

## Test Bank - Chapter 01

**Q1:** Nursing research is significant to the profession of nursing because it promotes

- A. more specifically defined nursing practice responsibilities.
- B. decreased liability within the practice of nursing.
- C. generation of a specialized body of nursing knowledge for use in nursing practice. (Correct)**
- D. expansion of the scope of nursing practice into other disciplines.

*Rationale: (A) Research aids in documenting accountability of nurses, but professional guidelines already exist regarding responsibility. Each state has a Nurse Practice Act with rules and regulations that define the scope of practice. (B) Liability is a legal concept related to a nurse's legal scope of practice and professional standards of practice. Research does not change a nurse's liability. (C) Nursing research generates a specialized scientific knowledge base that empowers the nursing profession to anticipate and meet constantly shifting challenges of health care delivery to multiple populations. It provides a foundation for evidence-based nursing care and quality improvement activities. (D) Although research can document nursing accountability, each state's Nurse Practice Act defines the scope of nursing practice for that state.*

**Q2:** Which of the following statements best describes Quality Improvement (QI)? QI is

- A. the collection, evaluation, and integration of valid research evidence, combined with clinical expertise, providing an understanding of patient and family values and preferences.
- B. the systematic use of data to monitor the outcomes of care processes as well as the use of improvement methods to design and test changes in practice to continuously improve the quality and safety of health care systems. (Correct)**
- C. a systematic, rigorous, critical investigation that aims to answer questions about health related phenomena.
- D. an investigation into a research question to understand the meaning of a human experience such as grief, hope, or loss.

*Rationale: (A) Evidence-based practice (EBP) is the collection, evaluation, and integration of valid research evidence, combined with clinical expertise and an understanding of patient and family values and preferences, to inform clinical decision making. (B) Quality improvement is best described as the systematic use of data to monitor the outcomes of care processes as well as the use of improvement methods to design and test changes in practice for the purpose of continuously improving the quality and safety of health care systems. (C) Research is the systematic, rigorous, critical investigation that aims to answer questions about health related phenomena. (D) Qualitative research is used in a study if the question is about understanding the meaning of a human experience such as grief, hope, or loss.*

**Q3:** An aspect of the scientific investigation of nursing practice that is also a fundamental concept of the American Nurses Association (ANA)'s Code of Ethics for Nurses (2015) is

- A. professional accountability. (Correct)**
- B. standards of care.

- C. legal scope of practice.
- D. advanced practice nursing activities.

*Rationale: (A) Scientific investigation promotes accountability, a hallmark of the nursing profession and a fundamental concept of the ANA's Code of Ethics for Nurses. (B) Standards of care are defined by ANA, as well as specialty nursing organizations. The Code of Ethics for Nurses states that nurses should conform to standards, but standards per se are not part of the Code. (C) Legal scope of practice is defined by each state's Nurse Practice Act and elaborated in its rules and regulations. (D) The ANA Code of Ethics applies to nursing practice in general, not advanced practice.*

**Q4:** Nurses who provide direct patient care must understand the nursing research process to?

- A. Identify potential subjects for clinical research studies.
- B. Assist as accurate data collectors in clinical research studies.
- C. Teach patients and families the risks and benefits of participating in research.
- D. Evaluate nursing research reports for relevance to their clinical practice. (Correct)**

*Rationale: (A) Subject identification is determined by the nurse researcher. (B) Data collectors need to understand their role in the study; they do not need to understand the entire research process. (C) Detailed explanation of the research study is the responsibility of the nurse researcher. (D) Nurses need to understand the research process to critically read research reports and determine if nursing practice should incorporate the research findings as valid evidence.*

**Q5:** The action that demonstrates the role of a knowledgeable consumer of nursing research is

- A. designing a nursing research study.
- B. analyzing data to determine a study's outcomes.
- C. evaluating the credibility of research findings. (Correct)**
- D. implementing an intervention found to be effective in one clinical case study.

*Rationale: (A) A consumer uses and applies research to practice but is not responsible for designing a study. (B) A consumer does not conduct data analysis of a study; the study's primary investigator analyses data. (C) A consumer of nursing research needs to understand the research process to determine the merit and relevance of evidence presented in research studies. (D) A consumer would not implement an intervention based on a single case study.*

**Q6:** The goal of gaining critical appraisal skills of research is to promote the nurse's ability to

- A. develop a sound research question.
- B. select metrics to analyse the data.
- C. ensure that human rights are protected.
- D. determine whether the conclusions of a research article are based on the study's findings. (Correct)**

*Rationale: (A) Research questions are developed after the review of the literature is complete. (B) Appropriate metrics for data analysis are determined as part of the research design. (C) Protection of human rights is followed from IRB approval throughout the study. (D) Critical appraisal*

competency includes the ability to read a research article and determine whether the conclusions are based on the study's findings. Critical competency also includes the ability to synthesize the findings of multiple studies to use in developing an evidence-based practice.

**Q7:** Members of the nursing staff are to participate in a unit-based clinical research study. Which research-related actions would be expected of a nurse with a baccalaureate nursing degree?

**A. Using critical appraisal skills to understand and assess the steps of the research process (Correct)**

B. Providing expert nursing consultation about the way in which clinical services are delivered

C. Developing research methods to monitor and evaluate the quality of nursing practice in the clinical setting

D. Providing leadership in the application of scientific knowledge to nursing practice

*Rationale: (A) A baccalaureate-prepared nurse should be able to use skills of critical appraisal to both understand and appraise the steps of the research process. (B) Nurses prepared at the baccalaureate level in nursing are at the bedside implementing protocols, whereas expert consultation is generally reserved for nurses prepared at the master's or higher-degree level (advanced education). (C) Developing research methods is generally reserved for nurses with advanced education. (D) Providing leadership in research application is generally reserved for nurses with advanced education.*

**Q8:** Which statement describes the role of the nurse in research?

A. Nurses must be prepared at the baccalaureate or higher level of education to have any role in nursing research.

B. Nurses with master's or higher levels of education are solely responsible for applying research to clinical practice.

**C. The research role of nurses prepared at both baccalaureate and master's levels of education includes critical appraisal skills. (Correct)**

D. Regardless of the nursing education level, only the nurse with the most comprehensive understanding of statistical methods should interpret research findings.

*Rationale: (A) Having a role in nursing research or implementing findings is not limited to nurses with baccalaureate or higher levels of education. (B) Nurses with master's or higher levels of education provide leadership to supervise how research findings are applied in the clinical area. However, all levels of nurses can apply research findings to practice. (C) To use research in evidence-based practice, the nurse must not necessarily be able to conduct research but should be able to understand and appraise the steps of the research process to read the research literature critically and use it to inform clinical decisions. (D) Data analysis is usually conducted by nurses with master's or higher levels of education. However, interpretation of research findings can be performed by any nurse who can critically analyze the research performed.*

**Q9:** What is the primary value of evidence-based nursing practice?

A. Implementing the most cost-effective nursing practices when providing patient care

**B. Incorporating research findings with clinical expertise when individualizing patient care (Correct)**

- C. Separating nursing research as unique from the research of other disciplines
- D. Developing new nursing theories to promote the growth of nursing science

*Rationale: (A) Cost-effective nursing interventions can occur based on evidence, but it is not the primary value of evidence-based nursing practice. (B) Evidence-based practice allows the nurse to systematically integrate the best available research evidence with individual clinical expertise, as well as the patient's values and preferences, when making clinical decisions. (C) Developing a unique body of nursing knowledge is important, but it is not the primary value of developing evidence-based nursing practice. Also, nurse researchers should be able to collaborate with researchers in other disciplines. (D) Developing abstract nursing theory is important, but evidence-based nursing is focused on the more concrete application of knowledge in clinical practice.*

**Q10:** A novice nurse researcher is comparing the processes used in nursing research and in evidence-based practice. What differences, if any, exist between the two?

- A. As scientific processes, they are fundamentally the same and should result in parallel outcomes.
- B. Both processes involve testing a question with an appropriate design and specific methodology.

**C. In a research study, the question is tested with an appropriate design and specific methodology, whereas in evidence-based practice, the question is used to search the research literature to find answers. (Correct)**

- D. In evidence-based practice, qualitative studies are critically appraised to answer a clinical question, whereas in nursing research, quantitative studies are reviewed to provide a foundation for the study.

*Rationale: (A) The research process and the evidence-based practice process, though similar, have fundamental differences as well. (B) This definition applies to the research process, not the evidence-based practice process. (C) Nursing research includes developing a design for a study, whether quantitative or qualitative, reviewing the literature, and carrying out a specific methodology to find answers to a question. In contrast, evidence-based practice includes a review of completed research studies to identify answers to a clinical question. (D) Both the research process and the evidence-based practice process include critical review of quantitative and qualitative studies.*

**Q11:** A nurse is analysing a research article. Where in the article is the nurse likely to find the research question and study purpose?

**A. Introduction (Correct)**

- B. Data analysis
- C. Findings
- D. Data collection

*Rationale: (A) The research question and study purpose is generally found early in the report: in the abstract, the introduction, or at the end of the literature review or conceptual framework section. (B) The research question and study purpose are defined before the data analysis section of the research article. (C) The research question and study purpose are defined before the findings section of the research article. (D) The research question and study purpose are defined before the*

*data-collection section of the research article.*

**Q12:** The nurse researcher is conducting a research study using subjects who will be interviewed regarding their experience with postpartum depression. Why would the researcher select a qualitative, rather than a quantitative, research design?

- A. Quantitative research is usually conducted in natural settings using data that are words rather than numbers.
- B. Qualitative research seeks to explain cause-and-effect relationships between variables.
- C. Quantitative research typically uses a convenience sample, seeking to answer a clinical question about a human experience.

**D. Qualitative research collects data from a small number of subjects, allowing for in-depth study of a phenomenon. (Correct)**

*Rationale: (A) Qualitative, not quantitative, research is usually conducted in natural settings using data that are words rather than numbers. (B) Quantitative, not qualitative, research seeks to explain cause-and-effect relationships between variables. (C) Qualitative, not quantitative, research seeks to answer a question about a human experience. (D) Qualitative research typically collects data from a small number of subjects, thus allowing for in-depth study of a phenomenon while using a subjective approach.*

**Q13:** The nurse is analysing a research article. To determine if an integrative review was performed as part of the study, the nurse must understand that an integrative review includes is a

- A. summary of research studies on a focused topic that used a specific statistical methodology.
- B. synthesis of the research and theoretical literature on a specific area without a statistical analysis. (Correct)**
- C. asynthesis of qualitative articles on a focused topic using a specific qualitative methodology.
- D. summary of articles in an attempt to develop a clinical practice statement or clinical guidelines.

*Rationale: (A) Meta-analysis summarizes articles on a focused topic that used a specific methodology. (B) An integrative review is a synthesis of research or theoretical literature on a specific area that follows specific steps of literature integration without statistical analysis. (C) Meta-synthesis is a synthesis of qualitative articles on a focused topic using specific qualitative methodology. (D) Clinical guidelines are practice statements designed to assist clinicians about health care decisions for specific conditions or situations.*

**Q14:** When assessing the strength of a body of evidence used in a research study for consistency, the nurse should determine

- A. extent to which the study's design, implementation, and analysis minimize bias.
- B. number of studies that have evaluated the research question, including overall sample size across studies.
- C. degree to which studies with similar and different designs investigated the same research questions and report similar findings. (Correct)**
- D. significance of the findings based on the statistical methods used for data analysis.

*Rationale: (A) Quality refers to the extent to which the study's design, implementation, and analysis minimize bias. (B) Quantity refers to the number of studies that have evaluated the research question, including overall sample size across studies. (C) Consistency is the degree to which studies that had similar and different designs (but investigate the same research question) reported similar findings. (D) Quantity refers to the strength of the findings in the statistical analyses.*

**Q15:** The nurse is analysing a qualitative research article. In which section of the article is the nurse likely to find a summary of legal-ethical issues considered in the study?

**A. Data collection or procedures (Correct)**

- B. Findings or results
- C. Discussion or implications
- D. Abstract or introduction

*Rationale: (A) Legal-ethical issues are typically discussed in the article's data-collection or procedures section, usually when discussing the sample. (B) The research results are typically found in the findings or results sections. (C) Recommendations are typically found in the discussion or implications sections. (D) The research question and study purpose are typically found in the abstract or introduction.*

**Q16:** The nurse is analysing a qualitative research article. In which section of the article should the nurse expect to find a discussion of the research findings?

- A. Procedures
- B. Methods
- C. Sample

**D. Results (Correct)**

*Rationale: (A) Data analysis is typically included in the data analysis or procedures section. (B) Instruments and their validity and reliability are included in the methods or instruments sections. (C) The research sample and legal-ethical issues are included in the sample or subjects section. (D) The discussion of the findings will be located in the results or discussion section.*

**Q17:** The nurse is using the critical reading process to analyse a research article. The nurse identifies the main theme of the article and states it in two sentences, using the nurse's own words. The nurse is using a strategy to promote which type of understanding?

- A. Preliminary
- B. Comprehensive (Correct)**
- C. Analysis
- D. Synthesis

*Rationale: (A) Strategies for preliminary understanding include activities such as using a dictionary and identifying key variables of the study. (B) Strategies for comprehensive understanding include restating the main idea or theme of the article in one's own words. (C) Strategies for analysis understanding include using criteria to critique the steps of the research process used in the study. (D) Strategies for synthesis understanding include writing a summary of the strengths and weaknesses of the study.*

**Q18:** The nurse is using the critical reading process to analyse a research article. The nurse is using a list of criteria to determine how well the researcher performed each step of the research process. The nurse is using a strategy to promote which type of understanding?

- A. Preliminary
- B. Comprehensive
- C. Analysis (Correct)**
- D. Synthesis

*Rationale: (A) Strategies for preliminary understanding include activities such as highlighting or underlining identified steps of the research process. (B) Strategies for comprehensive understanding include restating the main idea or theme of the article in one's own words. (C) Strategies for analysis and understanding include using criteria to critique the steps of the research process used in the study. (D) Strategies for synthesis understanding include writing a summary of the strengths and weaknesses of the study.*

**Q19:** Which of the following is a critical step for the quality improvement process in health care settings?

- A. Outlining general long-range goals
- B. Identifying current successful practices
- C. Testing practice changes slowly and tentatively
- D. Adopting a practice change as a new standard of care (Correct)**

*Rationale: (A) Quality improvement includes identifying specific, immediate goals, not long-range goals. (B) The quality improvement process includes identifying practices that pose problems, rather than identifying successful practices. (C) Quality improvement includes testing practice changes rapidly, not slowly. (D) The goal of quality improvement activities is to bring about changes in practice that will make a positive difference in patient care. Therefore, adopting a practice change is a critical step in the process.*

**Q20:** Which statements describe the actions of the baccalaureate nurse graduate as a participant in the nursing research process? (Select all that apply.) (Select all that apply.)

- A. Administering care at the bedside according to a research protocol (Correct)**
- B. Providing leadership by helping others apply scientific knowledge to practice
- C. Sharing with nursing colleagues research findings that are pertinent to practice (Correct)**
- D. Designing and conducting nursing research studies
- E. Functioning as a primary investigator for a research study

*Rationale: Following a research protocol at the bedside is an activity consistent with the practice of a nurse prepared at the baccalaureate level. Sharing research evidence with colleagues is an activity consistent with the practice of a nurse prepared at the baccalaureate level.*

**Q21:** Which aspects of the nursing research process are common to nurses at all educational levels? (Select all that apply.) (Select all that apply.)

- A. Disseminating research findings in research reports (Correct)**
- B. Maintaining the protection of patients who are subjects in a study
- C. Using one's expertise to develop theoretical explanations for findings (Correct)**
- D. Knowing the relationship between research and nursing practice (Correct)**
- E. Being a member of a collaborative team that applies research to practice

*Rationale: All nurses are responsible for protecting the rights of patients. All nurses should be aware that research is related to practice. All nurses can be a part of a clinical team that applies research to practice.*

**Q22:** For the baccalaureate nursing student, education in nursing research should result in (Select all that apply.) *(Select all that apply.)*

- A. mastering the development of research protocols. (Correct)**
- B. gaining a basic understanding of the research process. (Correct)**
- C. learning how research is related to clinical nursing practice.
- D. developing skills as a primary investigator in research. (Correct)**
- E. becoming a knowledgeable consumer of nursing research.

*Rationale: The student should gain an initial understanding of the importance of research in nursing practice. The student should learn how research is related to clinical nursing practice. The student should learn skills in the critical analysis of research to assist in decisions about applying research findings in nursing practice.*

**Q23:** Developing nurse researchers at a younger age is a priority for the future in the nursing profession because it should (Select all that apply.) *(Select all that apply.)*

- A. enhance the discipline's scientific development. (Correct)**
- B. increase the longevity of research careers.
- C. receive more research funding for professional organizations. (Correct)**
- D. promote mentoring opportunities for novice researchers.
- E. increase nursing's role in pharmaceutical research.

*Rationale: Developing young researchers increases the number of researchers contributing to the science of the discipline. Introducing nurses to research at a younger age allows them sufficient time to develop in-depth research programs in their careers. Introducing nurses to research at a younger age allows them time and opportunity to be mentored by experienced researchers, as well as to learn to become mentors themselves.*

**Q24:** When comparing the contributions of research, evidence-based practice, and quality improvement, which of the following is (are) unique to evidence-based practice? (Select all that apply.) *(Select all that apply.)*

- A. Collection of valid research evidence, combined with clinical expertise and an understanding of patient and family values and preferences, to inform clinical decision making. (Correct)**

B. A systematic rigorous, critical investigation that aims to answer questions about health-related phenomena.

**C. Evaluation of valid research evidence, combined with clinical expertise and an understanding of patient and family values and preferences, to inform clinical decision making. (Correct)**

D. Systematic use of data to monitor outcomes of care processes and the use of improvement methods to design and test changes in practice to continuously improve the quality and safety of health care systems.

**E. Integration of valid research evidence, combined with clinical expertise and an understanding of patient and family values and preferences, to inform clinical decision making. (Correct)**

*Rationale: The collection, evaluation, and integration of valid research evidence, combined with clinical expertise and an understanding of patient and family values and preferences, to inform clinical decision making, are unique contributions of evidence-based practice. Research can be described as a systematic, rigorous, critical investigation that aims to answer questions about health-related phenomena. Quality improvement can be described as the systematic use of data to monitor outcomes of care processes and the use of improvement methods to design and test changes in practice to continuously improve the quality and safety of health care systems.*

## Review Questions - Chapter 01

**Q1:** An awareness of current research findings can enhance the delivery of quality nursing care because?

**A. Research provides the nurses with the knowledge needed to make sound clinical decisions. (Correct)**

B. One pilot study can change nursing practice dramatically.

C. The Joint Commission on Accreditation of Healthcare Organizations requires all nurses to be consumers of research.

D. Traditional nursing care is no longer appropriate for 21st century nursing.

*Rationale: Clinical decisions should be based on knowledge about patient outcomes, not just tradition. Option B, C, and D are incorrect: Practice should never change on the basis of just one study. The Joint Commission regulates health care settings, not the practice of nursing. Much of "traditional" practice has been found to lead to positive patient outcomes.*

**Q2:** Why should consumers of health care be concerned about nursing research?

**A. There is evidence that nursing care makes a difference in outcomes. (Correct)**

B. The nursing profession needs to define its place in the health care system.

C. Accrediting agencies must determine how best to use the technology needed to provide nursing care.

D. Nurses must justify the cost of their services for reimbursement purposes.

*Rationale: Nursing is accountable to consumers when they can demonstrate the safety and effectiveness of nursing care. Options B and C focus on the nursing profession, not the consumer, and therefore do not answer the question. Nursing research builds knowledge about effective nursing interventions, as well as the cost-effectiveness of nursing care.*

**Q3:** When providing evidence-based care, the nurse follows which of the following sequences of steps?

A. Evaluate, act, appraise and assess, gather, and ask

B. Appraise and assess, act, ask, gather, and evaluate

**C. Ask, gather, assess and appraise, act, and evaluate (Correct)**

D. Gather, ask, evaluate, act, and appraise and assess

*Rationale: The correct sequence of steps involved in the process of evidence-based practice consists of ask, gather, assess and appraise, act, and evaluate.*

**Q4:** Which of the following best supports nursing theory?

A. Educational environment

**B. Nursing research (Correct)**

C. Patient outcomes

D. Expansive body of science

*Rationale: Although nursing research cannot prove or disprove a theory, it can support the theory. Nursing theory arises from clinical practice and has been developed by both practitioners and educators. Because theory cannot be tested directly, patient outcomes cannot directly support theory. Theory is part of an expansive body of science.*

**Q5:** A nurse researcher is searching for the purpose of a study in a research report. Where is the most likely place to find the purpose in the report?

A. At the end of the research design section

**B. At the end of the literature review section (Correct)**

C. At the end of the sampling section

D. At the end of the conclusion section

*Rationale: The purpose of a study is usually located at the end of the researcher's introduction, the end of the literature review, or conceptual framework section. The purpose of a study is usually not located in the research design section, sampling section, or conclusion section.*

**Q6:** The best way to determine that a research study met ethical standards is by locating which information?

A. The reliability and validity of each measure were discussed.

B. The data analysis procedures are thoroughly discussed.

**C. The study was approved by an institutional review board. (Correct)**

D. The sampling techniques used were discussed.

*Rationale: Approval of the study by an institutional review board ensures that the study met ethical standards. Although the discussion of the reliability and validity of instruments, the procedures used for data analysis, and the sampling techniques used are important, they do not indicate that the study met ethical standards.*

**Q7:** The nurse researcher wants to summarize several studies that focus on early detection of ovarian cancer. The nurse intends to use specific statistical methods that will allow conclusions to be drawn by the focus area. In this case, which is the best systematic review to choose?

**A. Meta-analysis (Correct)**

B. Integrative review

C. Meta-synthesis

D. Meta-summary

*Rationale: A meta-analysis summarizes a number of studies focused on a one question or topic using a specific statistical methodology to synthesize the findings in order to draw conclusions about the area of focus. An integrative review is a focused review and synthesis of either research or theoretical literature on a particular area that follows specific steps of literature integration and synthesis without statistical analysis and can include both quantitative and qualitative articles. A meta-synthesis is the synthesis of a number of qualitative research studies on a focused topic using specific qualitative methodology. A meta-summary is the synthesis of a number of qualitative*

research studies on a focused topic using specific qualitative methodology.

**Q8:** For which research question would qualitative methods be most appropriate?

- A. Which pain medications decrease the need for sleep medication in elderly patients?
- B. What is the meaning of health for migrant farmworker women? (Correct)**
- C. Under what conditions does a decubitus ulcer heal most quickly?
- D. How does frequency of medication administration affect the degree of pain experienced following knee replacement surgery?

*Rationale: Option B seeks to explore a phenomenon (health) for a specific population. Option A seeks to understand a cause-and-effect interaction between the use of pain medication and the need for sleep medication, making it a quantitative study. Option C seeks to discover a cause-and-effect interaction between treatment and speed of healing, making it a quantitative study. Option D seeks to discover a cause-and-effect interaction between medication administration and the degree of pain experienced, making it a quantitative study.*

**Q9:** The nurse is attempting to locate the legal-ethical issues of a qualitative research study. The best place for the nurse to look for this in the study is where?

- A. Discussion section
- B. Procedure section (Correct)**
- C. Design section
- D. Sample section

*Rationale: The legal-ethical issues of a study are usually included in the procedure section of the report.*

**Q10:** Which is the best strategy for a nurse researcher to use to read a research study critically?

- A. Read the study through once very thoroughly.
- B. Use a research text to clarify unfamiliar terms. (Correct)**
- C. Underline the study's findings.
- D. Use the abstract to select the parts of the study needing closer perusal.

*Rationale: A research text is an excellent resource for clarifying unfamiliar terms. Multiple readings are necessary for a critical understanding of the study. Although underlining critical components of the study may be useful, the study's findings are easily located in one section of the report. The abstract can provide only a general overview. The entire report should be scanned before closer scrutiny of specific parts.*

**Q11:** Which is the best way for a nurse to use research appropriately?

- A. Follow the study researcher's recommendations.
- B. Read many studies in the same content area and follow the recommendations of the studies with similar findings.
- C. Explore the strength of the evidence available. (Correct)**

D. Replicate studies in their practice environment to ensure recommendations are contextually appropriate.

*Rationale: It is important to determine all available evidence and the strength of the evidence before changing practice. Practice decisions should never be made on the basis of one study alone. Studies in the same content area may not represent the best knowledge in the area. Nurses do not need to replicate studies before making practice decisions.*

**Q12:** A nurse reads a research article and asks other graduate students to critically appraise article using the same criteria. The nurse is most likely using which stage of the critical reading process?

- A. Preliminary understanding
- B. Comprehensive understanding
- C. Analysis understanding (Correct)**
- D. Synthesis understanding

*Rationale: Analysis understanding occurs when the nurse asks fellow students to analyze the same study using the same criteria and compares results. Preliminary understanding includes strategies such as listing key variables and highlighting new terms. Comprehensive understanding includes identifying the main theme of the article. Synthesis understanding includes summarizing each research step in your own words using critiquing criteria.*

**Q13:** What can a nurse researcher determine by reading the abstract, introduction, major headings, and conclusions of a study?

- A. Relevance of the study to nursing practice
- B. Appropriateness of methods used
- C. Need for further study
- D. Study's main theme (Correct)**

*Rationale: The main theme of the study can usually be determined by reading these major parts of the report. The relevance of the study can be found in the introduction and background of the report. The methods should flow from the scientific background and research question. The need for further study is identified by the body of evidence available in the area and the findings of the study.*

**Q14:** How can a nurse researcher best achieve a comprehensive understanding of any research report?

- A. Skim the entire report for a general overview.
- B. Study the abstract to learn the main components of the study.
- C. Seek assistance for unclear content. (Correct)**
- D. Review the conclusion to link the content with the research question.

*Rationale: To understand a study comprehensively, it is important to clarify all areas of content that are not clear. Skimming the report leads to an overall understanding only. The abstract can provide only an overview of the study. All parts of the research process need to be understood.*

**Q15:** Before analyzing a research study, it is most important for the nurse researcher to?

- A. Synthesize the material.
- B. Comprehensively understand the study. (Correct)**
- C. Apply recommendations to practice.
- D. Read other similar studies.

*Rationale: Comprehensive understanding is necessary to analyze and synthesize the material. Synthesis of the material cannot occur until after the study is analyzed. Application of the material should not occur until after the study is analyzed and synthesized. It is not necessary to read other studies to analyze a new study.*

**Q16:** What is the most accurate term for making patient-care decisions based on research findings?

- A. Critical reflection
- B. Evidence-based practice (Correct)**
- C. Applied research
- D. Research implications

*Rationale: Evidence-based practice means making patient-care decisions on the basis of available evidence. Critical reflection is the process of thinking critically. Applied research tests the practical limits of descriptive theories but does not examine the efficacy of actions taken by practitioners. Research implications are the future actions suggested by the study findings.*

**Q17:** When does the strength of the scientific evidence available influence changes in nursing practice?

- A. Studies in the area have used quantitative methodology.
- B. Studies in the content area show similar results. (Correct)**
- C. Each study uses small, highly controlled samples of subjects.
- D. Selective bias is built into the research design.

*Rationale: Replicating studies and obtaining similar findings increases the validity of the findings. Qualitative studies can provide evidence that changes practice. Although controlling confounding variables improves the reliability of data, generalizability can be enhanced by the use of larger, more representative samples. Bias decreases the strength of the evidence.*

**Q18:** An experimental study in which subjects were randomly selected is an example of what level of study?

- A. Level II (Correct)**
- B. Level IV
- C. Level VI
- D. Level VII

*Rationale: Experimental studies yield Level II data. Nonexperimental studies yield Level IV data. A single descriptive or qualitative study yields Level VI data. The opinions of authorities or experts*

yield Level VII data.

**Q19:** Which phrase would be found in a report of a qualitative study?

- A. "The hypothesis of this study is \_\_\_\_\_."
- B. "Perceived pain was measured using the Abbott pain scale."
- C. "The control group received no instruction."
- D. "Subjects were asked to relate their perceptions of pain." (Correct)**

*Rationale: Data collected were perceptions of pain, not numeric data. A study with a hypothesis is a quantitative study. A study that collects numeric data is quantitative. A study with a control group is a quantitative study.*

**Q20:** Which phrase would be found in a report of a quantitative study?

- A. "A convenience sample was chosen." (Correct)**
- B. "The phenomenon studied was \_\_\_\_\_."
- C. "Data were analyzed and interpreted."
- D. "Researchers sought to explore the meaning of the hospital experience."

*Rationale: When a sample of convenience is chosen, the study is quantitative. Qualitative studies explore phenomena. Data collected in qualitative studies are "interpreted." Qualitative studies explore the meaning of human experience.*

**Q21:** Which study title indicates the use of qualitative methodology?

- A. Comparison of Nursing Assessment Techniques in Hospitals and Home Care Settings
- B. The Relationship between the Numbers of Errors Made and Educational Preparation
- C. The Effectiveness of Patient Teaching Pre- and Postoperatively
- D. The Experience of Mother-Child Bonding in Inner-City Populations (Correct)**

*Rationale: Qualitative studies explore the meaning of human experience. Quantitative studies seek differences among variables. Quantitative studies collect numeric variables and test relationships. Quantitative studies seek to explain cause-and-effect interactions.*

**Q22:** The nurse is critically reading a research study and writes cues, the relationships of concepts, and questions on a photocopy version of the study. This would most likely be included in which step of the critical reading process?

- A. Preliminary understanding
- B. Comprehensive understanding
- C. Analysis understanding (Correct)**
- D. Synthesis understanding

*Rationale: Analysis understanding consists of writing cues, the relationships of concepts, and questions on a photocopy version of the study. Preliminary understanding consists of listing key variables and highlighting new terms. A comprehensive understanding consists of identifying the main idea or theme of the article. Synthesis understanding consists of summarizing the report,*

*including strengths and weaknesses, in the nurse's own words.*

**Q23:** The nurse researcher is critically reading a research study and states the main idea of the article in his or her own words. This would most likely be included in which step of the critical reading process?

- A. Preliminary understanding
- B. Comprehensive understanding (Correct)**
- C. Analysis understanding
- D. Synthesis understanding

*Rationale: A comprehensive understanding consists of identifying the main idea or theme of the article. Preliminary understanding consists of listing key variables and highlighting new terms. Analysis understanding consists of writing cues, the relationships of concepts, and questions on a photocopy version of the study. Synthesis understanding consists of summarizing the report, including strengths and weaknesses, in your own words.*

**Q24:** Characteristics of a quantitative research design include

- A. lack of a hypothesis, either stated or implied.
- B. use of variables measured by instruments. (Correct)**
- C. use of snowball sampling techniques.
- D. lack of a focus on numerical analysis.

*Rationale: One of the main characteristics of a quantitative research design is the use of variables that are measured by instruments or scales.*

**Q25:** What is the goal of qualitative research?

- A. Test relationships
- B. Describe phenomena
- C. Look for meaning (Correct)**
- D. Assess differences

*Rationale: A main characteristic of qualitative research is to look for meaning.*

**Q26:** The nurse researcher is interested in gaining additional information about a study's sampling technique. This information is most likely found in which section of the research report?

- A. Procedures
- B. Data analysis
- C. Methodology (Correct)**
- D. Reliability

*Rationale: The population from which the sample was drawn is discussed in the section "Methods" or "Methodology."*

**Q27:** The nurse researcher is critiquing a qualitative research article. Where in the report would the researcher be most likely to find information about the phenomenon being investigated?

**A. Abstract (Correct)**

- B. Introduction
- C. Method
- D. Procedures

*Rationale: The abstract contains information that identifies the phenomenon being investigated as well as the research question, study purpose, and the research design.*

**Q28:** The nurse researcher is critiquing a quantitative research article and is interested in finding additional information on the findings that were obtained. Where would the researcher be most likely to find this information if it is not in the results section?

- A. Methods
- B. Instruments
- C. Procedures
- D. Discussion (Correct)**

*Rationale: In a quantitative report, if the findings are not included in the "results" section, they will be included in the "discussion" section.*

**Q29:** The nurse researcher is critically reading a quantitative research article and is most interested in obtaining information about the theoretical framework utilized. The researcher does not note a separate section in the article giving information about the theoretical framework. It is therefore most likely to be located in the

**A. literature review. (Correct)**

- B. purpose.
- C. problem.
- D. introduction.

*Rationale: The theoretical framework is most likely to be included with the literature review if it is not given its own section in the research report.*

**Q30:** What is an accurate description of a critique?

**A. It requires some knowledge of the subject matter. (Correct)**

- B. The process of critical appraisal that objectively and critically evaluates content of an article.
- C. The process of creating standards used to judge an article.
- D. It is an executive summary of an article.
- E. It serves to explain the link between theory and application.

*Rationale: A critique is the process of critical appraisal that objectively and critically evaluates content of an article. A critique requires the use of previously set critiquing criteria and standards. An executive summary is a detailed summary of a large amount of data. A critique is conducted for the purpose of objectively evaluating all aspects of a research report not just theory and*

application.

**Q31:** A nurse researcher guiding a group of health care providers through the steps of Evidence-based practice (EBP) process prepares the group to work through the last step of the EBP process which is?

- A. Evaluate (Correct)**
- B. Gather
- C. Ask
- D. Assess/appraise

*Rationale: Evaluate is the last step of the EBP process. The steps for Evidence-based practice are (1) Ask (2) Gather (3) Assess/appraise (4) Act and (5) Evaluate.*

**Q32:** Nurses are responsible for continuously improving the quality and safety of health care for patients and their families through systemic redesign of health care systems where they practice. While several Quality Improvement methods exist, the core steps for improvement commonly include which of the following (Select all that apply.) *(Select all that apply.)*

- A. conducting an assessment. (Correct)**
- B. setting specific goals for improvement. (Correct)**
- C. identifying ideas for changing current practice. (Correct)**
- D. rapidly testing practice changes. (Correct)**
- E. adopting the practice change as a new standard of care. (Correct)**
- F. measuring improvements in care. (Correct)**

*Rationale: All of the responses are correct.*

**Q33:** Which research process steps may be noted in an article's abstract? (Select all that apply.) *(Select all that apply.)*

- A. Identifying the methods (Correct)**
- B. Research question, study purpose
- C. Literature review (Correct)**
- D. Results
- E. Conclusion
- F. Legal-ethical issues
- G. Data collection procedure

*Rationale: Identifying the methods, the research question, study purpose, and the results may be noted in the abstract.*

**Q34:** What are the critiquing criteria used to judge the worth of a research study? (Select all that apply.) *(Select all that apply.)*

- A. Measures
- B. Objectives (Correct)**

C. Standards

**D. Effectiveness (Correct)**

**E. Evaluation guides (Correct)**

F. Questions

*Rationale: Measures, standards, evaluation guides, and questions are used to judge the worth of a research study. Objectives and effectiveness are not used to judge the worth of a research study.*