



**1st & 2nd**  
Year

## MASTERING Postgraduate Series

# Advanced Nursing Practice, Nursing Education, Nursing Management, and Nursing Research & Statistics SOLVED QUESTION PAPERS

*for MSc Nursing University Exams*

*(As per the INC Syllabus for MSc Nursing)*

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Advanced Nursing Practice, Nursing Education,  
Nursing Management, and Nursing Research & Statistics  
*(Including 1st and 2nd Year)*

**MGR**

**RUHS**

**DU**

**KUHS**

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**AIIMS**

**NTR**

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- Includes Extra Edge section in the beginning covering important last-minute revision topics related to subject in the form of tables, one-liners and spotters for quick glance



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# ADVANCED NURSING PRACTICE

## NURSING AS A PROFESSION

### SHORT ANSWER QUESTIONS

Knowledge Tree  
An Initiative by CBS Nursing Division

**Q1.** Define nursing.

(BFUHS, KUHS, MGR, RUGS, DU, CCU)

**Ans.**

*“Nursing is to bring the healthy and those who are suffering from disease to a condition for nature to act for preserving health, preventing disease and injury and to restore health and cure disease.”*

—**Florence Nightingale**

*“Nursing includes providing independent and team-based care to people of all ages, families, groups, and communities, whether they are ill or not, and in whatever setting.”*

—**International Council of Nurses (ICN)**

*“The unique function of the nurse is to assist the individual, sick or well, in the performance of those activities contributing to health or its recovery (or to a peaceful death) that he would perform unaided if he had the necessary strength, will, or knowledge and to do this in such a way as to help him gain independence as rapidly as possible.”*

—**Virginia Henderson**

**Q2.** What is code of ethics?

(RUHS, MGR, KUHS, RGHHS, BFUHS, DU, ABVHS)

**Ans.**

A code of ethics is a formal statement of group ideals and values.

## 2 Mastering the Postgraduate Series (MSc Nursing)

It is the obligation of nurses to deliver high quality care to the patients. They should be familiar with ethical codes of conduct and the basics of ethical decision-making because they undoubtedly encounter a variety of ethical dilemmas in their clinical practice.

### Code of Ethics for Nurses in India

- The nurse respects the uniqueness of individual in provision of care.
- The nurse respects the rights of individuals as partner in care and helps in making informed choices.
- The nurse respects individual's right to privacy, maintains confidentiality, and shares information judiciously.
- Nurse maintains competence in order to render quality nursing care.
- The nurse is obliged to practice within the framework of ethical, professional and legal boundaries.
- Nurse is obliged to work harmoniously with the members of the health team.
- Nurse commits to reciprocate the trust invested in nursing profession by society.

#### Reference:

Zahedi F, Sanjari M, Aala M, Peymani M, Aramesh K, Parsapour A, et al. *The Code of Ethics for Nurses. Iran J Public Health. 2013 Jan 1;42 (Supple1):1–8.*

### Q3. Enumerate the regulatory bodies and professional associations in nursing.

#### Ans.

Regulatory body may be defined as an entity that has the legal authority to control certain facets of human behavior. Main function of regulatory bodies in nursing is to maintain uniformity in nursing education and nursing practice across the globe.

Regulatory bodies are:

- International Council for Nurses.
- Indian Nursing Council.
- State Nursing Council.

Professional association reflects the natural tendency of people to join together for a common purpose, the development of commerce and industry and the political and social realities of achieving public recognition and prestige.

Professional associations are:

- Trained Nurses Association of India
- Student Nursing Association.
- Health Visitor League
- Midwives and Auxiliary Nurse Midwives Association
- Nursing Research Society of India
- State Nursing Associations

Other associations are:

- Commonwealth Nurses Association
- The Christian Nurses' League

- The Catholic Nurses Guild of India
- The Indian Red Cross Society

**Reference:**

*Textbook of ANP by Brar & Rawat, P. 29*

**Q4. Write the scope and various career opportunities in nursing.**  
(RUHS, MGR, KUHS, RGUHS, BFUHS, DU, ABVHS)

**Ans.**

There are many career opportunities for nurses. Nurses can work in hospital settings as well as in teaching side.

**Various nursing fields are:**

- Nurse practitioner
- School health nurse
- Nursing advisors in the Government sector
- Nursing assistant
- Supervisors
- Forensic nursing
- Teachers/Professors
- Nurse researcher
- Military nurse
- Transcultural nursing
- Space nursing
- Nurse clinician
- Telenursing
- Occupational nursing
- Traveler nurse
- Home care nurse

Position	Qualification		Roles
Independent nurse practitioner	Post doctoral degree in Nursing		<b>Nurse Researcher</b> <ul style="list-style-type: none"> <li>• Investigates nursing problems to improve care</li> <li>• Expand the scope of nursing</li> </ul>
Dean Nursing director	PhD in Nursing (5 years) MPhil in Nursing (2 years)		<b>Nursing Administrators</b> <ul style="list-style-type: none"> <li>• In education</li> <li>• In hospital services</li> </ul>
Reader Professor Assistant professor Lecturer Associate professor	MSc in Nursing (2 years)		<b>Nurse Educator</b> <ul style="list-style-type: none"> <li>• Works in schools of nursing</li> <li>• Provides educational programs for student nurses</li> <li>• Nursing service</li> </ul>
Diploma certification program <ul style="list-style-type: none"> <li>• Critical care nurse practitioners</li> <li>• Cardio thoracic nursing</li> <li>• Family nurse practitioner</li> </ul>	Post-Basic BSc (2 years)  Diploma in Nursing and Midwifery (3 years) (DGNM)	BSc in Nursing (4 years)	<b>Clinical Nurse Specialist</b> <ul style="list-style-type: none"> <li>• Patient care</li> <li>• Clinical educator</li> <li>• Nurse practitioners</li> <li>• Nurse midwives</li> <li>• Nurse anesthetists</li> <li>• Nurse researcher</li> </ul>
Auxiliary nurse midwifery (2 years)	Higher secondary students		Home visit



- Uses judgment in relation to individual competence while accepting and delegating responsibility
- Facilitates conducive work culture in order to achieve institutional objectives
- Communicates effectively following appropriate channels of communication
- Participates in performance appraisal
- Participates in evaluation of nursing services
- Participates in policy decisions, following the principle of equity and accessibility of services
- Works with individuals to identify their needs and sensitizes policy makers and funding agencies for resource allocation.
- **Professional advancement:**
  - Ensures the protection of the human rights while pursuing the advancement of knowledge
  - Contributes to the development of nursing practice
  - Participates in determining and implementing quality care
  - Takes responsibility for updating own knowledge and competencies
  - Contributes to core of professional knowledge by conducting and participating in research.

**Reference:**

RVS Nursing College / Top Rated Nursing Colleges in Coimbatore [Internet]. [cited 2022 Dec 16]. Available from: <https://www.rvsnursing.ac.in/code-of-ethics-for-nurses-in-india.php>

**Q7. Explain ethical principles in nursing.**

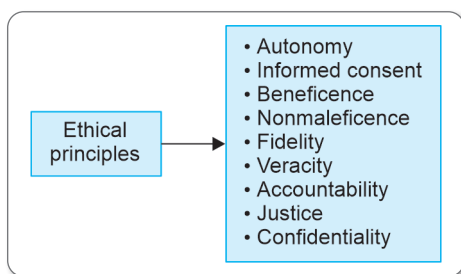
(RUHS, MGR, KUHS, RGUHS, BFUHS, DU, ABVHS)

**Ans.**

Ethical principles are the set of guiding principles that govern how nurses should behave or work in the hospital settings.

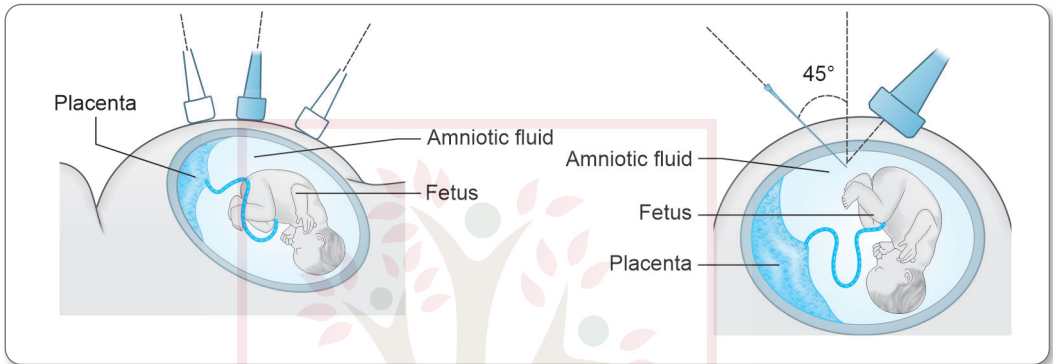
**Principles of Ethics**

- **Autonomy:** It simply means self-determination. The right to make their own decisions based on their own beliefs and values. It is the responsibility of doctors and nurses to provide full information to the patient regarding their treatment. After that, it is only decided by the patient whether they want to undergo that treatment or not.
- **Beneficence:** It means “**do good to the patient**”. Nurses should always look over the risk benefit ratio. **For example:** COVID vaccination is good in order to get prevention from COVID infection. But while administering the vaccine, patient may experience pain. But here the benefit is more than risk.
- **Nonmaleficence:** It means “**avoiding harm to the patient**”.
- **Fidelity:** It means faithfulness. Maintain the trust with the patient and family members is most important.
- **Veracity:** It means telling the truth only. Nurses need to be honest while providing care to the patients and their families. Do not make any false promises.



## Amniocentesis

Amniocentesis is a technique for withdrawing amniotic fluid from the uterine cavity *via* a transabdominal approach and under continuous ultrasound guidance to obtain a sample of fetal exfoliated cells, transudates, urine or secretions.

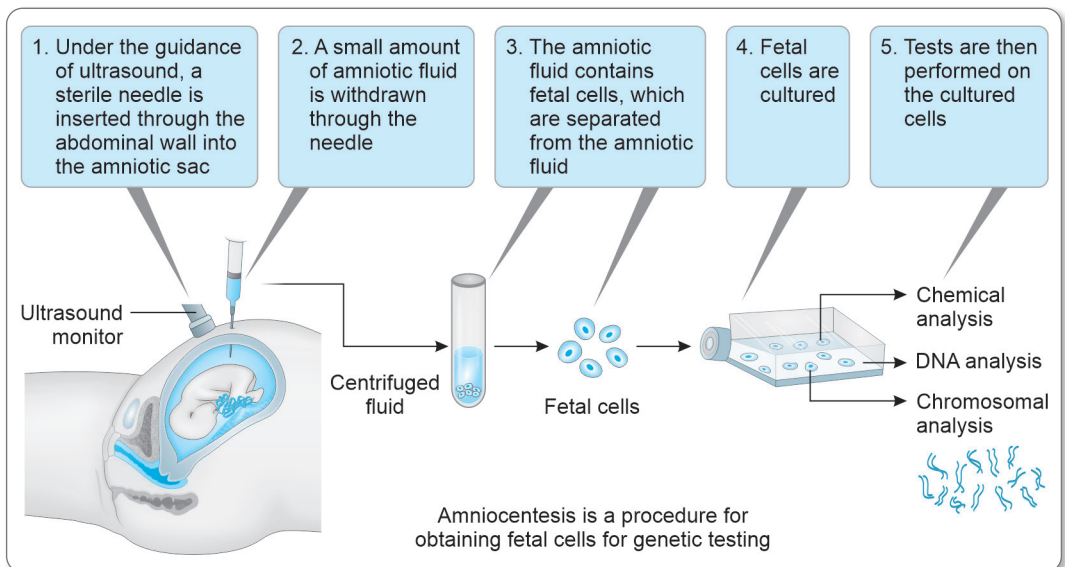


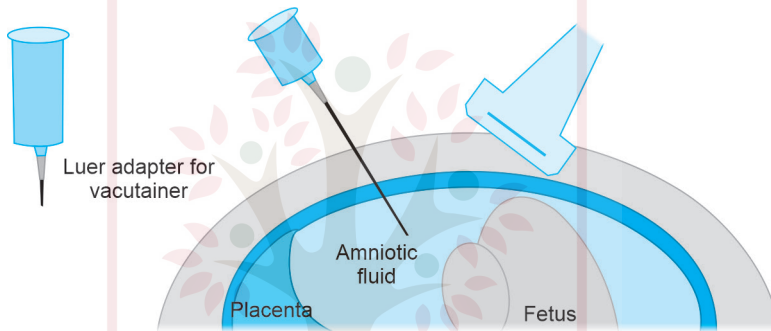
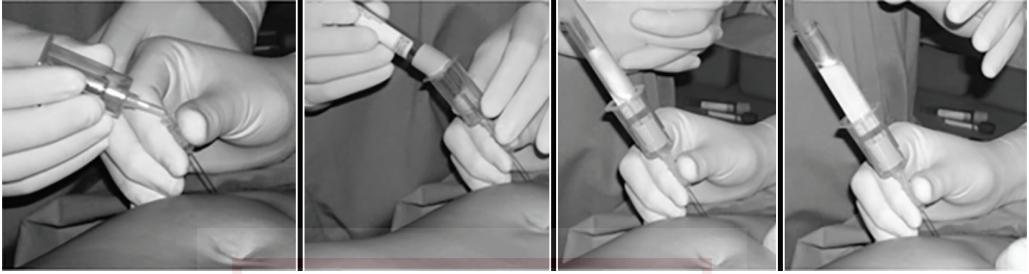
**Transverse sweep of the maternal abdomen shown in a sagittal view, with the ultrasound probe perpendicular to the abdominal surface**

**Puncture of the maternal abdominal wall into the uterine cavity, shown in a transverse view; note the needle and the ultrasound probe each at a 45° angle with regard to the mid-sagittal plane of the maternal abdomen**

- It is performed at 15–20 weeks of gestation. Approximately 18–20 mL of amniotic fluid is aspirated for testing. It is an out-patient procedure. Proper written informed consent must be obtained from the couple after disclosing the information about the benefits and harms related to procedure. After the procedure, patient is kept under strict observation and monitored for side-effects.

## Procedure





**Amniotic fluid aspiration with the vacutainer system**

### Indications

- Genetic amniocentesis
- Chromosomal analysis (Down syndrome)
- Spina Bifida (Alpha-fetoprotein)
- Inherited diseases (Muscular dystrophy)
- Bilirubin level in isoimmunization
- Fetal lung maturation (L/S ratio)

### Therapeutic Amniocentesis

- Reduce maternal stress in polyhydramnios
- Mainly in twin-twin transfusion or if abnormality associated

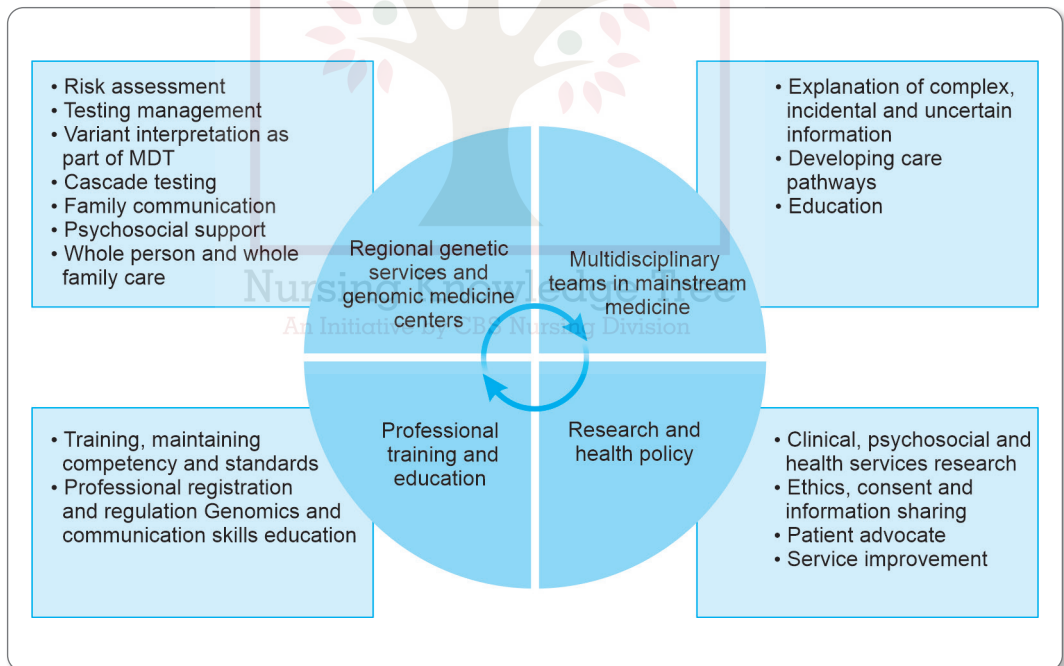
### Relative contraindications for amniocentesis include:

- Hepatitis B and HIV infections can be transmitted from maternal circulation to the fetus during the procedure. It should be deferred in HIV-infected patients until antiretroviral treatment is started and the viral load substantially decreases.

**Genetic counseling** is the process by which patients or relatives, at risk of an inherited disorder, are advised of the consequences and nature of the disorder, the probability of transmitting it and options open to them in management and family planning in order to prevent, avoid and ameliorate it.

**Nurses play a pivotal role in genetic counseling.**

- Nurses can raise awareness of prenatal testing for pregnant women.
- Assessment and analysis of risk factors for hereditary and nonhereditary diseases.
- Assists doctors in many diagnostic procedures associated with genetic testing.
- Making family tree/pedigree.
- Explaining the available genetic tests, their purpose, benefits and risks associated with the genetic tests.
- Provide nursing care to patients and families at risk of or affected by diseases with a genetic component.
- Acts as a referral agent to a genetic counselor if a genetic disorder exists.
- Provide emotional support for couples and families suffering from genetic conditions.
- Referral to appropriate self-help groups.



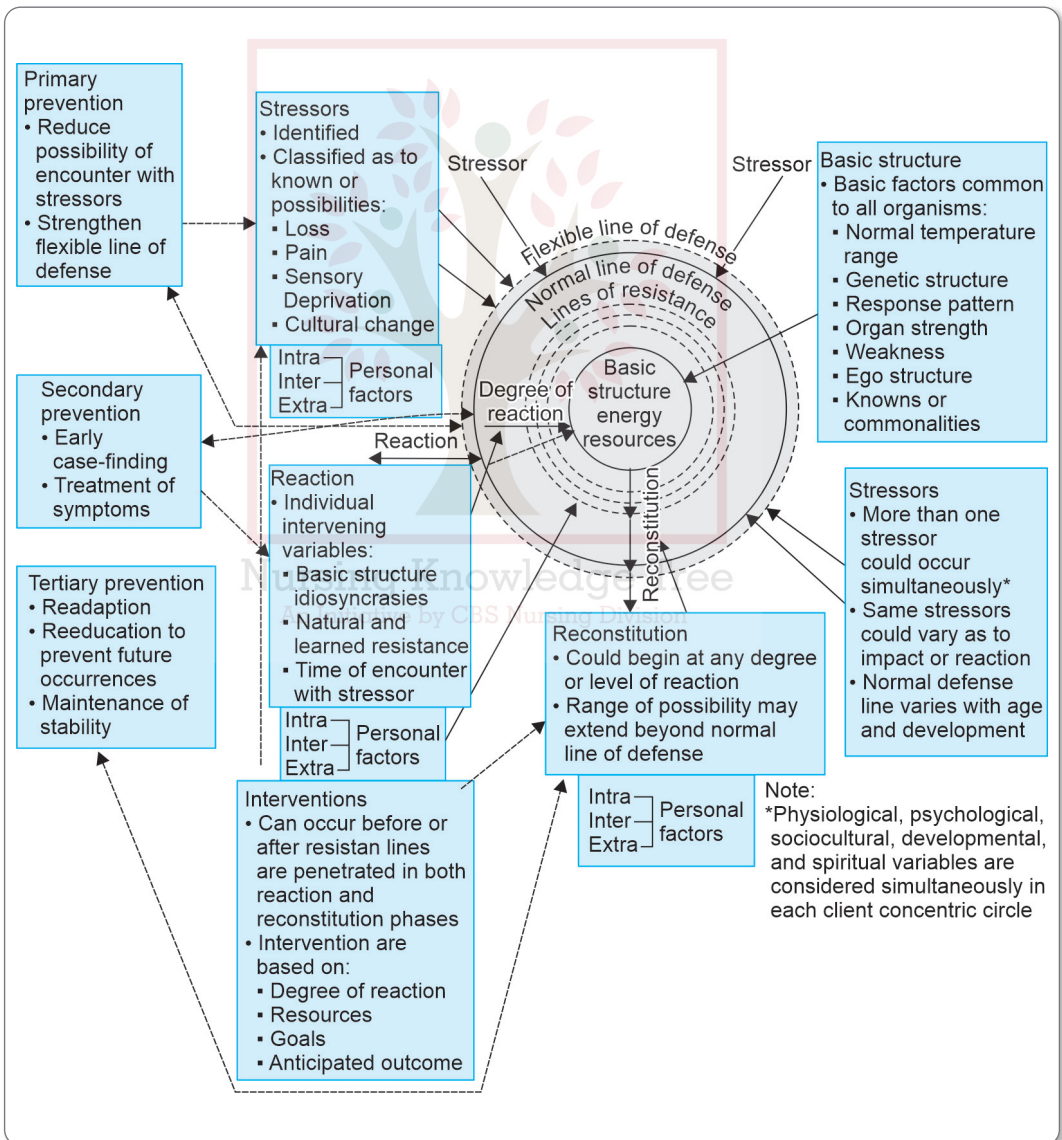
**References:**

- Barr JA, Tsai LP, Welch A, Faradz SMH, Lane-Krebs K, Howie V, et al. Current Practice for Genetic Counseling by Nurses: An Integrative Review. *Int J Nurs Pract.* 2018 Apr;24(2):e12629.
- Middleton, A., Marks, P., Bruce, A. et al. The Role of Genetic Counselors in Genomic Healthcare in the United Kingdom: A Statement by the Association of Genetic Nurses and Counselors. *Eur J Hum Genet* 25, 659–661 (2017). <https://doi.org/10.1038/ejhg.2017.28>

- The client system moved toward wellness when more energy is available than is needed and it moves toward illness and death when more energy is needed than its availability.

### Nursing

- Action which assists individuals, families and groups to maintain a maximum level of wellness.
- Primary aim is stability of the patient/client system with the help of nursing interventions to reduce stressors.



**Reference:**

Toney-Butler TJ, Thayer JM. Nursing Process. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022 [cited 2022 Dec 24]. Available from: <http://www.ncbi.nlm.nih.gov/books/NBK499937/>

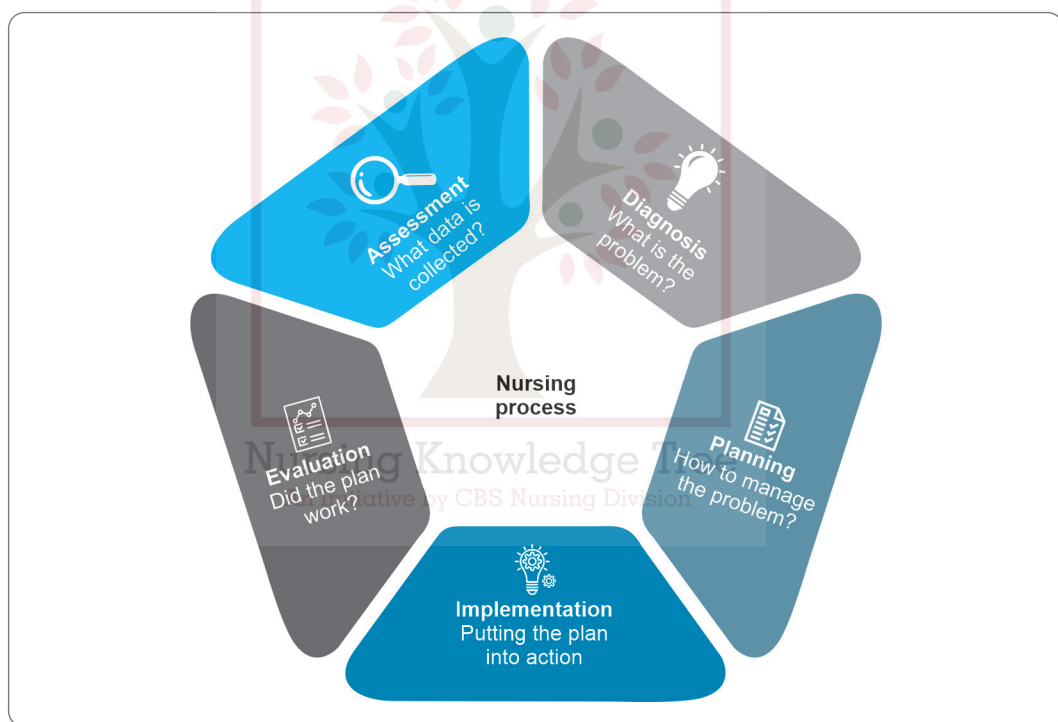
**LONG ANSWER QUESTION**

**Q46.** Discuss the steps involved in nursing process.

(RUHS, MGR, KUHS, RGUHS, BFUHS, DU, ABVHS)

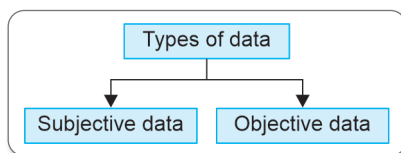
**Ans.**

Steps involved in nursing process are as follows.

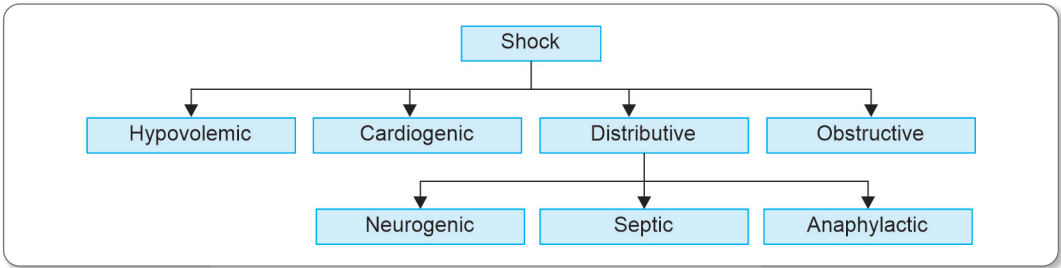
**Assessment**

The first phase of the nursing process is **assessment**. It involves collecting, organizing, validating, and documenting the clients' health status.

- **Subjective data:** It involves covert information such as feelings, perceptions, thoughts that are shared by the patient and can be verified only by the patient such as pain.
- **Objective data:** It is measurable, observable data such as blood pressure, edema.







For detail refer previous Qs Explanation

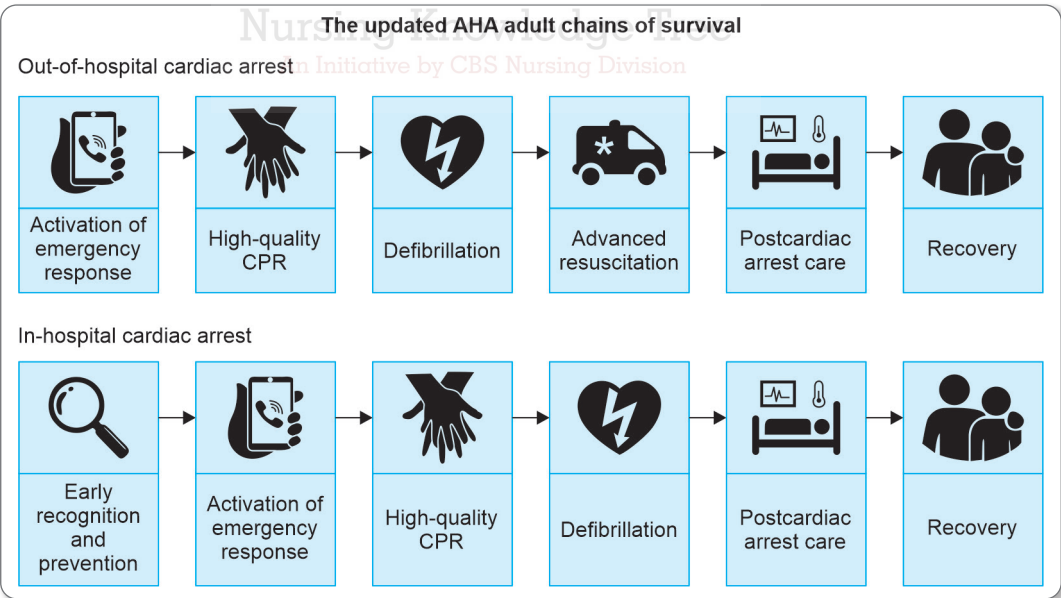
**Reference:**  
Haseer Koya H, Paul M. Shock. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022 [cited 2022 Jul 26]. Available from: <http://www.ncbi.nlm.nih.gov/books/NBK531492/>

**Q49. What is chain of survival? (RUHS, MGR, KUHS, RGUHS, BFUHS, DU, ABVHS)**

**Ans.**

Chain of survival describes the necessary measures for the prevention, early detection, and treatment of cardiac arrest including postresuscitation care.

- Early recognition and call for help
- Early CPR
- Early defibrillation
- Postresuscitation care



- Ensuring that biomedical waste guidelines are properly followed by the healthcare workers.
- Maintaining data of needle-stick injuries and postexposure prophylaxis (PEP).
- Initiating and facilitating immunization for hepatitis B virus and vaccination for the staff.
- Facilitating provision of first aid and appropriate consultation in case of suspected exposure of any hospital worker.
- Maintaining all the data electronically/registers.

**Reference:**

Ologie. What is the Role of an Infection Control Nurse? [Internet]. University of St. Augustine for Health Sciences. 2020 [cited 2022 Nov 8]. Available from: <https://www.usa.edu/blog/infection-control-nurse/>

**Q59. Differentiate between concurrent disinfection and terminal disinfection. (KUHS)****Ans.**

Disinfection means destruction of all the pathogens either by physical or chemical method.

Concurrent disinfection	Terminal disinfection
<p>Concurrent disinfection is the immediate disinfection of all contaminated articles and bodily discharges during the course of the disease.</p> <p>Concurrent disinfection of the contaminated articles immediately, then and there during the course of illness. It includes cleaning the isolation unit daily with effective disinfectant.</p> <ul style="list-style-type: none"> <li>• <b>Urinals and bedpans:</b> After emptying clean with brush soak in carbolic solution 1:40 for disinfection of articles: 10 minutes.</li> <li>• <b>Sputum mugs:</b> Collect the sputum in a sputum mug with disinfectant lotion. When container is full, it should be boiled or buried.</li> <li>• <b>Linen:</b> Keep the linen in a carbolic solution or any other effective disinfectant for 4 hours rinse, dry and send to laundry.</li> <li>• <b>Blankets:</b> Autoclaving is the best.</li> <li>• <b>Mattresses and pillow:</b> Place in direct sunlight for 6 hours for two consecutive days.</li> <li>• <b>Mackintosh:</b> Soap in Lysol or phenol 1:40 for 4 hours. Wash and dry in shade.</li> <li>• <b>Paper, cotton swabs, books:</b> Burn in disposal of all wastes by incineration.</li> <li>• <b>Disposal of excreta:</b> Especially for enteric isolation the urine and stool should be mixed with equal quantity (1 part of lime to 4 parts of water) and allowed to stand for 2–4 hours. Then disposed by burial</li> </ul> <p>Disinfectant should not be added in stool and discarded in septic tank as the disinfectant hinders the natural biological action.</p>	<p>Terminal disinfection means disinfection of the patient's unit and all the articles used after the discharge, transfer or death of the patient who was suffering from the contagious disease.</p> <p>It means after the patient has recovered from a communicable disease, the disinfection of the room and articles used by him is done after his discharge from the unit or transfer or death.</p> <p><b>Fumigation with sulfur:</b> Fumigation is disinfection by exposure to the fumes of a vaporized disinfectant or use of fumes or gases to destroy organisms. Fumigation with sulfur- the room should be filled with steam from a kettle. Sulfur in an earthen ware which is kept in a large container with water. Pour methylated spirit over the sulfur, put the sulfur afire and close the room.</p> <p><b>Fumigation with formalin:</b> It is done with potassium permanganate crystals and formalin is used for this purpose. Mix and place them in a metal bowl. For 100 cu feet, 140 g of <math>\text{KMnO}_4</math> and 250 mL of formalin are to be used then room should be closed completely and sealed for 24 hours for effective disinfection.</p> <p>Isolation technique, a medical aseptic practice, inhibits the spread and transfer of pathogenic organisms by limiting the contacts of the patient and creating some kind of physical barrier between the patient and others. In isolation techniques, disinfection procedures are employed to control contaminated items and areas.</p> <p>Disinfection is described as the killing of certain infectious (pathogenic) agents outside the body by a physical or chemical means. Isolation techniques employ two kinds of disinfection practices, concurrent and terminal.</p>



# NURSING EDUCATION

## INTRODUCTION TO NURSING EDUCATION

### SHORT ANSWER QUESTIONS

Nursing Knowledge Tree  
An Initiative by CBS Nursing Division

**Q1.** Define education, teaching and learning. (BFUHS, KUHS, MGR, RUGS, DU, CCU)

**Ans.**

Education	Teaching	Learning
<ul style="list-style-type: none"><li>• <b>According to Plato,</b> "Education is the ability to appropriately experience both pleasure and grief. The student's body and soul grow to their fullest potential in terms of beauty and perfection."</li><li>• <b>According to Mahatma Gandhi,</b> "Education is the process of bringing out the best qualities in a person's body, mind, and spirit."</li></ul>	<ul style="list-style-type: none"><li>• <b>According to N L Gage,</b> "Teaching is a sort of interpersonal influence that aims to alter another person's potential conduct."</li><li>• <b>According to John Brubacher,</b> "Teaching involves setting up and manipulating situations in which there are gaps and barriers that a person will try to get around and from which he will learn as he goes along."</li></ul>	<ul style="list-style-type: none"><li>• <b>According to Gates,</b> "The adjustment of behavior by experience is known as learning."</li><li>• <b>According to Crow and Crow,</b> "Learning is the process of acquiring new behaviors, skills, and viewpoints. It functions in an individual's effort to overcome challenges or to adapt novel circumstances, and it entails new methods of accomplishing things."</li></ul>

#### Reference:

Bhaskara Raj DE. Bhaskar N. Textbook of Nursing Education. 2nd edition. EMMESS Medical Publisher.

“Education is the process of bringing out the best qualities in a person’s body, mind, and spirit.”

—Mahatma Gandhi

Philosophy

**Meaning of word Philosophy:** The word philosophy is derived from the Greek words Philo means loving and Sophia means wisdom.

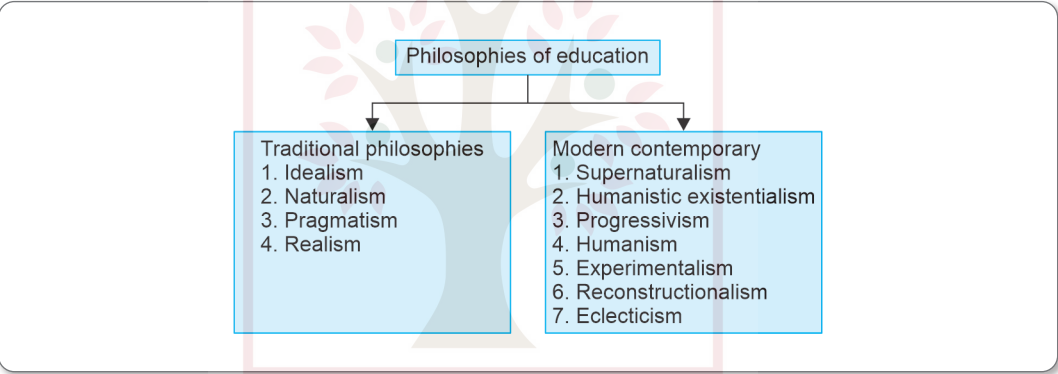
“Philosophy is the science of knowledge.”

—Fichte

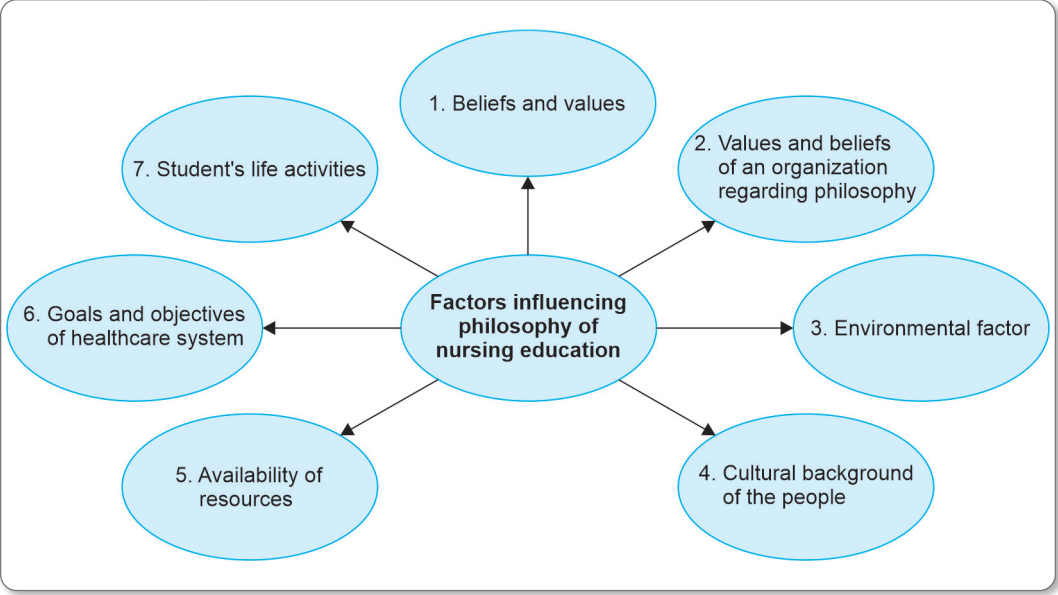
“Philosophy is an effort to understand human experience honestly or to make it all understandable.”

—Bright Man

Philosophies of Education



Factors Influencing Philosophy of Nursing Education



## TEACHING-LEARNING PROCESS

### SHORT ANSWER QUESTIONS

**Q7. Write about Principles of Instructional Design.**

(BFUHS, RUHS, MGR, KUHS, RGUHS, DU, ABVHS)

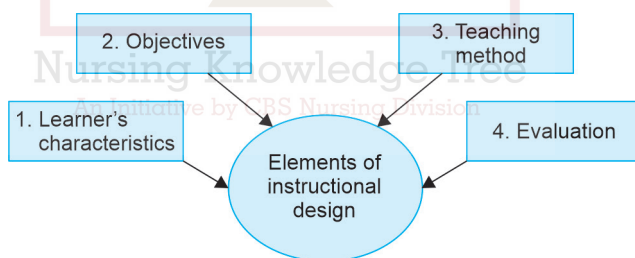
**Ans.**

Instructional design is defined as the method used to create, produce, and present educational materials and experiences.

#### Need of Instructional Design

- Recognize a performance issue.
- Establish the objectives and goals.
- Describe your students' needs.
- Create plans to address their needs and objectives.
- Identify and rate the results of learning.
- Analyze to determine whether objectives, needs, and goals have been met.

#### Elements of Instructional Design



1. **Learner's characteristics:** For whom the program is built for.
2. **Objectives:** What do you expect the students will learn?
3. **Teaching method:** How should the topic material be learned best?
4. **Evaluation:** How can you determine whether or not learning has occurred?

#### Principles of Instructional Design

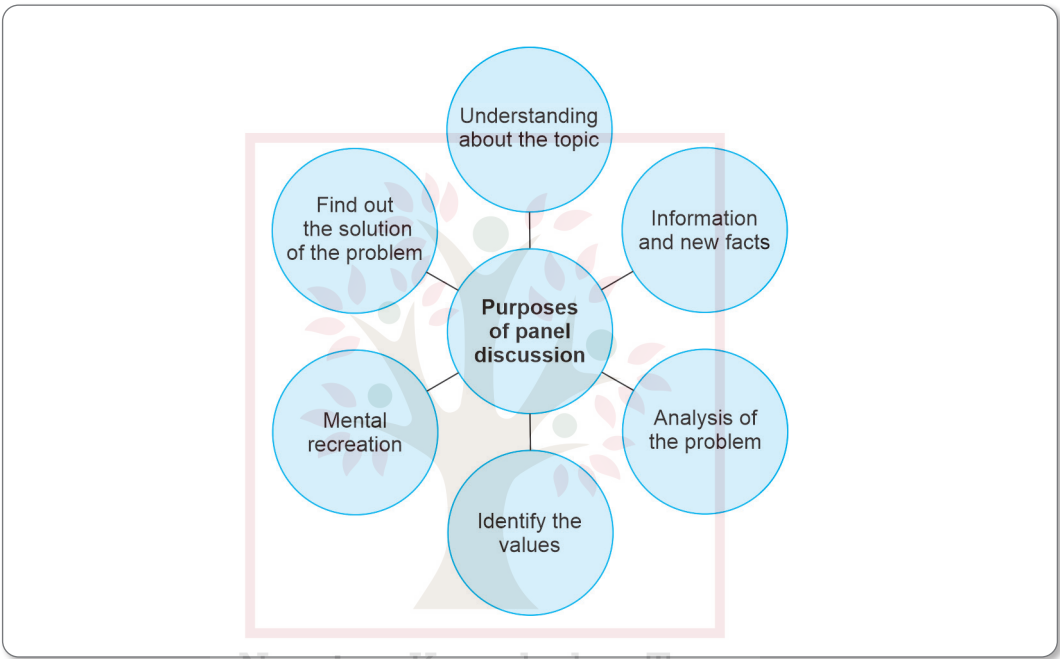
Three psychological principles of learning serve as the foundation for instructional design (ID):

1. Behavioral
2. Cognitive
3. Constructive

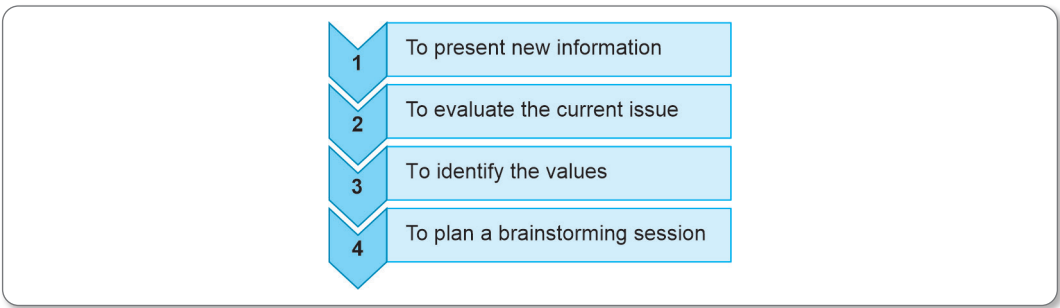
Origin of the Panel Discussion Technique

The panel discussion method was first time used by Harry A Ober Street in 1929.

Purposes of Panel Discussion



Panel Discussion Objectives



Principles of Panel Discussion

- Each panelist is given an equal opportunity to participate in the discussion. Thus, it largely pays attention to human behavior’s basic rules.



### Advantages

- 1 Give people a chance to learn through observation
- 2 It stimulates a number of senses
- 3 It arouses interest by using real examples so that students may see the methods in addition to hearing about them.
- 4 The demonstration method appeals to everyone since it is understandable to everyone.
- 5 This approach can be used for both group and one-on-one instruction
- 6 By explaining the rationale behind a technique, it clarifies the ideas highlighted
- 7 Links between theory and practical
- 8 It provides the teacher with a chance to assess the pupils' understanding of a method and decide whether further instruction is required.
- 9 Emphasizes the need for knowledge and the need for pupils to be able to use it right away
- 10 It serves as a powerful motivator for the student.

### Disadvantages

- Time consuming
- It can only be utilized in skilled subject.
- A lot of planning may be necessary before a demonstration.
- All the procedure cannot be demonstrated clearly.
- A teacher who is not skilled in the technique cannot demonstrate it.
- There were only a certain number of students arranged at once.

### Uses

- To demonstrate experiments or methods, as well as the use of experimental tools, in the lab, classroom, and hospital.
- To evaluate or modify a procedure in order to address a unique scenario or introduce a new subject.
- To educate the patient about a new procedure or treatment that they can perform at home.
- To perform a procedural demonstration at the patient's bedside or in the ward conference room.
- To show that carrying out the process in a natural setting has greater value than when done in an artificial setting.
- To demonstrate several methods of building rapport with patients in order to create the best possible nurse-patient relationship.

2. **Cost effective:** By keeping personnel in the office, increasing the creation of new products, and enhancing performance through frequent meetings with up-to-date information, costs (travel, food, and accommodation) are minimized.
3. **Easily accessible:** It is easy to access and locate *via* any origination location in the world.
4. **Large number of audience:** Attendance can be expanded. The price per person decreases with audience size.
5. **Adaptable:** Easy to adapt and good for businesses, associations, hospitals, and institutions to talk, learn from, and train.
6. **Flexible:** A transmit or receiving site can be positioned anywhere with a remote receive or transmit vehicle.
7. **Beneficial in medicine field:** For telemedicine and telenursing purposes, such as diagnosis, consultation, real-time transfer of medical pictures, etc., teleconferencing is a highly helpful technology.

#### Advantages of teleconferencing

1. Save time
2. Cost effective
3. Easily accessible
4. Large number of audience
5. Adaptable
6. Flexible
7. Beneficial in medicine field

#### References:

Bhaskara Raj DE. Bhaskar N. *Textbook of Nursing Education*. 2nd edition. EMMESS Medical Publisher. Teleconferencing [Internet]. [cited oct. 22]. Available from: <https://www.techtarget.com/searchunifiedcommunications/definition/teleconference>.

**Q24.** List the points you will keep in mind while selecting media for teaching.

(RUHS, MGR, KUHS, RGUHS, BFUHS, DU, ABVHS)

**Ans.**

Audiovisual aids, often known as instructional media, are sensitive teaching techniques that help students learn. They are sensory-rich materials that encourage, categorize, and stimulate people.

Instructional media are the equipment that helps a teacher with the teaching and learning process. These are tools used to facilitate the transfer of knowledge from one person to another.

**Points to be kept in mind while selecting media for teaching are:**

- Understand how to apply the instruction manual. Make sure you are familiar with how to manage it in order to produce the desired result before utilizing it. Watch the movie in advance or listen to the recording. Verify that the real objects, pictures or models you're about to exhibit are the right size and have all their pieces.
- Create a comfortable setting by setting up the chairs, tables, tools, and materials. Ensure adequate ventilation and lighting.
- **Selection of media:** Media should be appropriate for the teaching goal and the learner groups. The learners' motivation and interest should be stimulated by it.
- **Preparation of media:** Utilize resources that are readily available in your area to prepare it, and make sure it has significance and purpose. It should be simple and easily understandable.
- **Physical control:** Safely arrange the aids to make lending them to the teachers easier.
- **Visualization:** Before presenting them, carefully practice using the instructional aid.

## CRITERION AND NORM REFERENCED EVALUATION

### SHORT ANSWER QUESTIONS

**Q29. Differentiate between Criterion Referenced Evaluation and Norm Referenced Evaluation.**  
(RUHS, MGR, KUHS, RGUHS, BFUHS, DU, ABVHS)

**Ans.**

Sl. no.	Characteristics	Criterion referenced	Norm referenced evaluation
1.	Purpose	To ascertain whether each student has mastered a certain skill or concept.	To evaluate each student's performance in relation to that of other students in several subject areas.
2.	Type of measurements	Measures specific skills	Measures broad skills.
3.	Score interpretation	Each person is measured against a current benchmark for acceptable accomplishments.	A score is given to each person after comparison with other examinees.
4.	Interpretation	Absolute (percentage)	Relative (percentile)
5.	Group size	Small	Large
6.	Objective	To assess students' knowledge both before and after instruction.	To distinguish between high achievers and poor performers.
7.	Level of difficulty	The items that evaluate a certain skill are equally difficult.	The difficulty of the items varies.
8.	Items to measure	In order to gather a sufficient sample of students, each skill is tested by at least four items.	Less than four items are typically used to test each skill.

**Reference:**

Bhaskara Raj DE. Bhaskar N. Textbook of Nursing Education. 2nd edition. EMMESS Medical Publisher.

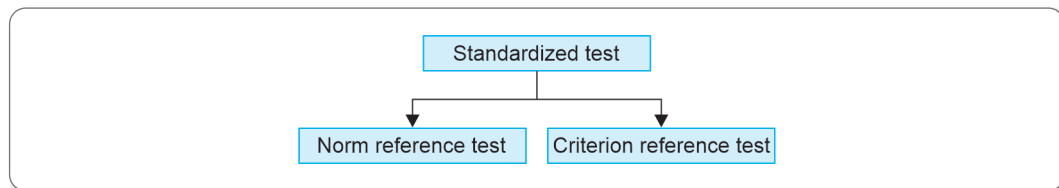
**Q30. Differentiate between anecdotal record and critical incident technique.**  
(RUHS, MGR, KUHS, RGUHS, BFUHS, DU, ABVHS)

**Ans.**

Sl. no.	Anecdotal record	Critical incident technique
1.	An observation that is written like a short story is called an anecdotal record.	The critical incident technique involves essential steps that are helpful for assessing the occurrence.
2.	It offers a permanent record of conduct that could be helpful in future assessments of a student.	It is a series of techniques for gathering accurate, methodical observations of human behavior that are significant from a critical perspective.

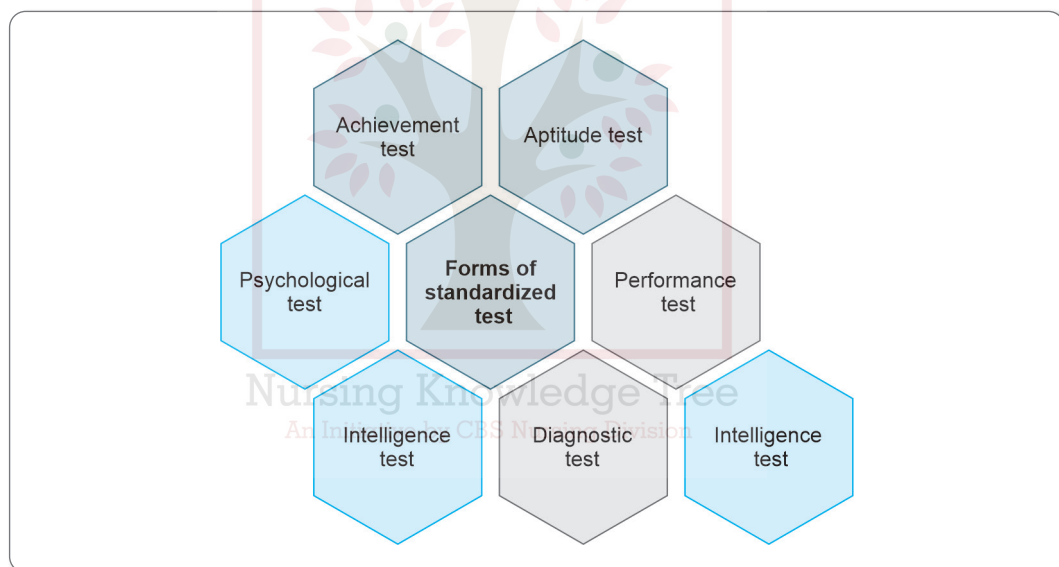
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### Types of Standardized Tests



- **Norm reference test:** Evaluate an individual's performance in comparison to that of others.
- **Criterion reference test:** Comparing a person's performance to a set of goals will allow you to determine whether they satisfy the criteria for a high score.

### Forms of Standardized Test

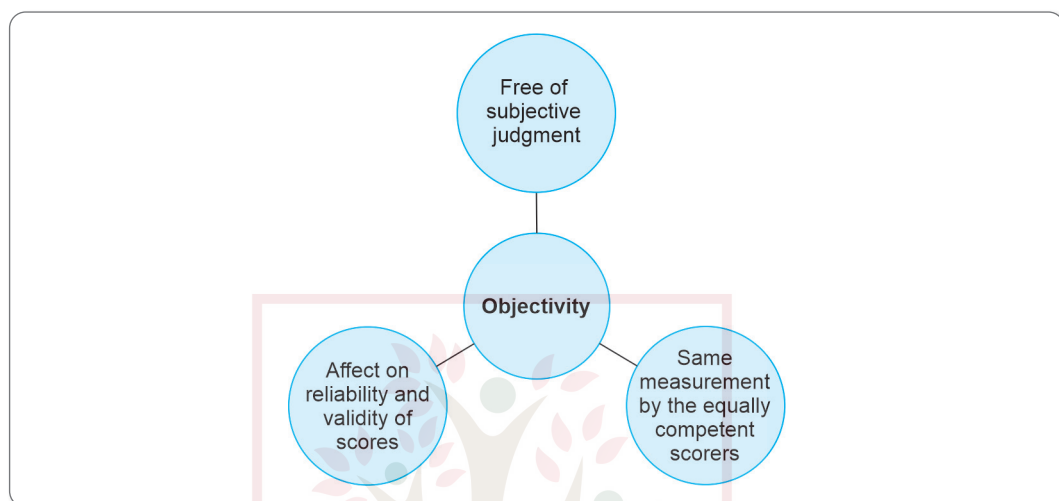


### Objectives of Standardized Test

- To hold institutions of higher learning and teachers accountable for the academic success of their students.
- To determine if students have acquired the knowledge that is expected from them to learn.
- To spot gaps in academic and learning achievement of students.
- To identify academic attainment discrepancies between certain student groups.
- To evaluate if educational programs are producing the desired outcomes.

### Uses of Standardized Test

- The selection of students and their placement in various programs.
- Identification of certain strengths and weaknesses related to academic achievement, learning, and other issues.



### Validity

The extent to which a test measures what it is designed to measure is referred to as its validity.

- It refers to a test's effectiveness in measuring what it is meant to measure.
- Validity is one of the most important criteria of a good evaluation.
- The most crucial factor in the choice and application of a testing process is validity. It should never be forgotten that:
  - It is a broad term that is influenced by all of the other features of a measuring device.
  - It depends on the degree, such as high, moderate or low.
  - Validity is specific, not general.

### Types of Validity

Sl. no.	Types	Description
1.	Content validity	Content validity determines whether the test items appropriately cover all relevant areas of the content area and are positioned in the right order.
2.	Predictive validity	The degree to which test results reliably anticipate results on a criterion measure is known as predictive validity. The tests that are employed for purposes of categorization and selection.
3.	Concurrent validity	A new test is compared to an existing test (of the same kind) to check if they yield similar results, which is known as concurrent validity.
4.	Constructive validity	The degree to which your test measures accurately what it is designed to is known as constructive validity.
5.	Face validity	When examining the test, one considers how well the test resembles the subject being examined logically.

### Factors Affecting Validity

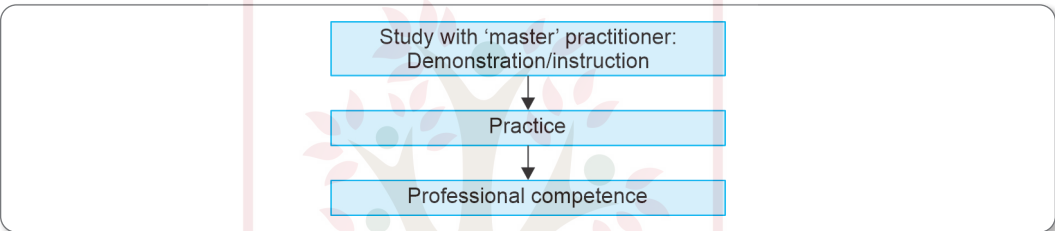
- **Unclear direction:** It may result to low validity.
- **Poor vocabulary:** If the reading vocabulary of the individual is poor and the students fail to reply the items of the test, even if they know the answer.

- Developing proper attitudes toward teaching
- Developing self-confidence in the teachers
- Enabling teachers to make proper use of instructional facilities.

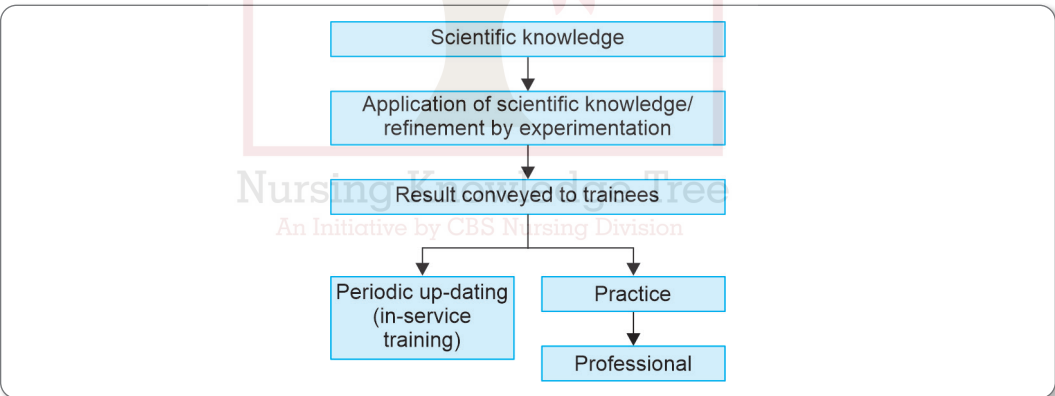
Models of Teacher Education

- Craft model
- Applied science model
- Reflective model

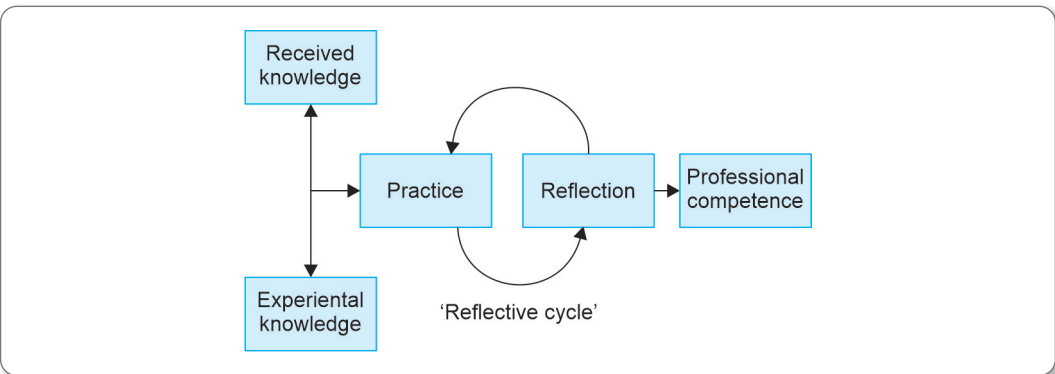
Craft Model



Applied Science Model



Reflective Model





**References:**

*Comprehensive Textbook of Nursing Education, Jaspreet Kaur Sodhi, P. 384–389*

## GUIDANCE AND COUNSELING

### SHORT ANSWER QUESTION

**Q55.** Write differences between guidance and counseling.

(RUHS, MGR, KUHS, RGUHS, BFUHS, DU, ABVHS)

**Ans.**

Sl. no.	Criteria	Guidance	Counseling
1.	Meaning	Advice or pertinent information provided by a superior to address an issue is referred to as guidance	Counseling is the term used to describe the expert guidance that a counselor offers to a client to assist in overcoming personal or psychological issues.
2.	Nature	Preventive	Curative, remedial.
3.	Approach	Guidance is more comprehensive and detailed.	Counseling is in depth and focused.
4.	Deals with	Educational and professional issues	Psychological and personal difficulties.
5.	Given by	Any superior or knowledgeable individual	A person with a high level of expertise and formal training.
6.	Privacy	It is open and less private	It is confidential.
7.	Interaction	Face to face interaction is not necessary	Face to face interaction is essential.
8.	Purpose	Helps the individual to choose best alternative to solve the problem.	Helps to change the perspective of an individual to get the solution.
9.	Mode	One-to-one or one-to-many	One-to-one

**References:**

*Bhaskara Raj DE. Bhaskar N. Textbook of Nursing Education. 2nd edition. EMMESS Medical Publisher. <https://pediaa.com/difference-between-guidance-and-counseling/>*

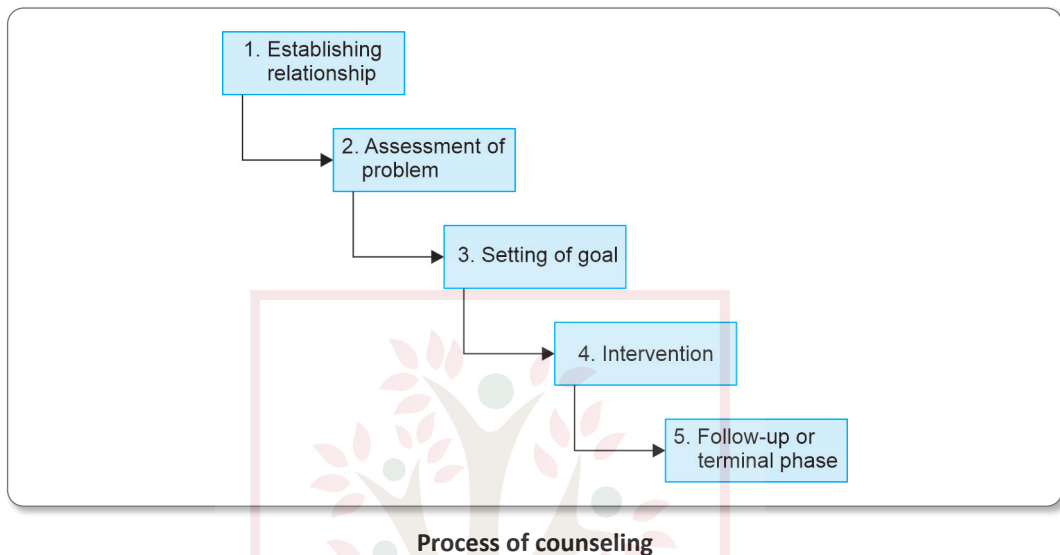
### LONG ANSWER QUESTION

**Q56.** Define counseling. Discuss types, elements and process of counseling.

(BFUHS, RUHS, MGR, KUHS, RGUHS, DU, ABVHS)

**Ans.**

**Definition:** A professional offering of support to a needy person in a specific scenario is known as counseling. Counseling involves a relationship between two people in which one of them



**Step 3. Setting of goal:** Counseling needs to have a goal, just like any other activity. The objectives or achievements that the client hopes to attain at the conclusion of counseling are known as goals. The counselor's knowledge and abilities should be considered while setting goals. Goals should be articulated in a way that emphasizes progress.

**Step 4. Intervention:** Depending on the theoretical viewpoints that the counselor adheres to, there are several perspectives on what a good counselor should accomplish with clients.

**Step 5. Follow-up or terminal phase:** Counselor is conscious of their own needs and constantly careful to avoid encouraging dependency. The process of getting termination starts much earlier. Termination is taken into consideration not only when a successful partnership ends, but also when it appears that counseling is not providing any benefit.

**Reference:**

Bhaskara Raj DE. Bhaskar N. Textbook of Nursing Education. 2nd edition. EMMESS Medical Publisher.

## MANAGEMENT OF NURSING EDUCATIONAL INSTITUTIONS

### SHORT ANSWER QUESTION

**Q57. Enlist different models of collaboration between education and service.**

(RUHS, MGR, KUHS, RGUHS, BFUHS, DU, ABVHS)

**Ans.**

- The nursing profession is faced with complex healthcare issues by technological and medical advancements.

- Collaborative partnerships between educational institutions and service agencies ensure evidence-based, cost-effective and improved healthcare outcomes.
- Many researchers have validated the benefits of collaboration such as improved patient outcomes, reduced length of stay, cost savings, increased nursing job satisfaction and improved teamwork.

### Model of Collaboration between Education and Service

The nursing literature presents several collaborative models that have emerged between educational institutions and clinical agencies to integrate education, practice and research to bridge a gap and best practice outcomes are achieved.

- Clinical School of Nursing Model (1995)
- Dedicated Education Unit Clinical Teaching Model
- Research Joint Appointments (Clinical Chair)
- Practice-Research Model
- Collaborative Clinical Education Epworth Deakin (CCEED) Model
- The Collaborative Learning Unit (British Columbia) Model
- The Collaborative Approach to Nursing Care (CAN-Carc) Model
- The Bridge to Practice Model
- Collaboration of Nursing Education and Service in India

#### Reference:

*Comprehensive Textbook of Nursing Education, Jaspreet Kaur Sodhi.*

## ADMINISTRATION OF NURSING CURRICULUM

Nursing Knowledge Tree

SHORT ANSWER QUESTION ive by CBS Nursing Division

**Q58. Write a short note on public relation.**

**Ans.**

*“Public relation is knowing what the public expects and explaining how administration is meeting these desires.”*

**—John Millet**

### Need of Public Relation

- Increase visibility for the hospital, employees, programs and services.
- Position the hospital as a healthcare leader and authority within the community or region.
- Expand awareness of the hospital's entire range of programs and services.
- Enhance the hospital's image.
- Aid in recruitment and retention of employees.
- Support efforts to raise funds for new programs and services or assist with the passage of levies and bonds.
- Act as a foundation when negative news about the hospital occurs.
- Boost employee morale.



# NURSING MANAGEMENT

## ADMINISTRATION

### SHORT ANSWER QUESTIONS

Nursing Knowledge Tree  
An Initiative by CBS Nursing Division

**Q1. Write a short note on the responsibilities of nurse administrator.**  
(BFUHS, KUHS, MGR, RUGS, DU, CCU)

**Ans.**

Nurse Administrators take on a range of duties that alter with the healthcare environment in order to give patients and their families the best care possible. A nurse administrator is responsible for the following tasks and duties:

- Develop goals and objectives for each region and communicating them to those in charge of, accomplishing them.
- In charge of handling issues and difficulties that develop in the nursing care sector.
- Responsible for organizing, staffing, managing, and evaluating nursing services.
- Establish the standards, policies, rules, and regulations for the organization.
- By organizing and examining them, break down the actions, decisions, and connections needed to function in a healthcare context into manageable tasks.
- Make nursing policies to ensure patients receive top-notch care.
- Establish a strong procedure for the responsible and effective management of hospital funds, and put in place adequate financial controls.
- Ensure that workers are hired to keep hospitals running smoothly.

**Q2. Differentiate between administration and management.**

(BFUHS, KUHS, MGR, RUGS, DU, CCU)

**Ans.**

The various differentiating factors are discussed below:

**On the basis of function**

Basis	Management	Administration
Meaning	Management is an art of getting things done through others by directing their efforts toward achievement of predetermined goals.	Administration is concerned with formulation of broad objectives, plans and policies.
Nature	Management is an executing function.	Administration is a decision-making function.
Process	Management decides who should do it and how should do it.	Administration decides what is to be done and when it is to be done.
Function	Management is a doing function because managers get work done under their supervision.	Administration is a thinking function, in this, plans and policies are determined under it.
Skills	Technical and human skills	Conceptual and human skills
Level	Middle and lower level function	Top level function

**On the basis of usage**

Basis	Management	Administration
Applicability	It is applicable to business concerns, i.e., profit-making organization.	It is applicable to nonbusiness concerns, i.e., clubs, schools, hospitals, etc.
Influence	The management decisions are influenced by the values, opinions, beliefs and decisions of the managers.	It is influenced by public opinion, govt. policies, religious organizations, customs, etc.
Status	It constitutes the employees of the organization who are paid remuneration (in the form of salaries and wages).	It represents owners of the enterprise who earn return on their capital invested and profits in the form of dividends.

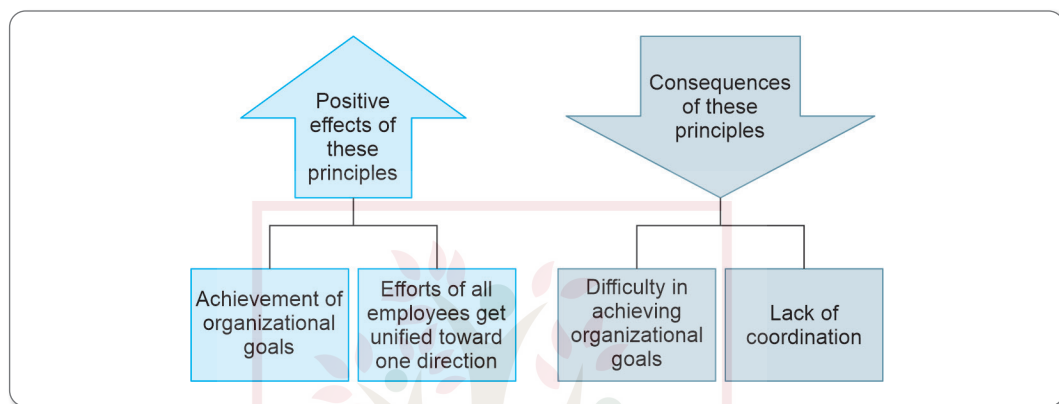
**Reference:**

<http://www.jiwaji.edu> . UNIT-I Difference Between Administration and Management

**LONG ANSWER QUESTIONS****Q3. Define administration. Describe the principles of administration applied to the nursing.**  
(BFUHS, KUHS, MGR, RUGS, DU, CCU)**Ans.**

The word administration has been derived from the Latin term, “administrare”, which means to manage or tend to.

that functions as a squad must perform all tasks. A plan of action must include a description of these actions.



#### Principle of unity of direction

##### Reference:

[https://ciet.nic.in/moocspdf/Business%20Studies%2003/lebs\\_10204\\_e-Content.pdf](https://ciet.nic.in/moocspdf/Business%20Studies%2003/lebs_10204_e-Content.pdf)

The manager is ultimately responsible for this plan and he/she monitors the progress of the defined and planned activities. Focus areas are the efforts made by the employees and coordination.

#### Subordination of Individual Interest

There are always all kinds of interests in an organization. In order to have an organization function well, Henri Fayol indicated that personal interests are subordinate to the interests of the organization (ethics).

The primary focus is on the organizational objectives and not on those of the individual. This applies to all levels of the entire organization, including the managers.

#### Remuneration

Motivation and productivity are close to one another as far as the smooth running of an organization is concerned. This management principle of the 14 principles of management argues that remuneration should be sufficient to keep employees motivated and productive. There are two types of remuneration namely nonmonetary (a compliment, more responsibilities, credits) and monetary (compensation, bonus or other financial compensation). Ultimately, it is about rewarding the efforts that have been made.

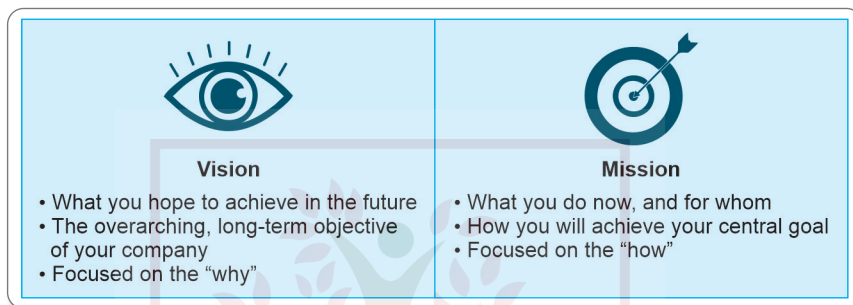
#### Degree of Centralization

Management and authority for decision-making process must be properly balanced in an organization. This depends on the volume and size of an organization including its hierarchy.

Centralization implies the concentration of decision-making authority at the top management (executive board). Sharing authority for the decision-making process with lower levels (middle and lower management), is referred to as decentralization by Henri Fayol.



- Purpose and values of the organization (products or services, market) or who are the organization's primary "clients" (stakeholders).
- What are the responsibilities of the organization toward these "clients"?
- What are the main objectives supporting the company in accomplishing its mission?

**Reference:**

<https://www.usemotion.com/blog/vision-vs-mission>

**Vision Statements**

Vision statements reflect the ideal image of the organization in the future. They create a focal point for strategic planning and are time-bound, with most vision statements projected for a period of 5–10 years.

The vision statement communicates both the purpose and values of the organization. For employees, it gives direction about how they are expected to behave and inspires them to give their best. Shared with customers, it shapes customers' understanding of why they should work with the organization.

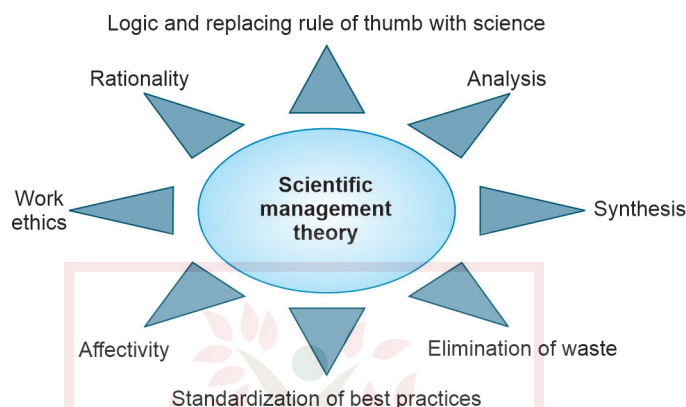
**Developing a Vision Statement**

The organization is vividly described in the mission statement as it successfully executes its operations.

Creating a vision statement can be done quickly depending on the culture; participants may choose from highly analytical, rational or divergent methods, such as concentrated discussions, divergent experiences involving daydreams, sharing stories, etc. Consult the participants to determine how they would like to describe the organizational goal.

Creating the idea might be the most enjoyable aspect of planning, but it is also the one where time can easily slip your mind.

It should be noted that the vision was initially a compelling description of the state and function of the organization once the strategic plan had been enacted, i.e., a very alluring image toward which the organization was attracted and guided by the strategic plan. Recently, the vision has evolved into more of a motivational tool, frequently containing extremely idealistic language and objectives that the organization simply cannot achieve.



#### Taylor's principle related to scientific management theory

Taylor's meticulous technique for finding the "one best way" to do a project included the following steps:

1. Select a representative sample of skilled workers, then closely analyze the task at hand.
2. Describe each operation in the list in detail, including every step taken.
3. Using a stopwatch, time each job that is completed. Repeat this step over and over to obtain the average amount of time required to perform each job.
4. Identify and eliminate any unnecessary tasks performed to achieve the activity.
5. Identify any changes, tools or approaches that can be used to reduce the time required to execute the work.
6. Determine the task's modified start and end times.
7. All employees are trained to carry out the task in the "one best method" determined.

#### Human Relations Theory: (1930-1970)

The term "human relations movement" refers to academics who study how people act in social situations, particularly at work. Its origins can be traced back to the 1930s and the Hawthorne studies, which investigated how social interactions, motivation, and employee happiness influenced workplace efficiency.

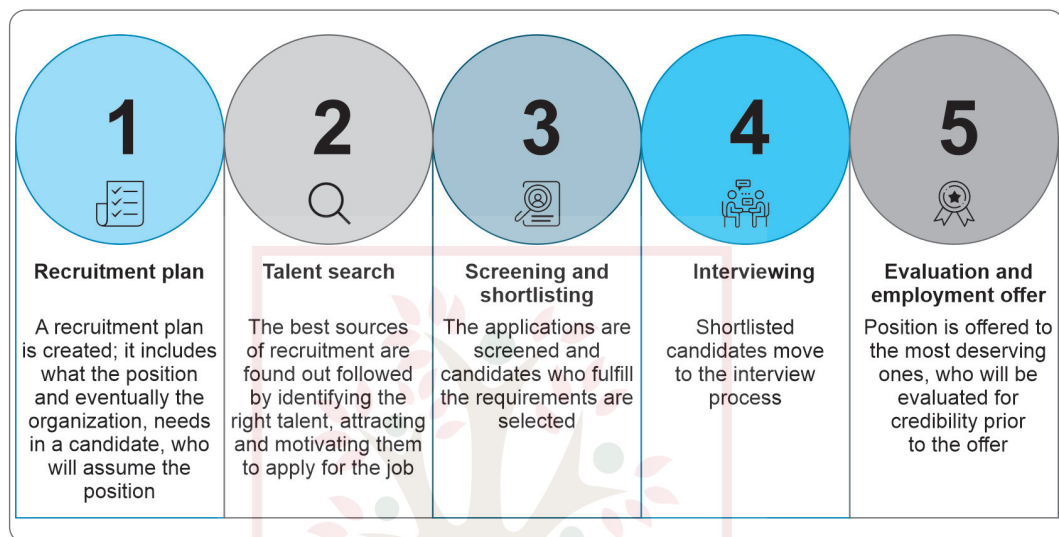
Rather than viewing employees as replaceable parts, the movement took into account how well people fit into firms psychologically. Between 1927 and 1930, George Elton Mayo conducted these Hawthorne investigations at the Western Electric Company's Hawthorne factory, resulted in the creation of the human relations theory.

He examined employee productivity under various environmental conditions and discovered that elements such as motivation, counseling, leading, and communicating had an effect on performance. Furthermore, he discovered that workers are motivated by relational components such as attention and camaraderie.

*"The hallmark of human relation theories is the primacy given to organizations as human cooperative systems rather than mechanical contraptions."*

—George Elton Mayo

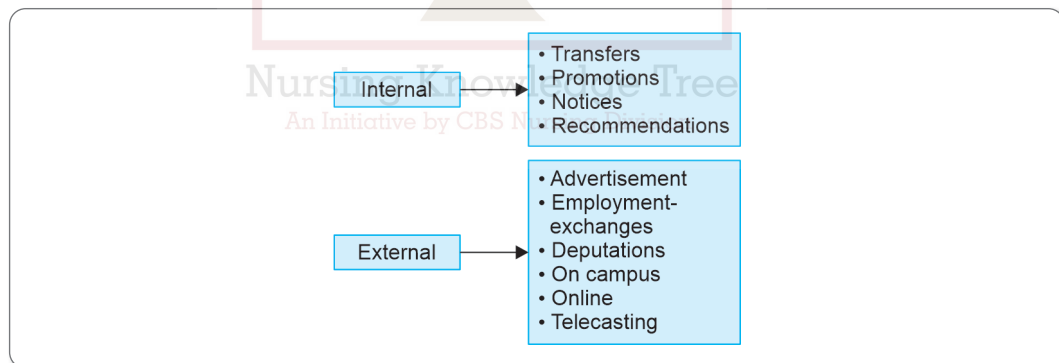
## Recruitment Process



### Reference:

<https://www.feedough.com/recruitment-process-everything-you-need-to-know/>

## Sources of Recruitment



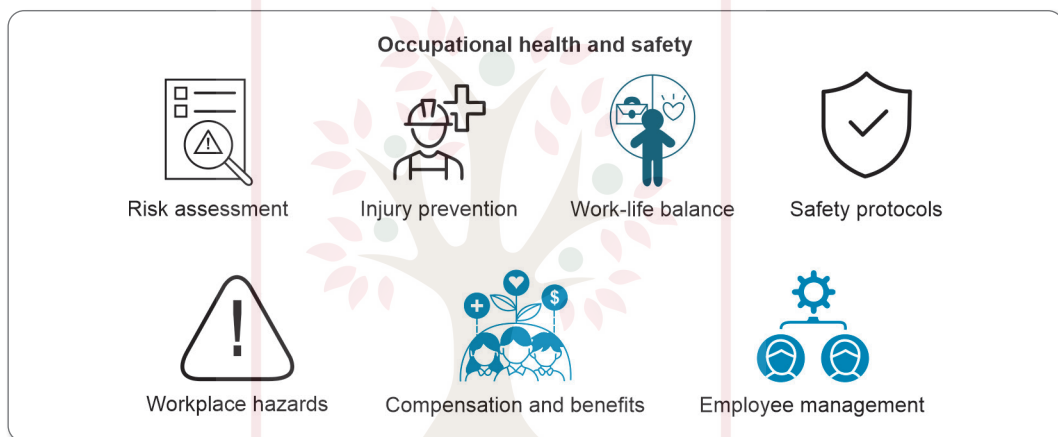
Sources of recruitment

## Recruitment Policy

### Components of recruitment policy include:

- General recruitment policy and terms of the organization
- Recruitment of temporary employees
- Selection process
- Job descriptions

- Establish a sharps program
- Establish an immunization program for all nurses
- Provide personal protective equipment (PPE), such as shield aprons and safety glasses.
- Establish procedures for the use of diagnostic equipment and PPE
- Minimize exposure time to radiation
- Ensure the posting of warning signs appropriately
- Promote rest breaks
- A well-planned rotation plan with rest breaks during night shifts and the day off after night duty
- Maintain the right work environment and culture.



#### References:

Joseph JK, Devu BK Textbook of Nursing Management and Leadership. 2022. CBS Publishers and Distributors  
 MR, Beena. GL, Hari Krishna, JC, Kiruba. 2020. Textbook of Nursing Management and Services for BSc Nursing. CBS Publishers and Distributors. 1st edition  
<https://images.app.goo.gl/tkL7wC2KxZD98CyFA>

### LONG ANSWER QUESTION

**Q61. Discuss the theories of motivation in detail.**

(RUHS, MGR, KUHS, RGUHS, BPUHS, DU, ABVHS)

**Ans.**

There are a number of different views that motivates workers. The most commonly held views or theories are discussed here and have been developed over the last 100 years or so. Unfortunately, all these theories do not reach the same conclusions. A few important theories and models of motivation are:

#### Maslow's-Hierarchy of Needs Theory

- This theory was proposed by Abraham Maslow and is based on the assumption that people are motivated by a series of five universal needs. These needs are ranked, according to the order in which they influence human behavior, in a hierarchical fashion.



# NURSING RESEARCH AND STATISTICS

## RESEARCH AND RESEARCH PROCESS

### SHORT ANSWER QUESTIONS

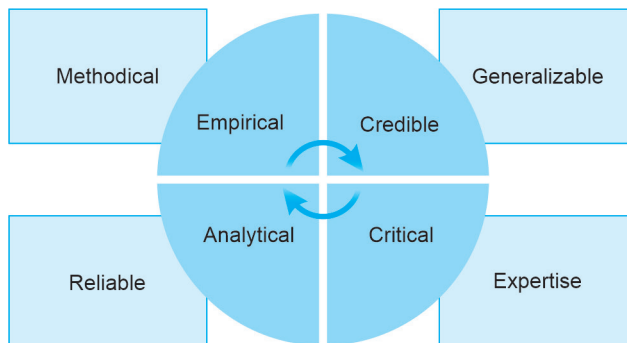
Nursing Knowledge Tree  
An Initiative by CBS Nursing Division

**Q1.** Write about the characteristics of good nursing research.

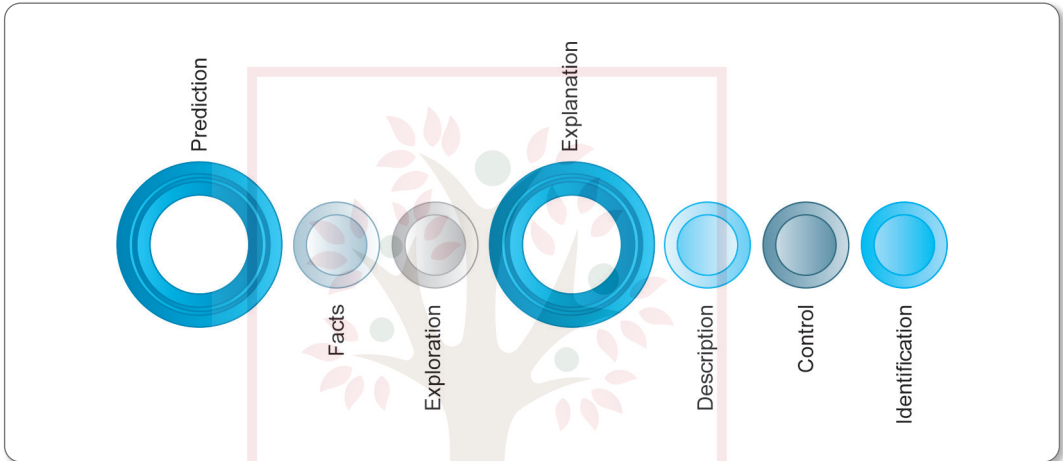
(MGR, KUHS, RGUHS, BPUHS, DU, ABVHS)

**Ans.**

The characteristics of a good research are discussed here:



- **Evidence-based practice** provides evidence-based information to improve clinical practice; thereby promoting quality care.
- **Advancing the nursing profession** by providing new knowledge and insight into the practice of nursing. It also contributes to the development and refinement of nursing theories.
- **Promoting interdisciplinary collaboration** helps to bridge the gap between different healthcare professions.



**Reference:**

Kaur, S and S, Muthuvenkatachalam (2024). *Nursing Research and Statistics*. CBS Publishers and Distributors Pvt. Ltd.

**Q3. State the significance of nursing research. (MGR, KUHS, RUHS)**

**Ans.**

Nurses should provide care based on scientific knowledge and empirical evidences acquired through research. Significance of nursing research can be highlighted from the following facts:

- Nursing research aids in the implementation of new changes in patient care that focuses on developing new interventions for all levels of prevention of a disease.
- It helps in developing standards and protocols, to provide quality care to the patients.
- Nursing research provides the best possible care based on the best available evidence.
- Researchers can develop skills in advanced data analysis techniques in nursing research.
- Nursing research enhances accountability in nursing practice.
- Effective nursing care based on research results can lead to increased patient satisfaction, improved patient outcomes, shorter hospital stays, reducing healthcare costs.

**Reference:**

Kaur, S and S, Muthuvenkatachalam (2024). *Nursing Research and Statistics*. CBS Publishers and Distributors Pvt. Ltd.

**References:**

Kaur, S and S, Muthuvenkatachalam (2024). *Nursing Research and Statistics*. CBS Publishers and Distributors Pvt. Ltd.  
[https://www.svtgbi.org.uk/research/3-svt\\_research\\_series/5-research-methodology/](https://www.svtgbi.org.uk/research/3-svt_research_series/5-research-methodology/)

**Q9. Enumerate the steps of quantitative research process.**  
 (MGR, KUHS, RGUHS, BFUHS, ABVHS)

**Ans.**

**Quantitative Research**

“Quantitative research is “a formal, objective, systematic process in which numerical data are utilized to obtain information about the world.”  
 —Burns and Grove

- The aim of quantitative research is to generalize the findings, to be objective and inclined to be deductive to test theories.
- Quantitative research process is a systematic approach that includes a series of steps included in five major phases:
  1. Conceptual phase
  2. Design and planning phase
  3. Empirical phase
  4. Analytic phase
  5. Dissemination phase

Steps of each phase are discussed as follows:

Phases	Steps
<b>Conceptual phase</b>	1. Identify and formulate research question or problem 2. Formulate study objectives 3. Review the literature 4. Develop conceptual framework 5. Formulate hypotheses/assumptions
<b>Design and planning phase</b>	1. Select research approach and design 2. Specify the population and sampling method 3. Develop or select tools for data collection 4. Obtain ethical approvals and ensure participant rights 5. Conduct a pilot study
<b>Empirical phase</b>	1. Select the sample 2. Collect data 3. Prepare data for analysis
<b>Analytic phase</b>	1. Analyze data using statistical methods 2. Interpret results and draw conclusions
<b>Dissemination phase</b>	Disseminate the research findings



8. **Develop or select tools for data collection:**
  - This step involves the most appropriate selection or development of tools for data collection.
  - Tools may include self-developed interview guides, observation protocols or adapting existing ones to fit the research context.
  - It uses methods such as interviews, focus groups, observations, and document analysis.
9. **Collect data:**
  - In qualitative research, the data collection process is challenging and time consuming.
  - It is essential to build rapport with participants, gaining their trust, and creating a comfortable and safe environment for data collection.
  - The data collection process is flexible in nature.
10. **Prepare data for analysis:** Analysis of data in qualitative research involves a series of procedures such as transcription, cleaning and organizing data, coding, categorizing, comparing, and laddering.
11. **Analyze and interpret data:**
  - The researcher uses interpretive and subjective approach to analyze and interpret the collected data.
  - The researcher interprets the collected data to identify patterns, themes, and relationships.
12. **Disseminate research findings:**
  - Dissemination of research findings can be done through academic publications, presentations, etc.
  - The researcher should ensure that the findings should be communicated accurately and appropriately.
  - Ethical considerations should be addressed in the dissemination process.

**Reference:**

Kaur, S and S, Muthuvenkatachalam (2024). *Nursing Research and Statistics*. CBS Publishers and Distributors Pvt. Ltd.

## PROBLEM-SOLVING

### SHORT ANSWER QUESTION

- Q11. Compare and contrast research process and problem-solving method.**  
(RUHS, MGR, KUHS, RGUHS, BFUHS, DU, ABVHS)

**Ans.**

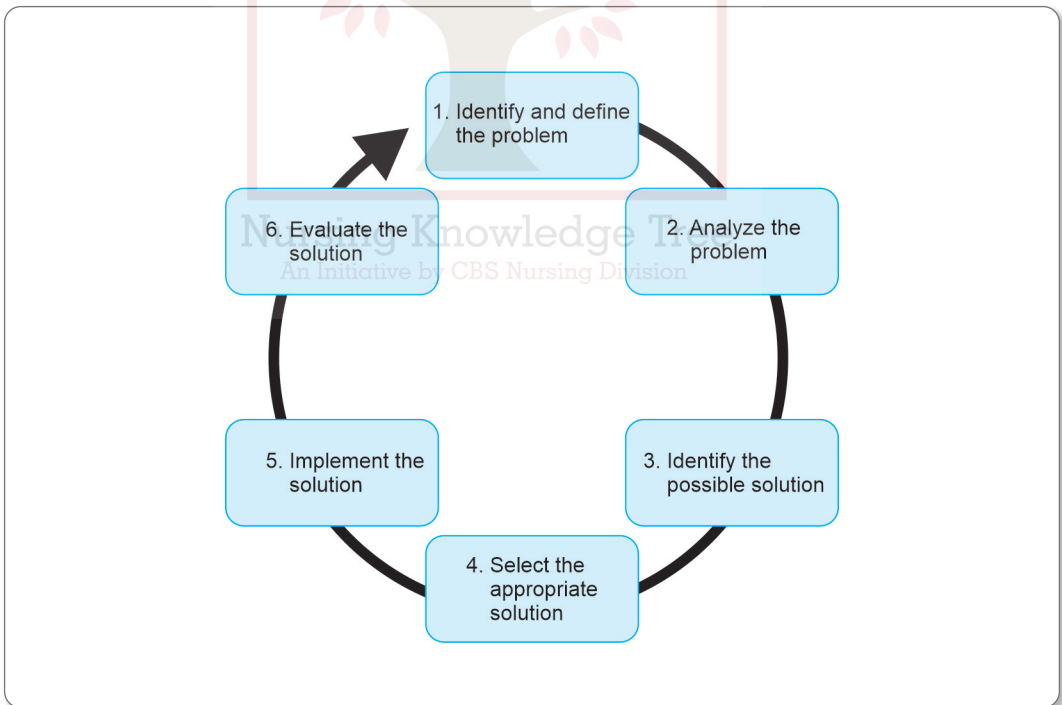
Characteristics	Research process	Problem-solving method
Purpose	To obtain new knowledge and insights	Find solution to a specific problem
Methodology	Structured and systematic approach	Flexible approach
Time Period	Months to years	Days to weeks

Contd...

Characteristics	Problem-solving method
Analysis	Analysis of problem itself
Steps	<ul style="list-style-type: none"> <li>Identifying the problem</li> <li>Analyzing the problem</li> <li>Developing alternative solutions</li> <li>Selecting the best solution</li> <li>Implementing the solution</li> <li>Follow up of action taken or strategies applied.</li> </ul>
Scope	Narrow scope and less rigorous in nature
Output	Remedial action

### Steps of Problem-Solving Process

The problem-solving process consists of six steps. In this approach, possible solutions of the problem are carefully evaluated and the best solution is chosen for implementation to solve the problem. The situation is carefully monitored over time to ensure initial and continued effectiveness of the solution. Therefore, it contributes to the nurse's knowledge for problem-solving in other similar situations. Each step of the problem-solving process is described in detail.



**Step 1: Identify and define the problem:** The first step is to identify, define and clearly understand the problem that needs to be solved.

**Step 2: Analyze the problem:** It involves breaking down the problem into manageable parts and examining each part in detail.

**Step 3: Identify the possible solution:** Use of creative and analytical thinking to formulate solutions to a problem by enlisting all the solutions in the order of priority.

**Step 4: Select the appropriate solution:** Prioritize all generated solutions and select the most appropriate one to solve it based on objective of problem-solving.

**Step 5: Implement the solution:** Implement the most appropriate solution and monitor its effectiveness.

**Step 6: Evaluate the solution:** The last step is to reassess the problem to ensure the effectiveness of the selected solution.

**Reference:**

Kaur, S and S, Muthuvenkatachalam (2024). *Nursing Research and Statistics*. CBS Publishers and Distributors Pvt. Ltd.

## SCIENTIFIC METHOD

### SHORT ANSWER QUESTIONS

**Q13. Enlist the steps of scientific methods. (MGR)**

**Ans.**

The steps of scientific methods are listed as follows:

1. Observing phenomenon
2. Define the objectives of the study
3. Review the literature about the problem
4. Define variables to be studied
5. Formulation of hypothesis
6. Design and conduct experiment to test hypothesis
7. Review for ethical considerations
8. Data collection
9. Analysis and interpretation of data
10. Draw conclusions
11. Communicate the findings of the study

**Reference:**

Kaur, S and S, Muthuvenkatachalam (2024). *Nursing Research and Statistics*. CBS Publishers and Distributors Pvt. Ltd.

**Step 5: Evaluate steps 1–4 and seek ways to improve next time:**

- After implementation of EBP, it is essential to evaluate and monitor any changes in the outcomes.
- Evaluation data should be gathered over a period of 6–12 months to assess the effect of the intervention properly.
- Positive effects must be incorporated in practice, while negative outcomes can be reviewed to determine how to address them.

**Barriers in Evidence-Based Practice**

- **Despite its potential benefits, there are several barriers that hinder the implementation of EBP in any discipline such as:**
  - Lack of knowledge
  - Resistance to change
  - Limited access to research
  - Lack of time
  - Limited continuing education programs
  - Lack of resources
  - Organizational barriers

**References:**

What is Evidence-Based Practice? [Internet]. [cited 2022 Aug 27]. Available from: <http://accelerate.uofuhealth.utah.edu/improvement/what-is-evidence-based-practice>

Kaur, S and S, Muthuvenkatachalam (2024). Nursing Research and Statistics. CBS Publishers and Distributors Pvt. Ltd.

**ETHICS IN NURSING RESEARCH**

An Initiative by CBS Nursing Division

**SHORT ANSWER QUESTIONS****Q20. What is ethics in nursing research?****Ans.**

Ethics in nursing research can be defined as the set of moral principles and guidelines that govern the conduct of research involving human participants in the field of nursing.

These principles are aimed to:

Ensure the protection

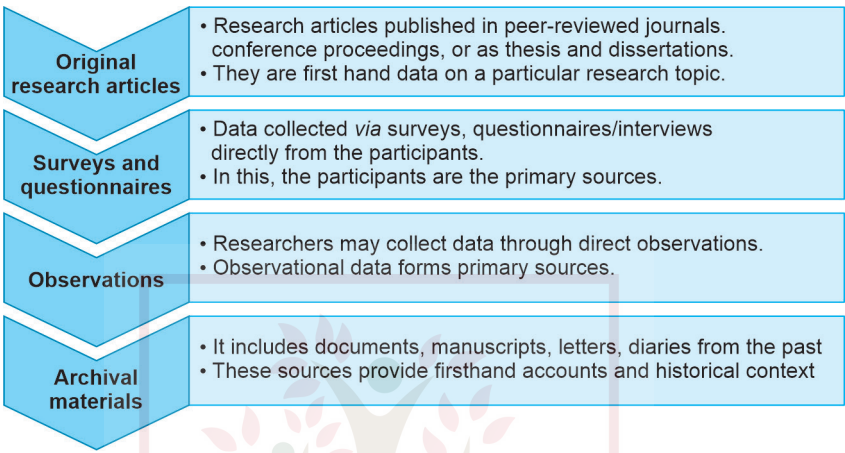
Ensure well-being

Rights of research participants

Promoting the integrity

Transparency

Credibility of research process



Secondary Sources

- It refers to materials that provide interpretations, summaries or analysis of original data conducted by others.
- Data is created by someone else or other than original researcher.
- Secondary sources aim to present or critique information derived by primary source.
- They provide valuable insights, analyzes and background of primary sources.
- Secondary sources are used to access synthesized information and expert interpretations.
- **It includes:** Systematic reviews, meta-synthesis and meta-analysis.

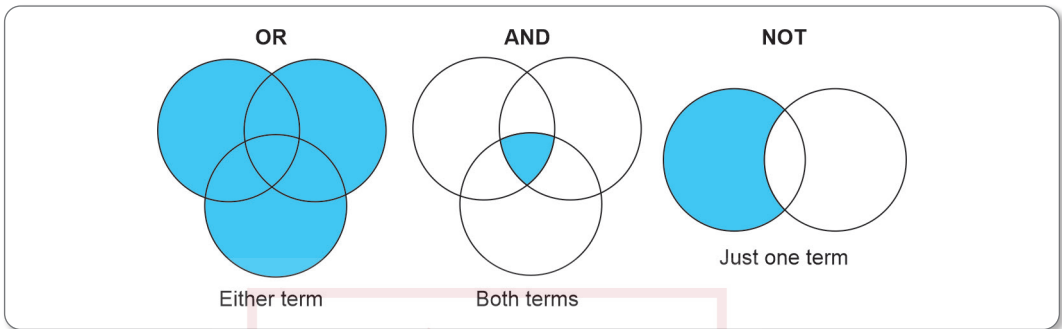
Tertiary Sources

- Also known as reference work.
- It is a source that provides an overview of information collected from primary and secondary sources both.
- Compiled, index, or organize information from primary and secondary sources.
- A summary of original information, often based on secondary information that has been published.
- **Examples of tertiary sources are:** Indexes, Abstract, catalogues, etc.

Primary	Secondary	Tertiary
Reports, Theses, Emails Conference proceedings, Company reports, Government publications, Unpublished manuscript sources, Interviews	Newspapers, Books, Journals, Internet, Some government publications, Surveys	Indexes, Abstracts, Catalogues, Encyclopedias, Dictionaries, Bibliographies

**Reference:** Annan, David. (2019). A GUIDE TO RESEARCH WRITING.

- **All these sources of literature can be accessed through either:** Printed sources/electronic sources



2. **Identifying and evaluating relevant sources:**

- This is a crucial task to ensure that the literature is of high-quality and includes only relevant material.
- During this step, the peer reviewed journal articles, books and reputable reports should be selected because they have established quality control processes and editorial standards that enhance the credibility of work published in their journals.
- Recently published journals should be prioritized (published within last 5–10 years) because nursing is a fast evolving field.

3. **Searching the literature: Manual searching and digital/online databases:**

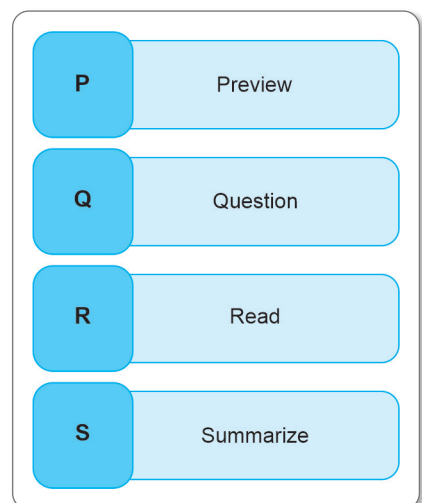
- This step involves identification of structured approach to search the appropriate information.
- Manual searching for printed journals was the standard practice until the digital revolution and advancements transformed the process of literature review.
- Due to the advancement, digital approach is considered more significant and efficient in nature.
- Moreover, both the manual and digital methods and some key databases are widely used in nursing practice and the conduction of research in the field of nursing.

4. **Analyzing and synthesizing literature review:**

- Once the relevant literature is retrieved through search, a thorough review of literature source is conducted.
- Later on pertinent information that addresses the research question is meticulously extracted.
- Key findings, methodologies and statistical data are documented to facilitate effective organization of material.
- In this process, the most common method is PQRS system.

5. **Writing the literature review:**

- After successful completion of analysis and synthesis of literature, the next step is to draft the literature review.
- Always make sure that literature review is well structured and must be written in reader friendly manner.



### Steps of Qualitative Research Design

1. Identify the research problem
2. Select the research setting and participants
3. Collect data using data collection tool
4. Analyze the collected data to find out recurring theme
5. Review of literature
6. Collect further data until no new themes emerge (data saturation)
7. Summarize the findings
8. Communicate the findings

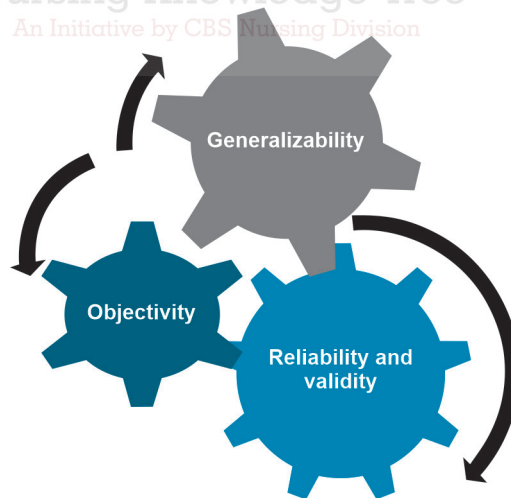
**Reference:**

Kaur, S and S, Muthuvenkatachalam (2024). *Nursing Research and Statistics*. CBS Publishers and Distributors Pvt. Ltd.

**Q28.** Write the characteristics of good research design and enlist the factors affecting the selection of good research design. (RUHS, MGR, KUHS, RGUHS, BFUHS, DU, ABVHS)

**Ans.**

- Designing a research study is always a complex process. However, it has its own strengths and weaknesses. A good research design must possess the following four characteristics.





**Q33. List the types of nonexperimental research designs.**

(RUHS, MGR, KUHS, RGUHS, BFUHS, DU, ABVHS)

**Ans.**

- Nonexperimental research designs are purely observational. The results are in descriptive form.
- In this, the researcher gathers data as it naturally occurs and explains the phenomena exactly as it is. Secondly the variables are neither manipulated nor controlled.

**Types of Nonexperimental Research Designs**

Sl. no.	Types of study	Description
<b>Classification based on Objectives</b>		
1.	Descriptive study	This study design is used to describe a phenomenon or documents its characteristics; focuses on what is happening, or how much of it has happened, rather than why it is happening.
2.	Predictive (Correlational) study	This study design is used to predict the variable of interest using information from other variables (called predictors).
3.	Explanatory study	This study design is used to explain how some phenomenon works or why it operates and explores causal relationships between variables.
<b>Classification based on time dimension</b>		
1.	Retrospective study	<ul style="list-style-type: none"> <li>• Looks back in time.</li> <li>• Data collected are used to make comparisons between the past and the present for the cases in the data set, e.g., case control study.</li> </ul>
2.	Cross-sectional study	<ul style="list-style-type: none"> <li>• Looks at a single point in time or relatively brief time.</li> <li>• The data collected are directly applied to each case at that single time period and comparisons are made across the variables of interest, e.g., correlational study and surveys, etc.</li> </ul>
3.	Prospective or longitudinal study	Looks at more than one time point; data collected makes comparisons across time, e.g., cohort studies and panel studies.

**Reference:**

Kaur, S and S, Muthuvenkatachalam (2024). *Nursing Research and Statistics*. CBS Publishers and Distributors Pvt. Ltd.

**Q34. Write a short note on the role of survey approach in nursing research.**

(RUHS, MGR, KUHS, RGUHS, BFUHS, DU, ABVHS)

**Ans.**

- Survey approach design is the most common nonexperimental research design. It describes population of interest by administering a survey or questionnaire to the participants.
- Data is collected through responses to questions.



- In the absence of random assignment, it is impossible to control extraneous variables in an experiment.
- Most of the research in nursing field is based on quasi-experimental research because it is more feasible, practical, and less expensive.

*Pre-experimental Research Design*

- These designs are weak in structure and control.
- Not considered rigorous enough for purpose of study.

Type	Description																				
Experimental	True experimental	<ul style="list-style-type: none"><li>• Participants undergo a pretest, receive an experimental treatment and then take a post-test.</li><li>• The control group provides a baseline for comparison.</li></ul> <p>Pretest-posttest control group design</p>																			
	Post-test only control group design	<ul style="list-style-type: none"><li>• Similar to the pretest-post-test design, but without the pretest.</li><li>• This design is effective in situations where a pretest may influence the study outcomes.</li></ul>																			
	Solomon four-group	<ul style="list-style-type: none"><li>• Combines elements of pretest-post-test design and post-test design only control group designs.</li><li>• Includes two experimental and two control groups to examine the effects of pretesting on study outcomes</li></ul> <p><b>Table 1:</b> The Solomon four-group design for the study</p> <table><tr><th>Group</th><th>Pretest</th><th>Treatment</th><th>Post-test</th></tr><tr><td>1R</td><td>O<sub>1</sub></td><td>×</td><td>O<sub>1</sub></td></tr><tr><td>2R</td><td>O<sub>3</sub></td><td></td><td>O<sub>4</sub></td></tr><tr><td>3R</td><td></td><td>×</td><td>O<sub>5</sub></td></tr><tr><td>4R</td><td></td><td></td><td>O<sub>6</sub></td></tr></table> <p><i>Note O = outcome measure; × = treatment; R = randomization; Group 1 and 2 = pre- and post-test control group, while groups 3 and 4 post-test only control design</i></p>	Group	Pretest	Treatment	Post-test	1R	O <sub>1</sub>	×	O <sub>1</sub>	2R	O <sub>3</sub>		O <sub>4</sub>	3R		×	O <sub>5</sub>	4R		
Group	Pretest	Treatment	Post-test																		
1R	O <sub>1</sub>	×	O <sub>1</sub>																		
2R	O <sub>3</sub>		O <sub>4</sub>																		
3R		×	O <sub>5</sub>																		
4R			O <sub>6</sub>																		

Contd...

Type		Description																																
		<div><p>Participants</p><p><b>Simple randomization:</b> Each participant has a 50% chance of being in either group</p><p>Treatment                      Control</p></div>																																
	Latin square design	Commonly used in experimental settings where researchers manipulate multiple factors, ensuring each level of each factor appears once in every row and column.	<table><tr><th colspan="2" rowspan="2"></th><th colspan="4">River gradient</th></tr><tr><th>1</th><th>2</th><th>3</th><th>4</th></tr><tr><th rowspan="4">Road gradient</th><td>1</td><td>D</td><td>A</td><td>B</td><td>C</td></tr><tr><td>2</td><td>A</td><td>D</td><td>C</td><td>B</td></tr><tr><td>3</td><td>C</td><td>B</td><td>A</td><td>D</td></tr><tr><td>4</td><td>B</td><td>C</td><td>D</td><td>A</td></tr></table>			River gradient				1	2	3	4	Road gradient	1	D	A	B	C	2	A	D	C	B	3	C	B	A	D	4	B	C	D	A
		River gradient																																
		1	2	3	4																													
Road gradient	1	D	A	B	C																													
	2	A	D	C	B																													
	3	C	B	A	D																													
	4	B	C	D	A																													
Quasi-Experimental Design	Non-randomized control group	Participants are assigned to groups without randomization, useful when randomization is impractical or ethically challenging.	<table><tr><th>Class</th><th>Pretest</th><th>Treatment</th><th>Post-test</th></tr><tr><td>Experimental</td><td>O</td><td>X<sub>1</sub></td><td>O</td></tr><tr><td>Control</td><td>O</td><td>X<sub>2</sub></td><td>O</td></tr></table> <p>Information O: Pretest or post-test of mathematical creative thinking ability X<sub>1</sub>: Learning using monopoly game media-based Course Review Horay (CRH) model X<sub>2</sub>: Conventional learning</p>	Class	Pretest	Treatment	Post-test	Experimental	O	X <sub>1</sub>	O	Control	O	X <sub>2</sub>	O																			
Class	Pretest	Treatment	Post-test																															
Experimental	O	X <sub>1</sub>	O																															
Control	O	X <sub>2</sub>	O																															
	Time series design	Data is collected at multiple of time before, during, and after an intervention, allowing researchers to observe trends and changes over time.	<div><p>Interrupted time-series design</p><table><tr><td>O<sub>1</sub></td><td>O<sub>2</sub></td><td>O<sub>3</sub></td><td>O<sub>4</sub></td><td>O<sub>5</sub></td><td>X</td><td>O<sub>6</sub></td><td>O<sub>7</sub></td><td>O<sub>8</sub></td><td>O<sub>9</sub></td><td>O<sub>10</sub></td></tr></table></div> <div><p>Equivalent time-series design</p><table><tr><td>O<sub>1</sub></td><td>X</td><td>O<sub>2</sub></td><td>X</td><td>O<sub>3</sub></td><td>X</td><td>O<sub>4</sub></td><td>X</td><td>O<sub>5</sub></td><td>X</td><td>O<sub>6</sub></td></tr></table></div>	O <sub>1</sub>	O <sub>2</sub>	O <sub>3</sub>	O <sub>4</sub>	O <sub>5</sub>	X	O <sub>6</sub>	O <sub>7</sub>	O <sub>8</sub>	O <sub>9</sub>	O <sub>10</sub>	O <sub>1</sub>	X	O <sub>2</sub>	X	O <sub>3</sub>	X	O <sub>4</sub>	X	O <sub>5</sub>	X	O <sub>6</sub>									
O <sub>1</sub>	O <sub>2</sub>	O <sub>3</sub>	O <sub>4</sub>	O <sub>5</sub>	X	O <sub>6</sub>	O <sub>7</sub>	O <sub>8</sub>	O <sub>9</sub>	O <sub>10</sub>																								
O <sub>1</sub>	X	O <sub>2</sub>	X	O <sub>3</sub>	X	O <sub>4</sub>	X	O <sub>5</sub>	X	O <sub>6</sub>																								

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Type			Description
	Pre-experimental design	One-shot case study	<p>A single group is observed after an intervention, providing a snapshot of outcomes without a comparison group.</p> <pre> graph LR     A[Exp. group] --&gt; B[Treatment] --&gt; C[Post-test]           </pre>
		One group pretest- post-test design	<ul style="list-style-type: none"> <li>Participants undergo a pretest, receive an intervention, and then take a post-test.</li> <li>A straightforward design is lacking a control group for comparison</li> </ul> <pre> graph LR     A[Pretest] --&gt; B[Treatment or intervention] --&gt; C[Post-test]     O1[O<sub>1</sub>] --- B --- O2[O<sub>2</sub>]           </pre>

**Reference:**

Kaur, S and S, Muthuvenkatachalam (2024). *Nursing Research and Statistics*. CBS Publishers and Distributors Pvt. Ltd.

**Q37. Define research design. Describe the types of quantitative research design. Elaborate on Quasi-Experimental Design. (RUHS, MGR, KUHS, RGUHS, BFUHS, DU, ABVHS)**

**Ans.**

Research design is a framework that provides a detailed blueprint of how the research will be carried out, what tools and techniques will be used and how the data will be analyzed.

There is no standard classification of research designs. However, for practical purposes, the research designs can be classified into three major categories: Quantitative research design, qualitative research design and mixed method research design.

**Quantitative research design mostly centers on numerical data. Variables are numerically measured. This design is broadly classified into:** Experimental research design and nonexperimental research design.

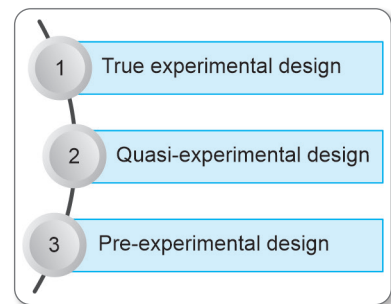
### Experimental Research Design

- Involves manipulation of independent variables.
- Used to measure whether one treatment has a better effect than another.
- Used to investigate interaction between independent and dependent variables after manipulating independent variables.
- Most scientifically sophisticated and powerful design.

**Three major types of experimental research designs are:**

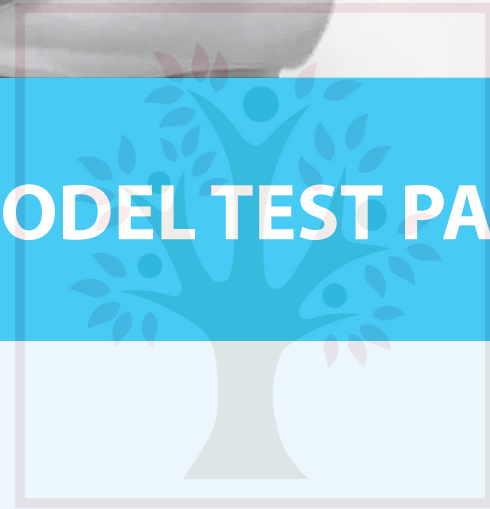
### Quasi-Experimental Research Design

- Quasi-experimental research design is framework that provides a detailed blueprint of how the research will be carried out, what tools and techniques will be used and how the data will be analyzed.





# MODEL TEST PAPERS



**Nursing Knowledge Tree**  
An Initiative by CBS Nursing Division

\*These model papers have been curated from the last ten years' papers for MSc Nursing from all the important universities.

**MODEL TEST SET-1****Advanced Nursing Practice****Time: 3 Hours****M.M.: 75****Note:** Attempt all questions.**Q1. Answer the following questions:****[20 × 2 = 40]**

1.
  - a. The purposes of theories in nursing.
  - b. Discuss the following theory in detail with suitable example:
    - i. Health belief model.
    - ii. Peplau's interpersonal relationship theory.
2. Write in detail about:
  - a. Stages of sleep cycle.
  - b. Factors affecting sleep.
  - c. Sleep disorders.
  - d. Role of nurse in promotion of sleep.

**Q2. Write notes on:****[5 × 7 = 35]**

- a. Concepts of causation.
- b. Role of nurse in management of dehydration.
- c. Genetic counseling.
- d. Future of nursing profession.
- e. Biomedical waste management in infection control.
- f. Counseling the client's significant family members in association with dying client.
- g. Application of computer in nursing practice.



# GLOSSARY

## ADVANCED NURSING PRACTICE

**Accountability:** The legal obligation of nurses to answer for their actions and decisions in patient care.

**Acidosis:** A state in which the blood pH falls below the normal range (7.35), typically caused by a rise in acids or a reduction in bicarbonate.

**Actual diagnosis:** Identifies existing patient health problems based on current symptoms.

**Acupressure:** A technique similar to acupuncture that uses manual pressure on specific points to promote relaxation and healing without needles.

**Acupuncture:** A traditional Chinese medicine practice involving the insertion of thin needles at specific points on the body to stimulate healing and balance energy.

**Acute stress:** Short-term stress that typically resolves quickly.

**Adventitious crisis:** A crisis caused by events beyond one's control, like natural disasters or violent crimes.

**Aggression:** Behaviors intended to harm or intimidate others, physically or psychologically.

**Aging process:** The natural, biological, psychological, and social changes that occur as individuals age.

**Alkalosis:** A condition in which the blood pH exceeds the normal level of 7.45, typically resulting from a reduction in acids or a rise in bicarbonate.

**Allostasis:** The process of achieving stability through physiological or behavioral changes.



