback from multiple sources, including supervisors, peers, subordinates, and sometimes even customers. It provides a comprehensive view of an employee's performance.
5. **Management by objectives (MBO):** MBO involves setting specific objectives and goals for employees and evaluating their performance based on the achievement of these objectives.
6. **Self-assessment:** Self-assessment allows employees to evaluate their own performance and provide insights into their strengths and areas for improvement.

c) Prepare a model performance appraisal to evaluate staff nurses.

To prepare a model performance appraisal for staff nurses, you can follow these steps:

1. **Define the evaluation criteria:** Determine the key areas of performance that you want to assess. This may include clinical skills, communication, teamwork, patient care, professionalism, and adherence to policies and procedures.
 2. **Establish performance standards:** Set clear expectations for each criterion. For example, for clinical skills, you may expect nurses to demonstrate proficiency in administering medications, performing assessments, and implementing care plans.
 3. **Develop a rating scale:** Create a rating scale to assess performance levels. This can be a numerical scale (e.g., 1-5) or a descriptive scale (e.g., exceeds expectations, meets expectations, needs improvement).
 4. **Gather performance data:** Collect data on nurses' performance through various methods, such as direct observation, patient feedback, incident reports, and self-assessment. Ensure that the data is objective, reliable, and relevant to the evaluation criteria.
 5. **Conduct performance reviews:** Schedule individual meetings with each nurse to discuss their performance. Provide specific examples of their strengths and areas for improvement based on the gathered data. Encourage open communication and allow nurses to share their perspectives.
 6. **Set goals and development plans:** Collaboratively establish goals for improvement and professional growth. Create a development plan that outlines specific actions and resources to support nurses in achieving their goals.
 7. **Document the appraisal:** Maintain accurate records of the performance appraisal, including the evaluation criteria, ratings, feedback, and development plans. Ensure confidentiality and secure storage of the information.
 8. **Provide feedback and follow-up:** Offer ongoing feedback and support to nurses throughout the performance period. Schedule regular check-ins to monitor progress, address concerns, and provide additional guidance if needed.
- Remember, the performance appraisal process should be fair, transparent, and focused on continuous improvement. It should provide nurses with valuable feedback and opportunities for growth.

II) Define supervision

“Supervision is achieving the desired results by means of intelligent utilisation of human talent”

-GR TERRY

b) List the technique and methods of supervision

1. **Direct Supervision:** This method involves close and continuous monitoring of employees' work. The supervisor provides specific instructions, guidance, and feedback to ensure that tasks are completed correctly and on time. Direct supervision is useful when employees are new or inexperienced and need more hands-on support.
2. **Indirect Supervision:** In this method, supervisors provide general guidelines and expectations to employees and allow them to work independently. They are available for consultation and support when needed but do not closely monitor every aspect of the work. Indirect supervision is suitable for experienced and self-motivated employees who require less oversight.
3. **Group Supervision:** Group supervision involves supervising a team or a group of employees collectively. The supervisor facilitates group discussions, encourages collaboration, and provides guidance to the entire team. This method promotes teamwork, fosters a sense of belonging, and allows for peer learning and support.
4. **Virtual Supervision:** With the increasing prevalence of remote work, virtual supervision has become more common. It involves supervising employees who are geographically dispersed using technology such as video conferencing, email, and project management tools. Virtual supervision requires clear communication, trust, and effective use of technology to ensure that employees stay on track and receive the necessary support.
5. **Performance Reviews:** Performance reviews are a formal method of supervision that involves assessing employees' performance against predetermined goals and expectations. Supervisors conduct regular evaluations, provide feedback, and set goals for improvement. Performance reviews help identify strengths and areas for development, and they provide an opportunity for employees to discuss their career aspirations and receive guidance.
6. **Coaching and Mentoring:** Coaching and mentoring are methods of supervision that focus on individual development and growth. Supervisors act as coaches or mentors, providing guidance, support, and feedback to help employees enhance their skills, overcome challenges, and achieve their professional goals. Coaching and mentoring can be done through regular one-on-one meetings or informal interactions.
It is important for supervisors to choose the most appropriate method of supervision based on the needs of the employees, the nature of the work, and the organizational context. A combination of different methods may also be used to ensure effective supervision and maximize employee performance and satisfaction.

c) Discuss role and responsibility of nurse in writing reports

Nurses play a crucial role in maintaining accurate and up-to-date records and reports in healthcare settings. Here are some key responsibilities of nurses in this regard:

1. **Patient Documentation:** Nurses are responsible for documenting patient information, including medical history, vital signs, medications administered, treatments provided, and any changes in the patient's condition. This documentation helps in tracking the patient's progress, ensuring continuity of care, and facilitating effective communication among healthcare professionals.
2. **Legal and Ethical Compliance:** Nurses must adhere to legal and ethical standards when documenting patient information. They should ensure that the documentation is accurate, complete, and confidential. This helps protect patient privacy and ensures compliance with healthcare regulations.
3. **Communication and Collaboration:** Nurses use records and reports to communicate important information to other healthcare team members. They collaborate with physicians, therapists, and other professionals by sharing relevant patient data, progress notes, and care plans. This promotes coordinated and comprehensive care.

4. **Evidence-Based Practice:** Nurses use records and reports to evaluate the effectiveness of interventions and treatments. By analyzing data and outcomes, they can identify trends, make informed decisions, and implement evidence-based practices to improve patient care.
5. **Quality Improvement:** Nurses contribute to quality improvement initiatives by collecting and analyzing data from records and reports. They identify areas for improvement, implement changes, and monitor the impact of interventions. This helps enhance patient safety, outcomes, and overall healthcare delivery.
6. **Research and Education:** Nurses may use records and reports for research purposes, such as identifying patterns, conducting audits, or participating in clinical trials. They also utilize this information to educate patients, families, and colleagues about healthcare conditions, treatments, and self-care strategies.

In summary, nurses play a vital role in maintaining accurate and comprehensive records and reports. Their documentation ensures effective communication, legal compliance, evidence-based practice, quality improvement, and supports research and education in healthcare settings

III) Define staffing

The management function, staffing is described as the systematic process of human resource identification, recruitment, and development. It means simply that the right candidates get selected and proper support for them to flourish and be successful in their roles. So, such a definition emphasizes that staffing be taken along with general business strategies.

List the staffing norms and patient classification system

Norms of staffing are the guidelines or standards that organizations follow when it comes to staffing their workforce. These norms help organizations ensure that they have a competent and well-balanced workforce. Here are some key norms of staffing:

1. **Job Analysis:** Before staffing, organizations conduct a job analysis to identify the tasks, responsibilities, and qualifications required for each position. This helps in determining the specific skills and competencies needed for each role.
2. **Recruitment:** Once the job analysis is complete, organizations engage in recruitment activities to attract potential candidates. This can include advertising job openings, utilizing job portals, conducting campus placements, or using recruitment agencies. The goal is to attract a pool of qualified candidates.
3. **Selection:** After attracting candidates, organizations go through a selection process to identify the most suitable individuals for the job. This process typically involves screening resumes, conducting interviews, administering tests or assessments, and checking references. The aim is to assess the candidates' qualifications, skills, and fit with the organization's culture.
4. **Orientation and Training:** Once selected, new employees undergo an orientation program to familiarize them with the organization's policies, procedures, and work environment. They may also receive training to develop the necessary skills and knowledge required for their roles. This helps in ensuring that employees are well-prepared to contribute effectively to the organization.
5. **Performance Appraisal:** Organizations regularly evaluate the performance of their employees through performance appraisal systems. This helps in identifying areas of improvement, providing feedback, and recognizing high-performing individuals. Performance appraisals also play a role in determining promotions, transfers, or terminations.
6. **Career Development:** Organizations provide opportunities for career development to their employees. This can include training programs, mentoring, job rotations, or promotions.

Career development initiatives help in retaining talented employees and ensuring their long-term growth within the organization.

7. **Succession Planning:** Organizations engage in succession planning to identify and develop potential leaders within the organization. This ensures a smooth transition of key positions in case of retirements, resignations, or promotions. Succession planning helps in maintaining organizational continuity and reducing the impact of talent gaps.

By following these norms of staffing, organizations can effectively manage their workforce, attract and retain talented individuals, and create a productive and motivated work environment

Discuss the role of nurse as manager and her qualities.

Nurse managers play a crucial role in healthcare settings, functioning as both leaders and administrators. They are responsible for overseeing the nursing staff, managing resources, ensuring quality patient care, and fostering a positive work environment. Key qualities of a successful nurse manager include strong communication, leadership, clinical expertise, and the ability to manage both people and resources effectively.

QUE 3.) Short answer questions (solve any 5 out of 6)

1.Importance of inservice education programme.

a. Skill Enhancement:

In-service education provides opportunities to learn new skills and refine existing ones, keeping professionals up-to-date with the latest advancements in their fields.

b. Knowledge Updates:

It ensures that professionals stay informed about new theories, research findings, and best practices relevant to their work.

c. Adaptability:

In-service training helps individuals adapt to changes in their workplace, such as new technologies, policies, or procedures.

d. Improved Performance:

By enhancing skills and knowledge, in-service education contributes to better job performance and increased productivity.

e. Career Advancement:

In-service education can equip individuals with the qualifications and experience needed for career progression.

f. Increased Confidence:

Feeling knowledgeable and competent in one's field can boost confidence and job satisfaction.

2.Currents trends and issues in nursing education

- The new scientific involvement and advances in technology has changed nursing profession, which has increased the results of care and service in nursing. There are so many trends and issues in nursing education and motivation towards nursing.
- Nursing was considered as female profession and profession of middle and lower class. This trend is still continued difference between nurses and physicians are still a wide subject. They both cannot be separate but the physicians have the status of master and nurses as a servant in hospital.
- In early 1900, the nurses were viewed as noble, morally, spiritual, self sacrificing known as Angels of mercy. After 1966, the nurses' image changed, mass media picture discouraged nurses' image again in American and world society.
- Major obstacles to the academicians of nursing include the lack of faculty with advanced preparation, lack of relevant learning resource and lack of influence in the bodies controlling advanced education within the country.
- Male candidates have not been allowed in midwifery due to cultural and somewhat ethical points.
- Missionary schools do not allow other religion candidates for admission in nursing
- Increasing complexity of patient care –nurses must demonstrate management skills at both the organizational and patient care levels. These concepts must be incorporated into the nursing curriculum. More research is needed to demonstrate the value to the health care delivery system as well as the cost effectiveness of health education, health promotion and advanced nursing practice. Nursing education programs must prepare students at all levels for roles in case management in the managed care environment.
- Nursing teaching methods that incorporate opportunities for interdisciplinary education and collaborative practice are required to prepare nurses for their unique professional role and to understand the role of other disciplines in the care of patients.
- Nursing shortage has a negative impact on patient care and particularly in acute and long term care settings.
- Greater life expectancy of individuals with chronic and acute conditions will challenge the health care system's ability to provide efficient and effective continuing care. Nursing practice, education and research must embrace and respond to these changing demographics.
- Advances in digital technology have increased the application of telehealth and telemedicine bringing together patient and provider without physical proximity.⁵
- Nanotechnology will introduce new forms of clinical diagnosis and treatment by means of inexpensive handheld biosensors capable of detecting a wide range of disease from minuscule body specimens.
- Nursing science needs to address health care issues such as emerging and reemerging infections those results from globalization. Nursing education and research must become more internationally focused to disseminate information and benefit from the multicultural experiences.

3.Explain the consumer protection act

- **Establishment of Forums:**

The Act establishes a three-tier system of consumer dispute redressal forums (District, State, and National) to handle complaints based on the value of goods or services.

- **Consumer Rights:**

It outlines several fundamental consumer rights, including the right to safety, information, choice, and redressal.

- **Protection from Unfair Practices:**

The Act aims to protect consumers from unfair trade practices, restrictive trade practices, and misleading advertisements.

- **Redressal Mechanism:**

Consumers can file complaints with the appropriate forum based on the value of their claim and receive compensation for damages or losses incurred due to defective goods or services.

- **Alternative Dispute Resolution:**

The Act encourages the use of mediation as an alternative method for resolving consumer disputes, promoting quicker and simpler resolution.

- **Product Liability:**

It addresses product liability, holding manufacturers, service providers, and sellers accountable for harm or injury caused by defective goods or deficient services.

- **Consumer Awareness:**

The Act emphasizes the importance of creating consumer awareness about their rights and responsibilities.

4. Principles of management by fayol.

1. Division of Work

This increases efficiency by assigning tasks among employees based on their skills and specializations, allowing them to be efficient. The [division of work](#) ensures the completion of tasks in a well-regulated time. Work can be performed more efficiently in business if divided into specialized tasks, each performed by a specialist-trained employee. This results in efficient and effective output. Thus, a company has separate departments for finance, marketing, production, human resource development, etc.

2. Authority and Responsibility

All managers must have the authority to give orders and amend changes to ensure the tasks are accomplished. With authority comes responsibility, so the authoritative person should be well-versed in the rules. There should be a balance between authority and responsibility. An organization should build safeguards against the abuse of managerial power. At the same time, a manager should have the necessary authority to carry out his responsibility

3. Discipline

This points towards the rules and policies to ensure fewer conflicts among employees. A well-disciplined workplace ensures smooth operations. Here, discipline, when applied, would mean that the workers and management both honor their commitments without any prejudice towards one another.

4. Unity of Command

Employees should receive instructions from only one superior to avoid confusion and conflicting orders. The principle of unity of command states that each participant in a formal organization should receive orders from and be responsible to only one superior. Fayol gave a lot of importance to this principle. He felt that if this principle is violated “authority is undermined, discipline is in jeopardy, order disturbed and stability threatened”.

5. Unity of Direction

A single manager should direct all organizational activities with the same objective using one plan. This ensures coordination and clarity in operations. Each group of activities having the same objective must have one head and one plan. This ensures unity of action and coordination. For example, if a company is manufacturing motorcycles and cars, then it should have two separate divisions for both of them.

6. Subordination of Individual Interests to General Interest

The organization's interests should always come first over group interests to maintain harmony. This ensures equality among the workers. Every worker has some individual interest in working in a company. The company has its objectives.

7. Remuneration

All the employees should be fairly compensated for the work that has been done. This ensures that the employees are well-motivated and are satisfied with the workplace. This will ensure a congenial atmosphere and good relations between workers and management. Consequently, the company's work would be smooth.

8. Centralization and Decentralization

The degree of centralization or decentralization depends on the nature of the organization. Centralization refers to decision-making by top management, while decentralization allows lower levels to make decisions. Fayol states, “There is a need to balance subordinate involvement through decentralization with managers’ retention of final authority through centralization.”

9. Scalar Chain

The scalar chain refers to an organization's clear line of authority, from the top to the lowest. Communication should follow this chain but can be bypassed in emergencies (Gang Plank). Fayol states, “Organisations should have a chain of authority and communication that runs from top to bottom and should be followed by managers and the subordinates.”

10. Order

A place for everything and everything in its place. Both material and human resources should be well-organized to ensure efficiency. Fayol says, “People and materials must be in suitable places at appropriate times for maximum efficiency.”

11. Equity

Managers should be kind and fair to their subordinates. Equity fosters loyalty and commitment among employees. Good sense and experience are needed to ensure fairness to all employees, who should be treated as fairly as possible,” according to Fayol.

12. Stability of Tenure of Personnel

High employee turnover is detrimental to organizational efficiency. The stability of tenure allows employees to gain experience and improve performance. “Employee turnover should be minimized to maintain organizational efficiency,” according to Fayol.

13. Initiative

Employees should be encouraged to take initiative and contribute ideas. This improves engagement, innovation, and overall performance. Workers should be encouraged to develop and carry out their plans for improvements, according to Fayol .

14. Esprit de Corps

Esprit de corps means fostering team spirit and unity within the organization. Managers should promote harmony and cooperation among employees. To foster team spirit, a manager should replace 'I' with 'We' in all his conversations with workers. This will create a spirit of mutual trust and belonging among team members. It will also minimize the need to use penalties.

5. Explain collective bargaining in nursing with examples.

Collective bargaining in nursing is a process where registered nurses, represented by a union or other bargaining agent, negotiate with their employer (usually a hospital or healthcare system) to reach a collective agreement on employment terms and conditions.

- **Increased Wages and Benefits:**

A union might negotiate for higher base pay, overtime pay, or improved health insurance and retirement benefits for nurses.

- **Improved Staffing Levels:**

Nurses may bargain for mandated nurse-to-patient ratios to ensure adequate staffing and reduce workload.

- **Enhanced Safety Measures:**

Collective bargaining can lead to the implementation of safer working conditions, such as proper lifting equipment or protocols to prevent workplace violence.

- **Professional Development Opportunities:**

Nurses can negotiate for paid time off for continuing education, tuition reimbursement, or mentorship programs.

6. Importance of the Indian nursing council in clinical area.

The Indian Nursing Council (INC) is crucial in the clinical area for maintaining uniform standards of nursing education and practice across India. It establishes minimum requirements for nursing education, develops and revises curricula to meet healthcare demands, and sets admission criteria for nursing programs. By regulating nursing education and practice, the INC ensures a consistent level of quality in nursing care provided to patients.

Que 4.) Very short notes (solve any 4 out of 5)

a. Process of auditing .

The auditing process generally involves four key stages: planning, fieldwork, reporting, and follow-up. These phases ensure a systematic and thorough examination of an organization's financial records and internal controls.

b. Classification of hospital with examples.

Categories include general, specialised, government-funded, private, and non-profit hospitals. What are the most common types of hospitals? The most common types of hospitals are general hospitals, community hospitals, specialised hospitals, government-funded hospitals, and for-profit hospital.

General Hospitals: Offer a broad range of medical, surgical, and emergency services.

Specialized Hospitals: Focus on specific medical conditions or patient populations.

trauma Centres: Handle severe injuries and emergencies.

Children's Hospitals: Specialize in the care of infants, children, and adolescents.

Rehabilitation Hospitals: Focus on helping patients recover from illness or injury.

c. List four common methods of recruitment of staff nurses.

Four common methods of recruiting staff nurses include advertising, employee referrals, career day programs, and open houses.

1. Advertising:

Hospitals and healthcare facilities can advertise job openings for nurses through various channels like newspapers, online job boards, and professional nursing publications.

2. Employee Referrals:

Current employees can be a great source of referrals for new nurses. Organizations often have referral programs in place to incentivize employees to recommend qualified candidates.

3. Career Day Programs:

Many nursing schools and colleges hold career day events where recruiters from healthcare organizations can present information about their facilities and available positions to graduating students.

4. Open Houses:

Open houses are events where potential candidates can visit a hospital or clinic, tour the facilities, and learn more about the organization's culture and job opportunities.

d. **Difference between centralized vs decentralized**

Centralized and decentralized refer to contrasting organizational structures.

In a centralized structure, decision-making authority is concentrated at the top, while in a decentralized structure, authority is distributed throughout the organization. Centralized systems are often more efficient for smaller, stable organizations, while decentralized structures are better suited for larger, complex, or geographically dispersed organizations.

e. **Write the importance of nursing rounds.**

Nursing rounds are crucial for several reasons: they enhance patient care by facilitating a thorough understanding of each patient's condition, promote communication and collaboration among the care team, and provide valuable learning opportunities for nursing staff and students. By systematically assessing patients, nurses can identify needs, potential problems, and the effectiveness of interventions, leading to improved patient outcomes.

**COMMUNITY HEALTH NURSING – 1 INCLUDING ENVIRONMENTAL SCIENCES AND
EPIDEMIOLOGY
FIFTH SEMESTER
BSC.NURSING
TIME: 3 HRS
MAX MARKS 12**

Section A

Que.I. Multiple Choice Questions

(12x1=12)

- 1) Community health nursing register includes all, except:
 - (A) Immunization register
 - (B) Family planning register
 - (C) Birth and death register
 - (D) Cumulative record

- 2) The BCG vaccine is administered for immunity against:
 - (A) Malaria
 - (B) Tuberculosis
 - (C) Jaundice
 - (D) Hepatitis

- 3) Which of the following is not a method of Health Promotion except
 - (A) Behavioural modification
 - (B) Lifestyle modification
 - (C) Immunization
 - (D) Nutritional education

- 4) Isolation of a child with measles belongs to what level of prevention?
 - (A) Primary
 - (B) Secondary
 - (C) Intermediate
 - (D) Tertiary

- 5) Which of the following is the blood born infection.
 - (A) Weil's disease
 - (B) Plague
 - (C) Hepatitis B
 - (D) Chikungunya

- 6) Under National Urban Health Mission one ASIA will provide services to
 - (A) 1000-2500 population
 - (B) 1000-1500 population

(C) 200-500 household (D) Both A and C

7) If a mother carry her 18 months old baby in the primary health center who has not been immunized even with single vaccine. A this time which vaccine can be given to the except.

- (A) DPT-1st
- (B) OPV-1st
- (C) Measles (D) BCG

8)

Transmission of infectious disease from mother to fetus is known as

- (A) Droplet
- (B) Vehicle born
- (C) Fomite born
- (D) Vertical transmission

9)

The food substance contains highest amount of protein is

- (A) Pulse
- (B) Soya bean
- (C) Egg
- (D) Fruits

10)

Community health influenced by various factors which interact with each other and determine the health status of:

- (A) Individual
- (B) Family
- (C) Community
- (D) All of the above

11)

Effect of noise pollution includes

- (A) Deafness
- (B) Inability to concentrate
- (C) Disturbed sleep
- (D) All of these

12)

Disease prevention strategies focus mainly on:

- (A) Health maintenance
- (B) Prevention of disease
- (C) All of the above
- (D) Promoting healthy lifestyles

**COMMUNITY HEALTH NURSING – 1 INCLUDING ENVIRONMENTAL SCIENCES AND
EPIDEMIOLOGY
FIFTH SEMESTER
BSC.NURSING
TIME: 3 HRS
MAX MARKS 63**

Section B

Que 2) Essay / Situation type (solve any 2 out of 3)

- a) Describe the preventive and control measure of cancer. Discuss the national program for prevention and control of cancer, diabetes, cardiovascular diseases and stroke.**
- b) List the sexually transmitted diseases. Explain the epidemiology of HIV/AIDS. Describe the role of nurse in national AIDS control program.**
- c) Define community health nursing . discuss the health problem in India . describe the qualities and roles of community health nurse**

Que 3) short notes (solve any 5 out of 6)

- a) Descriptive epidemiology**
- b) Revised national tuberculosis control program.**
- c) Discuss the type of record and reports in community health nursing.**
- d) Function and staffing pattern of a primary health centre.**
- e) Noise pollution.**
- f) Determinants of health.**

Que 4. Very short notes (solve any 4 out of 5)

- a) Enlist food borne diseases**
- b) Components of school health services**
- c) Causes and preventive measures for child abuse**
- d) Secondary level of prevention**
- e) Uses of epidemiology**

ANSWER KEY

COMMUNITY HEALTH NURSING – 1 INCLUDING ENVIRONMENTAL SCIENCES AND EPIDEMIOLOGY

FIFTH SEMESTER

BSC.NURSING

TIME: 3 HRS

MAX MARKS 12

Section A

Que.1. Multiple Choice Questions

(12x1=12.00)

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- (D) Cumulative record.

Answer : (D) Cumulative record.

2) The BCG vaccine is administered for immunity against:

- (A) Malaria
- (B) Tuberculosis
- (C) Jaundice
- (D) Hepatitis

Answer : (B) Tuberculosis

3) Which of the following is not a method of Health Promotion except

- (A) Behavioural modification
- (B) Lifestyle modification
- (C) Immunization
- (D) Nutritional education

Answer : (D) Nutritional education

4) Isolation of a child with measles belongs to what level of prevention?

- (A) Primary
- (B) Secondary
- (C) Intermediate
- (D) Tertiary

Answer : (B) Secondary

5) Which of the following is the blood born infection.

- (A) Weil's disease
- (B) Plague

- (C) Hepatitis B
- (D) Chikungunya

Answer : (C) Hepatitis B

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- (C) Measles
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Answer : (D) BCG

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Transmission of infectious disease from mother to fetus is known as

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- (D) Fruits

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Community health influenced by various factors which interact with each other and determine the health status of:

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- (C) Community
- (D) All of the above

Answer : (D) All of the above

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Answer : (D) All of these

12)

Disease prevention strategies focus mainly on:

- (A) Health maintenance
- (B) Prevention of disease
- (C) All of the above
- (D) Promoting healthy lifestyles

Answer : (C) All of the above

Section B

Que 2) Essay / Situation type (solve any 2 out of 3)

d) Describe the preventive and control measure of cancer. Discuss the national program for prevention and control of cancer, diabetes, cardiovascular diseases and stroke.

Ans : Preventive and control measures

1. Patient Education and Counselling
2. Screening and Early Detection
3. Risk Assessment and Personalized Care Plans
4. Medication Management
5. Clinical Monitoring and Follow-up
6. Lifestyle Modification Support
7. Promotion of Self-Management
8. Collaboration with Multidisciplinary Teams
9. Community Outreach and Education
10. Advocacy for Policy Change
11. Support for Patients and Families
12. Data Collection and Reporting
13. Continuing Education and Training

National program for prevention and control of cancer, diabetes, cardiovascular diseases and stroke :

National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS) was launched in 2010 to prevent and control major NCDs with focus on strengthening infrastructure, human resource development, health promotion, early diagnosis, management and referral.

Under NPCDCS, NCD Cells are being established at National, State and District levels for program management, and NCD Clinics are being set up at District and CHC levels, to provide services for early diagnosis, treatment and follow-up for common NCDs. Provision to provide free diagnostic facilities and drugs for all the patients attending the NCD

Clinics has been made under this program. Cardiac Care Unit (CCU) is also being set up in identified districts for providing facilities for emergency Care Day Care Centres at the identified districts are providing facilities for Cancer care NPCDCS program has two components:

1. Cancer
2. Diabetes, cardiovascular diseases, stroke and obesity.

Objectives

- To prevent and control NCD through behavioral and life style changes
- To provide early diagnosis and management of common NCD
- Capacity building at different levels of health care for prevention diagnosis and treatment of common NCD's.
- To train human resources with in public health setup
- To establish and develop capacity for palliative care and rehabilitation.

Staff Nurse

- 1 To undertake screening for non communicable diseases for all those of age 30 years and above, who report to the PHC.
- 2 To undertake screening of cancer cervix, using VIA.
- 3 To support and mentor ASHA/ANM and to expand population based screening of common NCDs.
- 4 To work closely with the medical officer in developing a treatment plan particularly related to life style modifications.
- 5 To counsel individuals on life style modifications, and to support/mentor ANM and ASHA in health promotion
- 6 To ensure the availability of drugs and supplies including equipment and consumables
- 7 To maintain records at the PHC level.

b) List the sexually transmitted diseases. Explain the epidemiology of HIV/AIDS. Describe the role of nurse in national AIDS control program.

Ans : Sexually transmitted diseases

Sexually transmitted infections (STIs), are infections that are Sexually transmitted diseases (STDs), also referred to as primarily spread through sexual contact including vaginal are caused by various bacteria, viruses, and parasites, STDs can anal, and oral sex. They can affect both men and women and have a wide range of symptoms and can lead to serious health complications if left untreated. Here are some common types of STDs .

Chlamydia

Gonorrhoea

Syphilis

Human Papillomavirus (HPV)

Herpes Simplex Virus (HSV)

Human Immunodeficiency Virus (HIV)

Hepatitis B and C

Trichomoniasis

Epidemiology

It was recognized in USA in 1981 for the first time It is found that simian immunodeficiency virus-was recognized in chimpanzees and its features were same as that of HIV Chimpanzees were considered as the source of HIV-1 infection and spread to human by them. The possible theory for the HIV is a pro spread of HIV from chimps to Humans is Hunter theory or we genetic mater can say "Bush Meat theory. In 1920, in Kinshasa in Democratic Republic of Congo (Central Africa) the first transmission of simian Immunodeficiency virus in humans The main cause for the virus break out in Kinshasa was sexual Trade. First case of RNA found in 1986 in sex workers, Chennai (India) in the Month of May. First case of AIDS was/reported in Mumbai in 1987.

Role of Nurse in National AIDS Control Programme (NACP)

The National AIDS Control Programme (NACP) is a Government of India initiative to prevent and control HIV/AIDS. Nurses play a key frontline role in achieving the goals of the program.

1. Health Education and Awareness
2. HIV Testing and Counseling

3. Antiretroviral Therapy (ART) Support
4. Prevention of Parent-to-Child Transmission (PPTCT)
5. Infection Control
6. Care, Support & Rehabilitation
7. Record Keeping and Reporting.

c) Define community health nursing . discuss the health problem in India . describe the qualities and roles of community health nurse.

Ans : The definition given by WHO expert committee was "the community health refers to the health status of the members of the community to the problems affecting their health and to the totality of health care provided for the community"

Health problem in India

1) Communicable Diseases:

- Malaria: 80% cases in tribal, hilly areas.
- Tuberculosis: 1.2 million new cases annually; high mortality.
- Diarrhoea : 2nd leading child death cause in India.
- Acute Respiratory Infection: 4 lakh child deaths annually.
- Leprosy: India ranks first in new leprosy cases.
- Filariasis: Endemic in 250 districts.
- AIDS: India has the 3rd highest number of HIV cases globally.

2) Non-communicable Diseases:

- Diabetes: India has the highest number of diabetics.
- Cancer: 1 million new cases yearly; 0.3 million deaths; oral cancer is common.
- Cardiovascular Diseases: 2.4 million deaths yearly; 25% deaths in 25–69 age group; 19% of all deaths.
- Blindness: 15 million blind in India; cataract is main cause; cornea demand exceeds supply.

3. Environmental Sanitation: 400 million defecate in open; 44% mothers leave children's feces in open; 48% children malnourished; poor hygiene practices.

4. Medical Care: Services focused on urban areas (32%); rural doctor shortage.

5. Population Problem: India has 17% of world's population; leads to unemployment, resource strain.

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6. Nutritional Problems:

- Vitamin D Deficiency: Affects 60–80% population.
- Calcium Deficiency: Causes bone deformities in children.
- Vitamin B12 Deficiency: Affects 80% Indians.
- Zinc Deficiency: Common in women, especially lactating and pregnant.
- Low Birth Weight (LBW): 22% of babies are LBW (more in rural areas).
- Protein Energy Malnutrition (PEM): 48% stunted, 19% wasted, 42.5% underweight.
- Xerophthalmia: Affects children 1–3 years due to Vitamin A deficiency.
- Nutritional Anaemia: Affects nearly 50% of population.
- Iodine Deficiency Disorders (IDD): 71 million people affected.

- Fluorosis: Caused by excess fluoride in water.

Qualities and role of a Community Health Nurse:

beliefs, superstition, customs and culture about health. She meets people with different classes in the society and with The CHN is in direct contact with people of different ideas, different attitudes. She must therefore possess special

- She must be respectful, tolerant and patient
- She must be tactful, observant and co-operative
- She must be able to adjust and work freely with different people at different situations in the community.
- She must appreciate the effort of all people and correct their mistakes tactfully
- She must create good interpersonal relationship with colleagues and other health workers and clients
- She must be trustworthy, punctual and sincere with his/her work.

Que 3) short notes (solve any 5 out of 6)

g) Descriptive epidemiology

Ans : EPIDEMIOLOGY-CONCEPT AND DEFINITION

The word epidemiology comes from the Greek words epi meaning on or upon, demos, meaning people and logos, meaning the study of in other words the word epidemiology has its roots in the study of what befalls a population.

USES OF EPIDEMIOLOGY

1. To study the disease trend since past
2. Community diagnosis
3. Planning and evaluation of health services
4. Evaluation of a new therapy or a new health measures
5. Determining the risk to an individual

Applications of epidemiology in public health

- Public health refers to collective actions to improve population health. Epidemiology, one of the tools for improving public health, is used in several ways.
- Preventing disease and promoting health.
- Community health assessment (community diagnosis) and priority setting.
- Improving diagnosis, treatment and prognosis of clinical diseases.
- Evaluating interventions and programmes.

Components of epidemiology

- Disease frequency
- Distribution of disease
- Determinants of health.

b) Revised national tuberculosis control program.

Ans: In the year 1992, Govt. of India, WHO and World Bank together reviewed the National Tuberculosis Program (NTP). After the revision it is referred to "Revised National Tuberculosis Program (RNTCP). RNTCP is based upon Internationally recommended directly Observed treatment short-course (DOTS) Strategy was launched in 1997. Full National coverage by 2006. Under the program diagnosis and treatment facilities are provided free of cost to all TB patients at CHC. PHC. All Government Hospitals, DOT centers have been established near to residence of patients to extent possible services.

- Goal of the Program

To decrease mortality and morbidity due to TB and cut transmission of infection Until/TB ceases to be a major Public Health Program in India.

- Objectives

- To reduce incidence of mortality and morbidity due to TB.
- To prevent further emergence of drug resistance and effectively manage drug resistant. TB cases.
- To improve outcomes among HIV infected TB patients.
- To involve provide sector on a scale commensurate with their dominants presence in healthcare services.
- To further decentralize and align basic RNTCP management units with NRHM block level units within general health System for effective Supervision and monitoring.

- Program of RNTCP

- A. Basic TB Cases Finding and Treatment Services
- B. HIV Coordination
- C. Ban on Commercial Serology Tests for TB Diagnosis
- D. TB Notification
- E. Case-based Web-based Reporting System (NIKSHAY)
- F. Partnerships

c) Discuss the type of record and reports in community health nursing.

Ans : Records

Records are the information kept in the health unit on the work of the unit, on the health conditions in the community, on individual patients, as well as information on administrative, matters: staff, equipment, supplies, etc.

- Types of Records

Records can be seen in various forms. Records can mainly be categorized in four ways:

- Periodically

1. Permanent records (e.g., cumulative records)
2. Temporary records (e.g., casual or daily records).

- Unit Based

1. Individual (e.g. individual health card)
2. Related to community (e.g., record of health problems)
3. National (e.g. National health program record).

- Subject Based

1. Economical (financial structure of family, village)
2. Social (records of social structure)

3. Political
4. Medical and nursing (treatment, medicine record).
 - Collection Place Based
 1. Collected at institutions (records of hospital and health center)
 2. Records to be kept with the individual (immunization card, disease card).
 - Types of Reports in Nursing / Health Sector (Very Short):
 1. Oral Report
Verbal communication (e.g. shift handover).
 2. Written Report
Documented information (e.g. patient records).

d) Function and staffing pattern of a primary health centre.

Ans : Functions of Primary Health Centre (PHC):

1. Medical Care – Basic outpatient care and minor ailments treatment.
2. Maternal and Child Health (MCH) – Antenatal, postnatal care, immunization.
3. Family Planning – Counselling and contraceptive services.
4. Nutrition Services – Health education and supplementation.
5. Immunization – Under Universal Immunization Programme (UIP).
6. Control of Communicable Diseases – Surveillance and treatment (e.g., TB, malaria).
7. Health Education – Awareness about hygiene, sanitation, and disease prevention.
8. Referral Services – Refers serious cases to higher health centres.
9. National Health Programmes – Implements various government health schemes.

- Staffing Pattern of PHC (as per IPHS standards):

Medical Officer (MBBS)-1

Pharmacist-1

Nurse (Staff Nurse) -1–2

Health Worker (Female) (ANM)-1

Health Worker (Male)-1

Lab Technician-1

Block Extension Educator-1

Driver (if vehicle present)-1

Supporting Staff (Sweeper etc.)-1–2

e) Noise pollution.

Ans : Meaning of Noise - Sound which is unwanted and disrupts one's life is called Normal sound becomes unacceptable when it interferes our normal activity, e.g., sleeping, working or during conservation.

- Types of noises
 1. Internal noise
 2. External Noise
 3. Atmospheric noise
 4. Extraterrestrial noise

5. Industrial noise
6. Man made noise.
7. Internal Noise
8. Thermal noise
9. Shot noise
10. Transit time noise

- Sources of Noise Pollution

The main sources of noise pollution are as follow:

1. Household sources
2. Social events
3. Commercial and Industrial activities
4. Transportation.

- Effects of Noise Pollution

Effects of noise pollution is:

On Humans

On Animals

On Environment

1 On Human- Noise pollution is one of the reason for cause of Nervous disorder, Headache, high blood pressure and short memory, Depression and fatigue, which will reduce the of a person. Physical and Mental fatigue and difficulty in Concentration ,Chronic exposure to Noise will cause Noise hearing loss.

2 On Animals- Noise pollution damage the nervous system of Animals will loose the control of mind. It creates problems in reproduction and navigation by of their sounds.

3 On Environment- Noise have serious effects on the growth of some plants Noise pollution will also cause poor quality of crops in pleasant atmosphere.

- Prevention of Noise Pollution

1. Do not use car horns unnecessary. Areas like hospitals and campuses are silence zones and horn is prohibited there.
2. Motors, machines and vehicles also produced loud noise when maintenance is not maintained properly. For better performance proper maintenance should be carried out regularly.

f) Determinants of health

Ans : Determinants of health are the factors that can effect the nature of outcomes Anything that can affects the health of an individual and Communities are known as determinants of Health

People health is determined by their circumstances environment. genetic social education, relationships with family and friends, all have less impact.

There are many factors that can directly or indirectly effects a person's health Some factors can affect the health in large aspect and same factor may have less of as impact

- Social Environment and Economic

Higher in come and social status are related to better the health. Person having good income have access to good health facility, food and other life comfort can lead to healthy life

- Education

A person with good education can understand the importance of being healthy than a low educated person. Low education are related to poor health, more stress and low self-esteem.

- Physical Environment

A person lives in healthy environment having easy access to natural things, safe water 'clean air' healthy work place, safe houses, Communities and roads all contribute to good health.

- Occupation

A person working in safe place, have more control over the working condition are considered to be healthy Many occupation can lead to many disease, e.g., a person work in cotton factory leads to Bagassosis like diseases.

- Social Support

A person having good support of family, friends and Communities leads to a healthy life and having less chance to get disease like depression, anxiety, etc

- Culture

Many customs tradition beliefs and value of a family can affect the health in both way either positively or negatively, e.g., practice of giving Honey after child birth is wrong practice whereas providing mother a good diet after child birth can effect the health in both ways.

- Genetics

Inherited characters and genes from generation to next generation plays an important part in health Person behavior and life skills deal with life problems and challenges.

- Gender

Men and women suffer from different type of diseases at different age group. e.g. women are more prone to Osteoporosis after menopause and males are more prone to cardiovascular diseases

Que 4. Very short notes (solve any 4 out of 5)

a) Enlist food borne diseases

Ans : definitions

"Foodborne disease or food poisoning is defined as any illness of a toxic or infectious nature contracted through consumption of contaminated water or food"

"Foodborne illness" is an umbrella term that describes any illness caused by consuming foods or beverages contaminated with harmful pathogens - such as bacteria, viruses, and fungi or their toxins

Food borne diseases are:

- Bacterial Foodborne Diseases:

1. Salmonellosis – Salmonella spp.
2. Listeriosis – Listeria monocytogenes
3. E. coli infection – Escherichia coli (especially E. coli O157:H7)
4. Campylobacteriosis – Campylobacter jejuni
5. Cholera – Vibrio cholerae
6. Shigellosis (Bacillary dysentery) – Shigella spp.
7. Botulism – Clostridium botulinum
8. Staphylococcal food poisoning – Staphylococcus aureus

9. Clostridium perfringens food poisonous

- Viral Foodborne Diseases:

1. Hepatitis A
2. Norovirus infection (Norwalk virus)
3. Rotavirus (mainly in children)

- Parasitic Foodborne Diseases:

1. Amebiasis – Entamoeba histolytica
2. Giardiasis – Giardia lamblia
3. Toxoplasmosis – Toxoplasma gondii
4. Trichinosis – Trichinella spiralis
5. Taeniasis – Taenia solium (pork tapeworm) or Taenia saginata (beef tapeworm)

- Fungal & Other Toxin-related Diseases:

1. Aflatoxicosis – due to Aspergillus flavus (in moldy grains/nuts)
2. Ergotism – from Claviceps purpurea (on contaminated grains)
3. Shellfish poisoning – due to marine toxins (e.g., saxitoxins)

b) Components of school health services

Ans : School health services in India typically encompass a range of components aimed at promoting the overall health and well-being of students. These components can vary from one region to another based on local policies and initiatives, but here are some common components often found in Indian school health programs:

- Health appraisal
- Prevention of communicable diseases
- Nutritional services
- Immunization
- First aid
- Treatment and follow-up
- Mental health
- Dental health
- Eye health services
- Health education
- Healthful school environment
- School Health records
- Education of School handicapped Children.

c) Causes and preventive measures for child abuse

Ans : Causes of Child Abuse:

1. Parental Factors
 - ✓ History of being abused in childhood
 - ✓ Lack of parenting skills or education
 - ✓ Substance abuse (alcohol/drugs)
 - ✓ Mental illness or emotional disorders
 - ✓ Unrealistic expectations of the child

2. Family Factors

- ✓ Domestic violence
- ✓ Poverty and financial stress
- ✓ Family breakdown or divorce
- ✓ Single parenting without support
- ✓ Overcrowding or lack of supervision

3. Social and Environmental Factors

- ✓ Social isolation of the family
- ✓ Poor community support systems
- ✓ Exposure to crime or violence
- ✓ Cultural or traditional beliefs that support harsh punishment

4. Child-related Factors

- ✓ Child with disabilities or chronic illness
- ✓ Undesired or unplanned child
- ✓ Behavioral issues in the child
- ✓ Gender bias (e.g., preference for male child)

• ☒ Preventive Measures of Child Abuse:

1. Parental Support and Education

- ✓ Parenting classes and counselling
- ✓ Stress management and conflict resolution training
- ✓ Educate about positive discipline methods

2. Strengthening Family and Social Support

- ✓ Strengthen family bonds through communication
- ✓ Support groups for parents and caregivers
- ✓ Community and religious group involvement

3. Early Identification and Intervention

- ✓ Teachers, nurses, and social workers trained to spot abuse
- ✓ Reporting suspected abuse to child protection services
- ✓ Timely counseling and therapy for affected children and families

4. Legal and Protective Measures

- ✓ Strict enforcement of child protection laws (like POCSO in India)
- ✓ Child helplines and emergency services (e.g., Childline 1098)
- ✓ Monitoring foster homes, childcare centers, and institutions

5. School and Community-Based Programs

- ✓ Awareness programs in schools about “Good touch, Bad touch”
- ✓ Counseling services in schools
- ✓ Safe environments for children to express themselves

d) Secondary level of prevention

Ans : Secondary Prevention

In this prevention, actual problem has already occurred, i.e., disease occur In this, it focuses on the early diagnosis and treatment of disease. It stops further complications to limit disabilities.

It includes early diagnosis and treatments:

It includes the detection of disease in the earliest stage These facilities provided in homes, CHC, PHC and hospitals. Screening test are used to detect diseases as early as possible. It includes so to cure the disease at early stage. It also includes periodic examination, breast self examination, etc. If some disease are Worson then will be referred to tertiary level care for further management.

e) Uses of epidemiology

Ans : Epidemiology is a strategy for the study of factors relating to the etiology, prevention, and control of disease; to promote health; and to efficiently allocate efforts and resources for health promotion, maintenance and medical care in human populations.

USES OF EPIDEMIOLOGY

- 1 To study the disease trend since past
2. Community diagnosis
3. Planning and evaluation of health services
4. Evaluation of a new therapy or a new health measure
5. Determining the risk to an individual
6. Identification of syndromes
7. Filling in the gaps in the natural history of the disease
8. Searching for the cause of a disease.

MUHS BSC.NSG SEM 4 WINTER 2024

PHARMACOLOGY (31MARKS)

Essay :(Any 1 out of 2) [1x10=10]

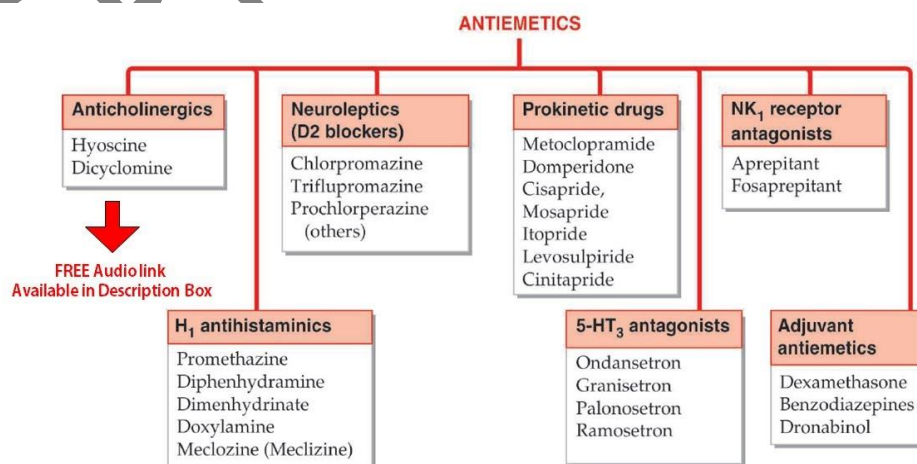
a) Describe various types of antiemetics. Explain in detail mechanism of action and indications of 5-HT₃ antagonists.

ANS-

Intro

Antiemetics are medications that treat nausea and vomiting. They can be used to treat motion sickness, gastroenteritis, and side effects of certain drugs and treatments.

Types



Anticholinergic antiemetics work by blocking acetylcholine receptors, which reduces stimulation of the vomiting center in the brain. They are mainly used to treat or prevent motion sickness.

H1 antihistaminics, such as diphenhydramine (Benadryl) and dimenhydrinate (Dramamine), work by blocking the action of histamine, a chemical released by the body in response to allergic reactions, stress, and other stimuli. Histamine is known to stimulate the vomiting center in the brain, leading to nausea and vomiting.

Neuroleptics, such as metoclopramide (Reglan) and haloperidol (Haldol), work by blocking the action of dopamine, a neurotransmitter that plays a key role in regulating nausea and vomiting. Dopamine is released by the brain in response to various stimuli, including stress, anxiety, and certain medications.

Prokinetics, such as metoclopramide (Reglan) and domperidone (Motilium), work by stimulating the muscles in the stomach and intestines to contract and move food through the digestive system more quickly. This helps to: **Increase gastric motility Increase intestinal motility Reduce gastric stasis**

- **NK1 receptor antagonists** work by blocking the action of substance P, a neurotransmitter that plays a key role in the transmission of pain and nausea signals from the gut to the brain.
- By blocking the NK1 receptor, aprepitant reduces the release of substance P, which helps to reduce nausea and vomiting.

5-HT₃ Antagonists:

1. Ondansetron (Zofran): This is a selective 5-HT₃ receptor antagonist, commonly used to treat nausea and vomiting associated with chemotherapy, radiation therapy, and postoperative care.
2. Palonosetron (Aloxi): Another 5-HT₃ receptor antagonist, used to prevent nausea and vomiting caused by chemotherapy, radiation therapy, and postoperative care.
3. Dolasetron (Anzemet): A 5-HT₃ receptor antagonist used to treat nausea and vomiting associated with chemotherapy and postoperative care.

MAO Inhibitors:

1. Methylsergide (Sergiol): A non-selective MAO inhibitor, used to treat migraines, cluster headaches, and other vascular headaches. It can also be used as an antiemetic.
2. Methyldopa (Aldomet): A non-selective MAO inhibitor, primarily used to treat hypertension. It can also have antiemetic effects.

INDICATIONS

Chemotherapy-Induced Nausea and Vomiting:

- Prevention of nausea and vomiting caused by:
 - Highly emetogenic chemotherapy regimens (e.g. cisplatin, cyclophosphamide)
 - Moderately emetogenic chemotherapy regimens (e.g. anthracyclines, taxanes)
 - Low-emetogenic chemotherapy regimens (e.g. fluorouracil, methotrexate)

Postoperative Nausea and Vomiting:

- Prevention of nausea and vomiting after:
 - Abdominal surgery
 - Gynecological surgery
 - Orthopedic surgery
 - Neurosurgery
 - Cardiothoracic surgery

Radiation Therapy-Induced Nausea and Vomiting:

- Prevention of nausea and vomiting caused by:
 - Radiation therapy to the abdomen or pelvis
 - Radiation therapy to the head and neck

Other Indications:

- Migraines: 5-HT₃ antagonists such as ondansetron (Zofran) and granisetron (Kytril) have been used off-label to treat migraines, particularly in patients who have not responded to other treatments.
- Post-traumatic stress disorder (PTSD): 5-HT₃ antagonists such as ondansetron (Zofran) have been used off-label to treat PTSD, particularly in patients who have not responded to other treatments.
- Gastroesophageal reflux disease (GERD): 5-HT₃ antagonists such as ondansetron (Zofran) have been used off-label to treat GERD, particularly in patients who have not responded to other treatments.

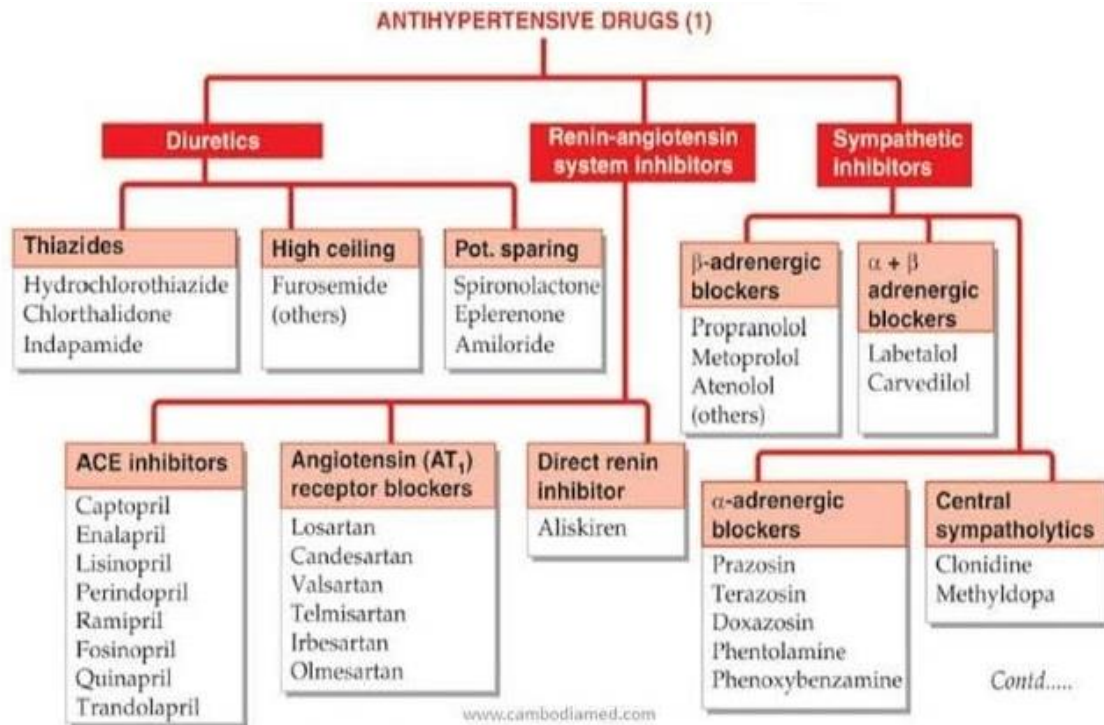
b) Classify antihypertensive agents. Describe in detail mechanism of action, therapeutic uses and nurses responsibilities of calcium channel blockers.

ANS:

INTRO

Antihypertensive agents, also known as blood pressure medications, are drugs used to treat high blood pressure. They work in different ways to lower blood pressure.

CLASSIFICATION



Mechanism of Action:

Calcium channel blockers (CCBs) are a class of medications that work by blocking the entry of calcium ions into the smooth muscle cells of blood vessels. This reduces the contraction of these muscle cells, causing the blood vessels to dilate and blood pressure to decrease.

Here's a step-by-step explanation of the mechanism of action:

1. Calcium ions (Ca^{2+}) enter the smooth muscle cells of blood vessels through voltage-gated calcium channels.
2. The calcium ions bind to calmodulin, a protein that regulates muscle contraction.
3. The binding of calcium ions to calmodulin triggers a cascade of events that ultimately leads to muscle contraction.
4. CCBs bind to the voltage-gated calcium channels, preventing calcium ions from entering the smooth muscle cells.
5. With fewer calcium ions available, the muscle cells are unable to contract as strongly, causing the blood vessels to dilate.

6. The dilation of blood vessels reduces blood pressure, which can help to alleviate symptoms of hypertension, angina, and other cardiovascular conditions.

Therapeutic Uses:

CCBs are used to treat a variety of cardiovascular conditions, including:

1. Hypertension: CCBs are effective in reducing blood pressure in patients with essential hypertension.
2. Angina: CCBs can help to relieve symptoms of angina by reducing the frequency and severity of chest pain.
3. Atrial fibrillation: CCBs can help to control the heart rate and rhythm in patients with atrial fibrillation.
4. Heart failure: CCBs can help to reduce the symptoms of heart failure by reducing blood pressure and improving cardiac output.
5. Raynaud's phenomenon: CCBs can help to improve blood flow to the fingers and toes in patients with Raynaud's phenomenon.

Nurses' Responsibilities:

As a nurse, your responsibilities when caring for patients taking CCBs include:

1. Monitoring blood pressure: Regularly monitor your patient's blood pressure to ensure that it is within a safe range.
2. Assessing for signs of hypotension: Monitor your patient for signs of hypotension, such as dizziness, lightheadedness, or fainting.
3. Monitoring for signs of angina: Monitor your patient for signs of angina, such as chest pain or discomfort.
4. Educating patients: Educate your patients on the importance of taking their medication as directed and the potential side effects of CCBs.
5. Monitoring for interactions: Monitor your patient for interactions with other medications, such as beta blockers or diuretics, which can increase the risk of hypotension.
6. Providing patient education: Provide your patient with information on how to manage their condition, including lifestyle changes and self-care techniques.
7. Monitoring for side effects: Monitor your patient for side effects of CCBs, such as headaches, dizziness, or constipation.

3. Short Notes :(Any 3 out of 4) [3x5=15]

a) Pharmacological management of acute asthmatic attack and nurses responsibilities.

ANS-

Acute Asthmatic Attack:

An acute asthmatic attack is a sudden and severe episode of asthma symptoms that can be life-threatening if not treated promptly and effectively. It is characterized by a sudden onset of wheezing, coughing, chest tightness, and shortness of breath, which can worsen rapidly.

Pharmacological Management of Acute Asthmatic Attack:

The pharmacological management of an acute asthmatic attack involves the use of bronchodilators, corticosteroids, and other medications to relieve symptoms and prevent further exacerbations. Here are some common medications used to manage acute asthma:

1. Bronchodilators:

- Beta2-agonists (e.g., albuterol, salmeterol): These medications relax the airway muscles, allowing for easier breathing.
- Anticholinergics (e.g., ipratropium): These medications block the action of acetylcholine, which can cause airway constriction.

2. Corticosteroids:

- Inhaled corticosteroids (e.g., fluticasone, budesonide): These medications reduce inflammation in the airways, which can help to relieve symptoms.
- Systemic corticosteroids (e.g., prednisone): These medications are used to treat severe asthma exacerbations and can help to reduce inflammation.

3. Other medications:

- Methylxanthines (e.g., theophylline): These medications can help to relax the airway muscles and improve lung function.
- Cromolyn sodium: This medication can help to prevent airway constriction and reduce inflammation.

Nurses' Responsibilities:

As a nurse, your responsibilities when caring for a patient with an acute asthmatic attack include:

1. Assessing the patient's symptoms: Monitor the patient's symptoms, such as wheezing, coughing, and shortness of breath, to determine the severity of the attack.
2. Administering medications: Administer bronchodilators, corticosteroids, and other medications as prescribed by the physician.
3. Providing oxygen therapy: Provide oxygen therapy to help the patient breathe more easily.
4. Monitoring vital signs: Monitor the patient's vital signs, such as heart rate, blood pressure, and oxygen saturation, to ensure that they are stable.
5. Providing education: Educate the patient on how to use their medications, how to recognize signs of an asthma attack, and how to manage their condition.
6. Monitoring for side effects: Monitor the patient for side effects of medications, such as tremors, tachycardia, and hypokalemia.
7. Providing emotional support: Provide emotional support to the patient and their family, as an acute asthmatic attack can be a frightening and stressful experience.

b) Describe mechanism of action and therapeutic uses of oxytocin.

ANS-

Oxytocin is a hormone and neurotransmitter that plays a crucial role in various physiological and psychological processes. Its mechanism of action and therapeutic uses are multifaceted and diverse.

Mechanism of Action:

1. Oxytocin is released by the posterior pituitary gland in response to physical touch, social bonding, and emotional stimuli.
2. It binds to specific receptors in the brain, particularly in the hypothalamus, amygdala, and hippocampus, which are involved in emotional processing, social behavior, and memory formation.
3. Oxytocin activates the release of neurotransmitters such as dopamine, serotonin, and GABA, which contribute to its anxiolytic, antidepressant, and anti-stress effects.
4. Oxytocin also modulates the activity of the hypothalamic-pituitary-adrenal (HPA) axis, which regulates the body's response to stress.

Therapeutic Uses:

1. **Labor and Delivery:** Oxytocin is commonly used to stimulate uterine contractions during labor, helping to facilitate a smoother and more efficient delivery.
2. **Postpartum Care:** Oxytocin is used to help with uterine involution and reduce postpartum bleeding.
3. **Anxiety and Stress Relief:** Oxytocin has been shown to have anxiolytic and anti-stress effects, making it a potential treatment for anxiety disorders.
4. **Depression:** Oxytocin has been investigated as a potential adjunctive treatment for depression, particularly in individuals with social anxiety disorder.
5. **Autism Spectrum Disorder (ASD):** Oxytocin has been explored as a potential treatment for ASD, as it may help improve social cognition and behavior.

6. **Social Bonding:** Oxytocin has been used to enhance social bonding and attachment in individuals with autism, schizophrenia, and other conditions.
7. **Pain Management:** Oxytocin has been shown to have analgesic effects, making it a potential treatment for chronic pain.
8. **Gastrointestinal Disorders:** Oxytocin has been used to treat gastrointestinal motility disorders, such as irritable bowel syndrome (IBS).
9. **Menopausal Symptoms:** Oxytocin has been investigated as a potential treatment for menopausal symptoms, such as hot flashes and night sweats.

c) Describe mechanism of action and therapeutic uses of benzodiazepines.

ANS-

Benzodiazepines are a class of medications that work by enhancing the activity of the neurotransmitter gamma-aminobutyric acid (GABA), which is the primary inhibitory neurotransmitter in the brain. GABA helps to calm down or slow down the activity of neurons, leading to a decrease in anxiety, muscle tension, and other symptoms.

Mechanism of Action:

1. Benzodiazepines bind to specific receptors on GABA neurons, increasing the frequency and duration of GABA-mediated chloride channel opening.
2. This increased chloride channel opening leads to an influx of chloride ions into the neuron, causing a hyperpolarization of the neuron's membrane potential.
3. As a result, the neuron becomes less likely to fire, leading to a decrease in the activity of other neurons and a calming effect on the brain.
4. Benzodiazepines also have a rapid onset of action, typically within 30-60 minutes, and a relatively short duration of action, typically 6-12 hours.

Therapeutic Uses:

1. Anxiety Disorders: Benzodiazepines are commonly used to treat anxiety disorders such as generalized anxiety disorder, panic disorder, and social anxiety disorder.
2. Insomnia: Benzodiazepines can help individuals fall asleep and stay asleep, making them a common treatment for insomnia.
3. Muscle Relaxation: Benzodiazepines can help relax muscles and reduce muscle spasms, making them a common treatment for muscle tension and spasms.
4. Seizure Control: Benzodiazepines can be used to treat seizures, particularly in combination with other anticonvulsant medications.
5. Sedation: Benzodiazepines can be used as a sedative to help individuals relax and fall asleep, particularly in situations where other sedatives may not be effective.

Examples of benzodiazepines include:

- Alprazolam (Xanax)
- Diazepam (Valium)
- Clonazepam (Klonopin)
- Lorazepam (Ativan)
- Temazepam (Restoril)

d) Describe in detail preanesthetic medications.

Preanesthetic medications, also known as premedications, are medications administered to patients before anesthesia to help prepare them for surgery and anesthesia. The primary goals of preanesthetic medications are to:

1. Reduce anxiety and stress
2. Relieve pain
3. Promote relaxation
4. Enhance the effectiveness of anesthesia
5. Minimize side effects

Types of Preanesthetic Medications:

1. Anxiolytics:

- Benzodiazepines (e.g., midazolam, diazepam): These medications help reduce anxiety and promote relaxation.
- Non-benzodiazepines (e.g., buspirone): These medications have a similar effect to benzodiazepines but are less likely to cause dependence.

2. Sedatives:

- Barbiturates (e.g., pentobarbital): These medications can induce sleep and reduce anxiety.
- Propofol: This medication is often used as a sedative and can also be used as an anesthetic agent.

3. Antihistamines:

- Diphenhydramine (Benadryl): This medication can help reduce anxiety and promote relaxation.

4. Anti-emetics:

- Ondansetron (Zofran): This medication can help prevent nausea and vomiting during and after anesthesia.

5. Muscle relaxants:

- Rocuronium (Zemuron): This medication can help relax muscles and reduce muscle spasms.

Mechanisms of Action:

1. Anxiolytics: Bind to GABA receptors, increasing the activity of GABA, which has a calming effect on the brain.

2. Sedatives: Bind to GABA receptors, increasing the activity of GABA, which can induce sleep and reduce anxiety.
3. Antihistamines: Block histamine receptors, which can help reduce anxiety and promote relaxation.
4. Anti-emetics: Block serotonin receptors, which can help prevent nausea and vomiting.
5. Muscle relaxants: Bind to nicotinic receptors, which can help relax muscles and reduce muscle spasms.

Indications for Preanesthetic Medications:

1. Anxiety or stress related to surgery
2. Pain management
3. Sedation for procedures
4. Prevention of nausea and vomiting
5. Muscle relaxation

Contraindications for Preanesthetic Medications:

1. Known allergy to the medication
2. History of substance abuse or dependence
3. Respiratory depression
4. Severe liver or kidney disease
5. Pregnancy or breastfeeding (for certain medications)

Side Effects of Preanesthetic Medications:

1. Drowsiness
2. Dizziness
3. Confusion
4. Nausea and vomiting
5. Respiratory depression
6. Allergic reactions

Administration of Preanesthetic Medications:

1. Oral: Taken by mouth, usually 30-60 minutes before surgery.
2. Intravenous (IV): Administered through a vein, usually 15-30 minutes before surgery.
3. Intramuscular (IM): Injected into a muscle, usually 30-60 minutes before surgery.

4. Very Short Notes : (Any 3 out of 4) [3×2=6]

a) Types of hormone replacement therapy.

ANS-

Hormone replacement therapy (HRT) is a treatment that involves replacing or supplementing hormones that are naturally produced by the body. There are several types of HRT, including:

1. Estrogen-only HRT: This type of HRT involves taking estrogen alone, without progesterone. It is often used to treat menopausal symptoms such as hot flashes and vaginal dryness.
2. Combination HRT: This type of HRT involves taking both estrogen and progesterone. It is often used to treat menopausal symptoms and to prevent osteoporosis.
3. Bioidentical HRT: This type of HRT involves taking hormones that are identical to the hormones produced by the body. Bioidentical hormones are often used to treat menopausal symptoms and to prevent osteoporosis.
4. Customized HRT: This type of HRT involves taking a combination of hormones that are tailored to an individual's specific needs and symptoms.
5. Systemic HRT: This type of HRT involves taking hormones through the bloodstream, which can be done through pills, patches, or injections.
6. Local HRT: This type of HRT involves applying hormones directly to the affected area, such as the vagina or skin.
7. Topical HRT: This type of HRT involves applying hormones to the skin, which can be done through creams, gels, or patches.
8. Vaginal HRT: This type of HRT involves applying hormones directly to the vagina, which can be done through creams, rings, or tablets.
9. Progesterone-only HRT: This type of HRT involves taking progesterone alone, without estrogen. It is often used to treat symptoms such as heavy bleeding or mood changes.
10. Testosterone replacement therapy (TRT): This type of HRT involves taking testosterone to treat low testosterone levels, which can cause symptoms such as low libido, fatigue, and decreased muscle mass.

11. Human growth hormone (HGH) replacement therapy: This type of HRT involves taking HGH to treat growth hormone deficiency, which can cause symptoms such as short stature, delayed puberty, and decreased muscle mass.
12. Thyroid hormone replacement therapy: This type of HRT involves taking thyroid hormones to treat hypothyroidism, which can cause symptoms such as fatigue, weight gain, and dry skin.

It's important to note that HRT should only be started under the guidance of a healthcare provider, and it's essential to carefully weigh the benefits and risks of HRT before starting treatment.

b) Therapeutic uses of antihistamine agents.

ANS-

Antihistamine agents are commonly used to treat a variety of conditions, including:

1. Allergic reactions: Antihistamines are effective in relieving symptoms of allergic reactions, such as itching, hives, and swelling.
2. Hay fever and other allergic rhinitis: Antihistamines can help alleviate symptoms of hay fever, such as runny nose, congestion, and sneezing.
3. Skin allergies: Antihistamines can be used to treat skin allergies, such as eczema, dermatitis, and contact dermatitis.
4. Hives: Antihistamines can help relieve itching and reduce the size of hives.
5. Itching: Antihistamines can be used to treat itching caused by various conditions, such as atopic dermatitis, psoriasis, and insect bites.
6. Anxiety and insomnia: Some antihistamines, such as diphenhydramine, can have a sedative effect and are sometimes used to treat anxiety and insomnia.
7. Motion sickness: Antihistamines can help alleviate symptoms of motion sickness, such as nausea, vomiting, and dizziness.
8. Sedation: Antihistamines can be used as a sedative to help individuals relax and fall asleep.
9. Pruritus: Antihistamines can be used to treat pruritus, a condition characterized by itching without a rash.
10. Chronic urticaria: Antihistamines can be used to treat chronic urticaria, a condition characterized by recurring hives.

Some specific therapeutic uses of antihistamine agents include:

- Diphenhydramine (Benadryl): used to treat allergic reactions, itching, and insomnia.
- Chlorpheniramine (Chlor-Trimeton): used to treat allergic reactions, itching, and congestion.
- Loratadine (Claritin): used to treat allergic reactions, itching, and congestion.
- Fexofenadine (Allegra): used to treat allergic reactions, itching, and congestion.
- Cetirizine (Zyrtec): used to treat allergic reactions, itching, and congestion.
- Hydroxyzine (Vistaril): used to treat anxiety, insomnia, and itching.

c) Enlist opioids antagonists and its indications.

ANS-

Opioid antagonists are medications that bind to opioid receptors in the brain and body, but do not activate them. Instead, they block the effects of opioids, including their analgesic, euphoric, and sedative effects. Here are some common opioid antagonists and their indications:

1. Naloxone (Narcan):

- Indications: Reversal of opioid overdose, treatment of opioid dependence, and prevention of opioid withdrawal.
- Mechanism of action: Binds to opioid receptors, reversing the effects of opioids and restoring normal breathing and circulation.

2. Naltrexone (ReVia):

- Indications: Treatment of opioid dependence, prevention of relapse, and treatment of alcohol dependence.
- Mechanism of action: Binds to opioid receptors, blocking the effects of opioids and reducing cravings.

3. Methadone (Dolophine):

- Indications: Treatment of opioid dependence, maintenance therapy for opioid addiction, and management of chronic pain.
- Mechanism of action: Binds to opioid receptors, providing a stable and controlled level of opioid activity.

4. Buprenorphine (Subutex, Suboxone):

- Indications: Treatment of opioid dependence, maintenance therapy for opioid addiction, and management of chronic pain.

- Mechanism of action: Binds to opioid receptors, providing a partial agonist effect that reduces cravings and withdrawal symptoms.

5. Clonidine (Catapres):

- Indications: Treatment of opioid withdrawal, hypertension, and attention deficit hyperactivity disorder (ADHD).
- Mechanism of action: Binds to alpha-2 adrenergic receptors, reducing sympathetic nervous system activity and promoting relaxation.

6. Lofexidine (Lucemyra):

- Indications: Treatment of opioid withdrawal, particularly in patients who are not candidates for buprenorphine or methadone.
- Mechanism of action: Binds to alpha-2 adrenergic receptors, reducing sympathetic nervous system activity and promoting relaxation.

Opioid antagonists are used to treat a range of conditions, including:

- Opioid dependence and addiction
- Opioid overdose
- Opioid withdrawal
- Chronic pain
- Anxiety and stress
- Insomnia
- Attention deficit hyperactivity disorder (ADHD)

d) Therapeutic uses of adrenergic blockers.

ANS –

Adrenergic blockers, also known as beta blockers, are medications that block the effects of the neurotransmitter norepinephrine (also known as noradrenaline) on the heart and blood vessels. They are commonly used to treat a variety of conditions, including:

1. Hypertension (high blood pressure): Adrenergic blockers can help lower blood pressure by reducing the heart rate and blood vessel constriction.
2. Angina pectoris: Adrenergic blockers can help reduce the frequency and severity of angina attacks by reducing the heart rate and blood pressure.

3. Heart failure: Adrenergic blockers can help reduce the symptoms of heart failure by reducing the heart rate and blood pressure.
4. Migraines: Adrenergic blockers can help reduce the frequency and severity of migraines by blocking the release of norepinephrine.
5. Anxiety and panic disorders: Adrenergic blockers can help reduce anxiety and panic symptoms by blocking the effects of norepinephrine on the brain.
6. Performance anxiety: Adrenergic blockers can help reduce performance anxiety by blocking the effects of norepinephrine on the brain.
7. Tremors: Adrenergic blockers can help reduce tremors by blocking the effects of norepinephrine on the brain.
8. Insomnia: Adrenergic blockers can help reduce insomnia by blocking the effects of norepinephrine on the brain.
9. Attention deficit hyperactivity disorder (ADHD): Adrenergic blockers can help reduce symptoms of ADHD by blocking the effects of norepinephrine on the brain.
10. Post-traumatic stress disorder (PTSD): Adrenergic blockers can help reduce symptoms of PTSD by blocking the effects of norepinephrine on the brain.

Some specific therapeutic uses of adrenergic blockers include:

- Propranolol (Inderal): used to treat hypertension, angina pectoris, and performance anxiety.
- Metoprolol (Lopressor): used to treat hypertension, angina pectoris, and heart failure.
- Atenolol (Tenormin): used to treat hypertension, angina pectoris, and heart failure.
- Nadolol (Corgard): used to treat hypertension, angina pectoris, and heart failure.
- Pindolol (Visken): used to treat hypertension, angina pectoris, and performance anxiety.



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Third Semester B.Sc. Nursing (2022) Examination

Subject : Adult Health Nursing – I

Section - B

(Total Marks: 63)

2. Essay / Situation Type (Solve any 2 out of 3) (2×15=30 Marks)

(a)

Shri Ram Lal, aged 65 years, is admitted in ortho ward for below knee amputation.

- Define fracture.
- Write the classification of fractures.
- Write medical and surgical management of fracture.
- Write the pre-operative and post-operative nursing care for a patient undergoing amputation.

(a) Fracture and Amputation Nursing Care

• Definition of Fracture:

A fracture is a break in the continuity of a bone due to trauma, stress, or pathological conditions.

b) Classification of Fractures:

- **Based on skin integrity:** Open (compound), Closed (simple).
- **Based on bone position:** Displaced, Non-displaced.
- **Based on fracture pattern:** Transverse, Oblique, Spiral, Comminuted, Greenstick.

c) Medical and Surgical Management of Fracture:

- **Medical:** Immobilization (cast, splint, traction), Pain management, Bone grafting.



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Dietary Management of Diabetes Mellitus:

Low-carbohydrate, high-fiber diet.

Avoidance of sugary foods and refined carbohydrates.

Frequent small meals with a balanced intake of proteins, fats, and complex carbohydrates.

Diabetic Foot Care:

Daily foot inspection for ulcers and infections.

Proper hygiene and moisturizing to prevent cracks.

Avoiding barefoot walking.

Properly fitting footwear and regular podiatric check-ups.

(c)

- Enlist types of anemia.
- Write etiological factors & clinical manifestation of iron deficiency anemia.
- Discuss medical and nursing management of a patient with severe anemia based on two priority problems.

Types of Anemia:

Iron deficiency anemia

Vitamin B12 deficiency anemia

Hemolytic anemia

Aplastic anemia

Sickle cell anemia

Etiological Factors and Clinical Manifestations of Iron Deficiency Anemia:

Causes: Poor diet, chronic blood loss, malabsorption.

Symptoms: Fatigue, pallor, shortness of breath, brittle nails, palpitations.



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Medical and Nursing Management:

Medi cal: Iron supplements, Blood transfusion, Treating underlying causes.

Nursing Care: Monitoring hemoglobin levels, Dietary counseling, Administering iron therapy, Preventing complications like heart failure.

3. Short Notes (Solve any 5 out of 6)

(5×5=25 Marks)

(a) Leukemia

Leukemia is a cancer of blood-forming tissues, leading to an overproduction of abnormal white blood cells, causing anemia, infections, and bleeding tendencies.

(b) Pathophysiology of Liver Cirrhosis

Progressive scarring of liver tissue due to chronic liver disease, leading to portal hypertension, ascites, jaundice, and liver failure.

(c) Post-Operative Complications of Thyroid Surgery

- Hemorrhage
- Respiratory distress due to laryngeal edema
- Hypocalcemia due to accidental parathyroid removal
- Thyroid storm

(d) Medications Used in Pulmonary Tuberculosis

- First-line drugs: Isoniazid (INH), Rifampicin, Ethambutol, Pyrazinamide
- Second-line drugs: Streptomycin, Fluoroquinolones



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(e) Eczema

A chronic inflammatory skin condition characterized by redness, itching, and scaling, often triggered by allergens or irritants.

(f) Risk Factors of Coronary Artery Diseases

- Modifiable: Smoking, Hypertension, Diabetes, Obesity
- Non-modifiable: Age, Genetics, Gender

4. Very Short Notes (Solve any 4 out of 5)

(4×2=8 Marks)

Very Short Notes

(a) Principles of Intercostal Drainage

- Used for draining air, blood, or fluid from the pleural cavity.
- Includes underwater seal drainage.

(b) Enlist Types of Shock

- Hypovolemic shock
- Cardiogenic shock
- Septic shock
- Neurogenic shock
- Anaphylactic shock

(c) Stages of Wound Healing

- Hemostasis
- Inflammation
- Proliferation
- Maturation

Abhiye

Principal

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- **Surgical:** Open Reduction and Internal Fixation (ORIF), External Fixation, Arthroplasty.

d) Pre-operative Nursing Care for Amputation:

- Psychological preparation and counseling.
- Pain management.
- Assessment of circulation and sensation.
- Educating the patient about post-operative care.

e) Post-operative Nursing Care for Amputation:

- Pain control and monitoring for infection.
- Stump care and dressing changes.
- Prevention of complications like contractures and phantom limb pain.
- Rehabilitation and prosthetic training.

(b)

- Define diabetes mellitus.
- Explain the pathophysiology of type 1 diabetes mellitus.
- Write dietary management of a patient with diabetes mellitus.
- Write a note on diabetic foot care.

Definition of Diabetes Mellitus:

A metabolic disorder characterized by hyperglycemia due to insulin deficiency or resistance.

Pathophysiology of Type 1 Diabetes Mellitus:

Autoimmune destruction of pancreatic β -cells.

Reduced insulin production.

Increased blood glucose levels.

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