UP CNET 2026 Post Basic BSc Nursing

Question Paper (Memory-Based) with Solutions

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General Instructions

(i) The examination will be conducted in Computer-Based Test (CBT) mode.

(ii) The question paper will consist of Multiple Choice Questions (MCQs).

(iii) Each question carries +1 mark for every correct answer.

(iv) There is no negative marking for incorrect answers.

(v) The total number of questions is 120.

(vi) The duration of the examination is 140 minutes.

(vii) Only one option is correct for each question.

(viii) No marks will be awarded or deducted for unattempted questions.

(ix) Candidates must carry a valid admit card and photo identity proof to the examination centre.

(x) Electronic devices such as mobile phones, smart watches, calculators and other communication devices are strictly prohibited inside the examination hall.

(xi) Candidates should follow all instructions issued by the examination authority during the examination.

1. Modifiable risk factors in case of hypertension include all, except:

(A) Age

(B) Obesity

(C) Salt intake

(D) Alcohol intake

Correct Answer: (A) Age

Solution:

Concept:

Risk factors for hypertension are classified into:

- Modifiable Risk Factors
- Non-Modifiable Risk Factors

Step 1: Identify the modifiable risk factors.

Modifiable risk factors include:

- Obesity
- Excess salt intake
- Alcohol consumption
- Smoking
- Physical inactivity
- Stress

Step 2: Identify the non-modifiable risk factors.

Non-modifiable risk factors include:

- Age
- Gender
- Family history
- Genetic factors

Step 3: Select the factor that cannot be modified.

Among the given options, Age cannot be changed and is therefore a non-modifiable risk factor.

Therefore,

$$\boxed{\text{Age}}$$

$$\boxed{\text{Answer} = \text{(A)}}$$

Quick Tip: Remember: Age, gender and family history are non-modifiable risk factors, while obesity, smoking, alcohol and salt intake are modifiable risk factors.

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2. Kangaroo Mother Care (KMC) is mainly used for:

(A) Full-term baby

(B) Low birth weight baby

(C) Macrosomic baby

(D) Post-term baby

Correct Answer: (B) Low birth weight baby

Solution:

Concept:

Kangaroo Mother Care (KMC) is a method of caring for newborns through continuous skin-to-skin contact between the mother and the baby.

Step 1: Understand the purpose of KMC.

KMC is recommended for:

- Low Birth Weight (LBW) babies
- Preterm babies
- Stable newborns requiring warmth and care

Step 2: Identify the benefits of KMC.

Benefits include:

- Maintenance of body temperature
- Promotion of breastfeeding
- Better weight gain
- Reduced risk of infection
- Improved mother-child bonding

Step 3: Choose the correct option.

Since KMC is primarily designed for low birth weight and preterm babies,

Low Birth Weight Baby

Answer = (B)

Quick Tip: Kangaroo Mother Care (KMC) = Skin-to-skin contact + Exclusive breastfeeding + Special care for low birth weight and preterm babies.

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3. Most effective method to prevent hospital-acquired infection is:

(A) Antibiotics

(B) Hand hygiene

(C) Isolation only

(D) PPE only

Correct Answer: (B) Hand hygiene

Solution:

Concept:

Hospital-acquired infections (HAIs), also known as nosocomial infections, are infections that patients acquire while receiving treatment in a healthcare facility and were not present at the time of admission.

Step 1: Understand the common mode of transmission.

The hands of healthcare workers are the most common vehicle for transmission of microorganisms from one patient to another.

Contaminated hands can spread:

- Bacteria
- Viruses
- Fungi
- Drug-resistant organisms

Step 2: Evaluate the given options.

- **Antibiotics:** Used for treatment, not the primary preventive measure.
- **Hand Hygiene:** Most effective and universally recommended method.
- **Isolation only:** Useful for specific infections but not sufficient alone.
- **PPE only:** Important, but less effective if proper hand hygiene is not practiced.

Step 3: Apply infection control guidelines.

According to WHO and infection prevention protocols, proper hand washing or hand sanitization before and after patient contact is the single most effective method to reduce hospital-acquired infections.

Therefore,

$$\boxed{\text{Hand Hygiene}}$$

$$\boxed{\text{Answer} = \text{(B)}}$$

Quick Tip: "Clean Hands Save Lives" is the cornerstone of infection prevention. Hand hygiene is more effective than isolation or PPE alone in preventing hospital-acquired infections.

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4. If a patient's blood pressure is 120/80 **mmHg, his pulse pressure is:**

(A) 54 mmHg

(B) 40 mmHg

(C) 96 mmHg

(D) 200 mmHg

Correct Answer: (B) 40 mmHg

Solution:

Concept:

Pulse Pressure is the difference between systolic blood pressure and diastolic blood pressure.

$$\text{Pulse Pressure} = \text{Systolic BP} - \text{Diastolic BP}$$

where,

$$\text{Systolic BP} = 120 \text{ mmHg}$$

$$\text{Diastolic BP} = 80 \text{ mmHg}$$

Step 1: Write the formula for pulse pressure.

$$PP = SBP - DBP$$

Step 2: Substitute the given values.

$$PP = 120 - 80$$

$$PP = 40 \text{ mmHg}$$

Step 3: Identify the correct option.

The calculated pulse pressure is

$$40 \text{ mmHg}$$

Therefore,

$$\boxed{40 \text{ mmHg}}$$

$$\boxed{\text{Answer} = \text{(B)}}$$

Quick Tip: Remember:

$$\text{Pulse Pressure} = \text{Systolic BP} - \text{Diastolic BP}$$

For a normal BP of 120/80 mmHg, pulse pressure is typically 40 mmHg.

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5. A 55-year-old male presents with severe chest pain radiating to the left arm, sweating, and

nausea. ECG shows ST elevation. What is the priority nursing action?

(A) Start IV fluids

(B) Administer oxygen

(C) Give morphine

(D) Check blood sugar

Correct Answer: (B) Administer oxygen

Solution:

Concept:

The patient is showing classic signs and symptoms of an **ST-Elevation Myocardial Infarction (STEMI)**, which is a medical emergency caused by acute blockage of a coronary artery.

Common features include:

- Severe chest pain
- Pain radiating to the left arm, neck or jaw
- Sweating (diaphoresis)
- Nausea and vomiting
- ST-segment elevation on ECG

Step 1: Identify the emergency condition.

The presence of chest pain with ST elevation indicates acute myocardial infarction.

The heart muscle is not receiving adequate oxygen due to reduced blood flow.

Step 2: Apply the ABC principle (Airway, Breathing, Circulation).

In any emergency situation, nursing priorities follow:

$$A \rightarrow B \rightarrow C$$

Airway → Breathing → Circulation

The immediate priority is to improve oxygen delivery to the ischemic myocardium.

Step 3: Evaluate the options.

- **Start IV fluids** – Useful in some situations but not the first priority.

- **Administer oxygen** – Improves oxygen supply to the heart and is the priority action.
- **Give morphine** – Helps relieve pain but comes after ensuring oxygenation.
- **Check blood sugar** – Important assessment but not the immediate priority.

Step 4: Select the priority nursing intervention.

Since myocardial tissue is at risk of damage due to lack of oxygen,

$$\boxed{\text{Administer Oxygen}}$$

is the priority nursing action.

Therefore,

$$\boxed{\text{Answer} = \text{(B)}}$$

Quick Tip: For acute myocardial infarction questions, remember the emergency management approach:

$$\text{ABC} \rightarrow \text{Oxygen} \rightarrow \text{ECG Monitoring} \rightarrow \text{Definitive Treatment}$$

In priority-based nursing questions, always choose the option that addresses airway, breathing, or circulation first.

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6. Strength of Savlon for disinfecting thermometer is:

(A) 1:20

(B) 1:30

(C) 1:40

(D) 1:50

Correct Answer: (C) 1:40

Solution:

Concept:

Savlon is a commonly used antiseptic and disinfectant solution containing:

- Chlorhexidine Gluconate

- Cetrimide

It is used in hospitals and healthcare settings for disinfection of equipment and prevention of infection.

Step 1: Understand thermometer disinfection.

Clinical thermometers come in direct contact with patients and may carry microorganisms. Therefore, proper disinfection is necessary after each use to prevent cross-infection.

Step 2: Recall the recommended dilution.

For disinfection of thermometers, the standard nursing practice recommends Savlon solution in the strength of:

$$1 : 40$$

This means:

$$1 \text{ part Savlon } + 40 \text{ parts water}$$

Step 3: Select the correct option.

Among the given options,

$$\boxed{1 : 40}$$

is the recommended dilution for thermometer disinfection.

Therefore,

$$\boxed{\text{Answer} = \text{(C)}}$$

Quick Tip: Frequently asked Nursing Foundation question:

$$\text{Savlon for Thermometer} = 1 : 40$$

Remember: "Thermometer → Savlon 1:40"

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7. Convert Fahrenheit to Celsius formula is:

(A) $(F - 32) \times \frac{5}{9}$

(B) $(F+32)\times\frac{5}{9}$

(C) $(F-32)\times\frac{9}{5}$

(D) $(F\times\frac{9}{5})+32$

Correct Answer: (A) $(F-32)\times\frac{5}{9}$

Solution:

Concept:

Temperature can be expressed in different scales, the most common being:

- Celsius Scale ($^\circ C$)
- Fahrenheit Scale ($^\circ F$)

The relationship between Celsius and Fahrenheit temperatures is:

$$\frac{C}{5}=\frac{F-32}{9}$$

From this relation, the conversion formula from Fahrenheit to Celsius is obtained.

Step 1: Start with the standard conversion formula.

$$\frac{C}{5}=\frac{F-32}{9}$$

Step 2: Multiply both sides by 5.

$$C=(F-32)\times\frac{5}{9}$$

Step 3: Verify with a known temperature.

For example,

$$F=212^\circ F$$

$$C=(212-32)\times\frac{5}{9}$$

$$C=180\times\frac{5}{9}$$

$$C=100^\circ C$$

which is the boiling point of water.

Step 4: Choose the correct option.

Therefore, the Fahrenheit-to-Celsius conversion formula is

$$\boxed{C = (F - 32) \times \frac{5}{9}}$$

Hence,

$$\boxed{\text{Answer} = \text{(A)}}$$

Quick Tip: Remember:

$$^\circ C = (^\circ F - 32) \times \frac{5}{9}$$

and

$$^\circ F = \left(^\circ C \times \frac{9}{5}\right) + 32$$

A common trick: "Subtract 32, then multiply by 5/9" for Fahrenheit to Celsius conversion.

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8. When an individual expresses his failures and difficulties by blaming others is known as:

(A) Repression

(B) Projection

(C) Denial

(D) Sublimation

Correct Answer: (B) Projection

Solution:

Concept:

Defense mechanisms are unconscious psychological strategies used by individuals to reduce anxiety and protect themselves from emotional conflict.

Step 1: Understand Projection.

Projection is a defense mechanism in which a person attributes his own unacceptable thoughts,

feelings, failures, or shortcomings to another person.

Instead of accepting responsibility, the individual blames others.

Example:

A student who performs poorly in an examination may blame the teacher rather than accepting inadequate preparation.

Step 2: Differentiate from other defense mechanisms.

- **Repression:** Unconscious blocking of painful thoughts or memories.
- **Projection:** Attributing one's own faults or feelings to others.
- **Denial:** Refusing to accept reality.
- **Sublimation:** Channeling unacceptable impulses into socially acceptable activities.

Step 3: Identify the correct option.

Since the individual is blaming others for his failures and difficulties,

$$\boxed{\text{Projection}}$$

Therefore,

$$\boxed{\text{Answer} = \text{(B)}}$$

Quick Tip: Projection = "My fault becomes your fault."

When a person attributes his own shortcomings or unacceptable feelings to someone else, it is called Projection.

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9. Rate of chest compression to ventilation ratio for neonatal resuscitation is:

(A) 3:1

(B) 1:3

(C) 3:2

(D) 2:1

Correct Answer: (A) 3:1

Solution:

Concept:

Neonatal resuscitation is performed when a newborn fails to establish effective breathing after birth.

Unlike adults, neonatal cardiac arrest is usually caused by respiratory failure. Therefore, ventilation is extremely important during neonatal CPR.

Step 1: Recall the recommended compression-ventilation ratio.

According to Neonatal Resuscitation Program (NRP) guidelines,

$$\text{Chest Compression} : \text{Ventilation} = 3 : 1$$

This means:

$$3 \text{ compressions} + 1 \text{ ventilation}$$

Step 2: Understand the reason for the ratio.

Newborns usually develop cardiac problems secondary to inadequate oxygenation.

Hence greater emphasis is placed on ventilation than in adult CPR.

Step 3: Calculate the events per minute.

The 3:1 ratio provides approximately:

$$90 \text{ compressions/minute}$$

and

$$30 \text{ breaths/minute}$$

for a total of

$$120 \text{ events/minute}$$

Step 4: Choose the correct option.

Therefore,

$$\boxed{3 : 1}$$

is the recommended compression-to-ventilation ratio for neonatal resuscitation.

Hence,

$$\boxed{\text{Answer} = \text{(A)}}$$

Quick Tip: Remember the CPR ratios:

- Neonate = 3 : 1
- Child/Adult (single rescuer) = 30 : 2
- Child/Adult (two rescuers) = 15 : 2

Neonatal CPR focuses more on ventilation because most neonatal arrests are respiratory in origin.

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10. Intelligence Quotient (IQ) is:

(A) Mental age/Chronological age ×100

(B) Retrieval

(C) Chronological age/Mental age ×100

(D) None of the above

Correct Answer: (A) Mental age/Chronological age ×100

Solution:

Concept:

Intelligence Quotient (IQ) is a numerical measure of an individual's intellectual ability in relation to others of the same age group.

The concept was introduced by **William Stern** and later popularized through intelligence testing.

Step 1: Recall the formula for IQ.

The Intelligence Quotient is calculated as:

$$IQ = \frac{\text{Mental Age}}{\text{Chronological Age}} \times 100$$

where:

- Mental Age (MA) = Level of intellectual performance

- Chronological Age (CA) = Actual age of the individual

Step 2: Understand the interpretation.

If:

$$MA = CA$$

then

$$IQ = \frac{CA}{CA} \times 100$$

$$IQ = 100$$

which indicates average intelligence.

Example:

If a child is:

10 years old

but performs intellectually like a

12 year old

then

$$IQ = \frac{12}{10} \times 100$$

$$IQ = 120$$

Step 3: Evaluate the options.

- Option A gives the correct formula.
- Option B is unrelated to IQ calculation.
- Option C is the reverse of the correct formula.
- Option D is incorrect because Option A is correct.

Therefore,

$$\boxed{IQ = \frac{\text{Mental Age}}{\text{Chronological Age}} \times 100}$$

Hence,

$$\boxed{\text{Answer} = \text{(A)}}$$

Quick Tip: Remember:

$$IQ = \frac{MA}{CA} \times 100$$

A simple memory trick:

"Mental age comes first in IQ."

If Mental Age = Chronological Age, then IQ = 100 (average intelligence).

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11. Which of the following visual aid is ideal for rural community?

(A) Model

(B) Role play

(C) Chalk board

(D) Pamphlet

Correct Answer: (B) Role play

Solution:

Concept:

Health education in rural communities should use methods that are simple, interesting, culturally acceptable, and understandable even for people with low literacy levels.

Visual and audiovisual aids help communicate health messages effectively.

Step 1: Evaluate the given options.

- **Model:** Useful for demonstrations but may not actively involve the audience.
- **Role Play:** An interactive teaching method that uses real-life situations and encourages participation.

- **Chalk Board:** Useful mainly in classroom settings.
- **Pamphlet:** Requires reading ability and may not be effective in populations with low literacy.

Step 2: Understand why role play is preferred.

Role play:

- Attracts community attention
- Encourages participation
- Demonstrates real-life health situations
- Overcomes literacy barriers
- Improves retention of information

Step 3: Choose the most appropriate aid.

For rural communities, role play is considered one of the most effective educational methods.

Therefore,

Role Play

Answer = (B)

Quick Tip: For community health education, methods involving active participation such as role play, drama and folk media are highly effective, especially in rural populations.

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12. A written statement outlining duties, responsibilities and work assignment is referred as:

(A) Job Description

(B) Job Evaluation

(C) Job Analysis

(D) Self Appraisal

Correct Answer: (A) Job Description

Solution:

Concept:

Job Description is a formal written statement that explains the duties, responsibilities, authority, reporting relationships and working conditions of a particular job.

It helps employees understand what is expected from them.

Step 1: Understand Job Description.

A Job Description generally contains:

- Job title
- Duties and responsibilities
- Reporting authority
- Working conditions
- Scope of work

Step 2: Differentiate from related terms.

- **Job Description:** Written statement of duties and responsibilities.
- **Job Evaluation:** Determines the relative worth of a job.
- **Job Analysis:** Process of collecting information about a job.
- **Self Appraisal:** Employee's self-assessment of performance.

Step 3: Identify the correct option.

Since the question specifically refers to a written statement outlining duties and responsibilities,

$$\boxed{\text{Job Description}}$$

Therefore,

$$\boxed{\text{Answer} = \text{(A)}}$$

Quick Tip: Remember:

Job Analysis = Collect information

Job Description = Written duties and responsibilities

Job Evaluation = Determine job worth

Job Specification = Qualifications required for the job

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13. VED stands for:

(A) Valuable, Essential, Desirable

(B) Valuable, Estimated, Desirable

(C) Vital, Essential, Desirable

(D) Vital, Estimated, Desirable

Correct Answer: (C) Vital, Essential, Desirable

Solution:

Concept:

VED Analysis is an inventory control technique used in hospitals and healthcare organizations to classify items according to their criticality in patient care.

VED stands for:

$$V = \text{Vital}$$

$$E = \text{Essential}$$

$$D = \text{Desirable}$$

Step 1: Understand the VED categories.

- **Vital (V):** Items whose non-availability can seriously affect patient care and hospital functioning.
- **Essential (E):** Items necessary for efficient functioning but whose temporary shortage can be tolerated.
- **Desirable (D):** Items whose absence does not significantly affect patient care.

Step 2: Identify the correct expansion.

Among the given options,

$$VED = Vital,\ Essential,\ Desirable$$

Step 3: Select the correct option.

Therefore,

$$\boxed{\text{Vital, Essential, Desirable}}$$

$$\boxed{\text{Answer} = \text{(C)}}$$

Quick Tip: Inventory Control Methods:

- ABC = Based on annual consumption value
- VED = Based on criticality of items
- HML = Based on unit cost

Remember:

$$VED = Vital + Essential + Desirable$$

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14. Sampling method gives equal chance to all units in the population to get picked?

(A) Random

(B) Accidental

(C) Judgemental

(D) Quota

Correct Answer: (A) Random

Solution:

Concept:

Sampling is the process of selecting a subset of individuals from a population to represent the entire population in a study.

A good sampling technique ensures that the sample accurately reflects the characteristics of the population.

Step 1: Understand Random Sampling.

In Random Sampling:

- Every unit in the population has an equal chance of being selected.
- Selection is free from personal bias.
- Probability of selection is known.

Examples:

- Lottery method
- Random number table
- Computer-generated random selection

Step 2: Differentiate from other methods.

- **Accidental Sampling:** Participants are selected based on convenience.
- **Judgemental Sampling:** Researcher selects participants according to personal judgment.
- **Quota Sampling:** Participants are selected to fill predetermined categories.

Step 3: Identify the method that provides equal opportunity.

Since every member of the population gets an equal chance of selection,

Random Sampling

Therefore,

Answer = (A)

Quick Tip: Key feature of Random Sampling:

Equal Chance of Selection for Every Unit

Whenever a question mentions "equal chance", "unbiased selection", or "probability sampling", think of Random Sampling.

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15. Importance of research in nursing is to:

(A) Build a body of nursing knowledge

(B) Promote confidence in nursing practice

(C) Build infrastructure for nursing education

(D) Help in smooth functioning of nursing unit

Correct Answer: (A) Build a body of nursing knowledge

Solution:

Concept:

Nursing research is a systematic scientific process used to generate new knowledge and improve nursing practice, education, administration, and patient care.

Research forms the foundation of Evidence-Based Nursing Practice (EBP).

Step 1: Understand the primary purpose of nursing research.

The main aim of nursing research is to:

- Generate new knowledge
- Validate existing knowledge
- Improve patient care
- Develop evidence-based practices
- Strengthen the nursing profession

Step 2: Analyze the given options.

- **Build a body of nursing knowledge:** Primary purpose of nursing research.
- **Promote confidence in nursing practice:** An indirect benefit of research.

- **Build infrastructure for nursing education:** Not the primary objective of research.
- **Help in smooth functioning of nursing unit:** A management-related outcome rather than the main purpose of research.

Step 3: Identify the most appropriate answer.

The most important contribution of research is the development and expansion of nursing knowledge.

This knowledge becomes the basis for clinical decision-making and professional practice.

Therefore,

$$\boxed{\text{Build a Body of Nursing Knowledge}}$$

$$\boxed{\text{Answer} = \text{(A)}}$$

Quick Tip: The foundation of professional nursing is research.

$$\text{Research} \rightarrow \text{Knowledge} \rightarrow \text{Evidence-Based Practice}$$

Whenever asked about the primary importance of nursing research, think: "Building and expanding nursing knowledge."
