

EMRS Female Staff Nurse Tier 2 Sample Paper

Q.1

Which diagnostic test is most commonly used for stroke evaluation?

- A. MRI
- B. CT Scan
- C. EEG
- D. X-ray

Answer:

B

Sol:

Sol. A CT Scan is the most commonly used diagnostic test for stroke. It is widely available and can quickly identify areas of the brain affected by stroke.

Explanation of other options:

- (a) MRI: MRI is a more sensitive test than CT Scan, but it is not as widely available and is more expensive. It is used in some cases, but not as commonly as CT Scan.
- (b) CT Scan: CT Scan is the most commonly used diagnostic test for stroke. It is widely available and can quickly identify areas of the brain affected by stroke.
- (c) EEG: EEG is used to diagnose epilepsy and other conditions related to the brain's electrical activity. It is not used for stroke diagnosis.
- (d) X-ray: X-ray is used to diagnose conditions related to the bones and joints. It is not used for stroke diagnosis.

Q.2

Which practice helps prevent tooth decay?

- A. Eating sugary snacks
- B. Brushing and flossing regularly
- C. Drinking soda frequently
- D. Using mouthwash occasionally

Answer:

B

Sol:

Sol. Regular brushing and flossing are the most effective ways to prevent tooth decay. They help remove plaque and bacteria that cause decay.

Explanation of other options:

- (a) Eating sugary snacks: Sugary snacks can lead to plaque buildup, which promotes tooth decay if not cleaned properly.
- (b) Brushing and flossing regularly: As they are the most effective ways to maintain oral hygiene and prevent tooth decay.
- (c) Drinking soda frequently: Frequent soda consumption exposes teeth to acids and sugars, which erode enamel and promote tooth decay.
- (d) Using mouthwash occasionally: While mouthwash can help reduce bacteria and freshen breath, it is not sufficient on its own to prevent tooth decay without brushing and flossing.

Q.3

Why is ointment or petroleum jelly applied to a wound?

- A. To stop bleeding
- B. To keep the wound dry

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- C. To prevent scarring and keep the wound moist
 - D. To disinfect the wound

Answer:

C

Sol:

Sol. Ointments and petroleum jelly keep the wound moist and reduce scarring by preventing scab formation. A moist environment promotes better healing and minimizes scar tissue development.

Explanation of other options:

- (a) To stop bleeding: Ointments are applied after bleeding has been controlled and stopped. They are not used for bleeding control.
- (b) To keep the wound dry: Wounds heal better in a moist environment, and ointments help maintain this condition.
- (c) To prevent scarring: Ointments and petroleum jelly help prevent scarring by keeping the wound moist.
- (d) To disinfect the wound: Disinfection is typically done during the cleaning process, not after ointment application.

Q.4

Why should menopause be managed?

- A. To manage weight gain
- B. To reduce hot flashes
- C. To prevent bone loss
- D. To improve skin health

Answer:

C

Sol:

Sol. During menopause, estrogen levels decline, leading to bone thinning. Consuming calcium-rich foods helps maintain bone density, reduces fracture risk, and supports overall health in menopausal women.

Explanation of other options:

- (a) To manage weight: Calcium intake does not directly influence weight management, though it supports bone functions.
- (b) To reduce hot flashes: Hot flashes are primarily caused by hormonal fluctuations and are not directly managed by calcium.
- (c) To prevent bone loss: Maintaining bone strength during menopause is a primary goal, achieved through calcium and vitamin D intake.
- (d) To improve digestive health: While calcium is important for gut health, it is not the primary reason for managing menopause.

Q.5

What is the total duration of Multibacillary Leprosy (MBL) treatment?

- A. 6 months
- B. 12 months
- C. 18 months
- D. 24 months

Answer:

B

Sol:

Sol. The total duration of Multibacillary Leprosy (MBL) treatment is 12 months. This period is essential to ensure the complete eradication of *Mycobacterium leprae* and to minimize the risk of relapse or drug resistance.

Explanation of other options:

- (a) 6 months: This duration is insufficient for Multibacillary Leprosy treatment but may apply to Paucibacillary Leprosy (PBL).
- (b) 12 months: This is the standard and recommended duration for treating MBL under the World Health Organization's (WHO) guidelines.
- (c) 18 months: This duration exceeds the required treatment time and is not standard protocol for MBL.
- (d) 24 months: Such an extended treatment duration is unnecessary and not recommended in routine cases of MBL.

Q.6

Nursing intervention

- A. Teach
- B. Encour
- C. Explai
- D. Help t

Answer:

C

Sol:

Ans. (c) Explain and manage fear and manage pain. During surgery, patients are often anxious and may experience pain. Providing information about the procedure and the use of anesthesia and analgesics can help manage fear. When patients undergo surgery, they may experience pain. While teaching diverse patients, it is important to use appropriate communication techniques and help them understand the procedure. helpful, educational, and supportive.

Q.7

AIDS is due to

- A. Inheri
- B. Reduc
- C. Reduc
- D. Autoimmunity

Answer:

B

Sol:

Sol. **AIDS (Acquired Immunodeficiency Syndrome)** is caused by the **Human Immunodeficiency Virus (HIV)**, which specifically targets and destroys **T-helper cells (CD4+ cells)**. This reduction weakens the immune system, making the body susceptible to infections and diseases.

Explanation of other options:

- **(a) Inheritance of genes:** AIDS is **not inherited**; it is caused by an **acquired viral infection (HIV)** through unprotected sexual contact, contaminated needles, blood transfusion, or from mother to child during childbirth or breastfeeding.
- **(b) Reduction in number of T-Helper cells:** **Correct option**; HIV attacks and destroys T-helper cells, weakening the immune system and leaving the body vulnerable to opportunistic infections.
- **(c) Reduction in number of killer T-cells:** Killer T-cells (CD8+ cells) are not the primary target of HIV. The virus primarily infects T-helper cells.
- **(d) Autoimmunity:** AIDS is **not an autoimmune disease**; it is caused by an external viral infection, not the body attacking its own tissues.

Q.8

Which of the subsequent cell organelles aids in the decomposition of organic materials?

- A. Lysosomes
- B. Cytoplasm
- C. Golgi apparatus
- D. Mitochondria

Answer:

A

Sol:

Specifically designed to break down biological macromolecules into smaller, absorbable units. Lysosomes are filled with enzymes that can break down almost any biological polymer, including proteins, nucleic acids, and lipids. These enzymes are active at the acidic pH of the lysosome, which is maintained by the presence of a proton pump. Lysosomes are commonly known as the "garbage disposal" of the cell because they break down and dispose of foreign contaminants and cellular debris.

Q.9

Why is it important to keep your fingernails clean and trimmed?

- A. To improve their shine
- B. To prevent bacterial buildup
- C. To enhance nail color
- D. To increase nail length

Answer:

B

Sol:

Sol. Clean and trimmed nails prevent dirt and bacteria from accumulating under the nails, reducing the risk of infections and illnesses. Proper nail hygiene is essential for overall health and cleanliness.

Explanation of other options:

- (a) To improve their shine: Nail shine is a cosmetic concern and does not impact hygiene or health.
- (b) To prevent bacterial buildup: As maintaining clean and trimmed nails minimizes the risk of bacterial and fungal infections.
- (c) To enhance nail color: Nail color is a cosmetic issue and is not related to hygiene or health.
- (d) To increase nail length: Long nails can trap more dirt and bacteria, making them harder to keep clean and hygienic.

Q.10

Which bacterium causes leprosy?

- A. Staphylococcus aureus
- B. Mycobacterium tuberculosis
- C. Mycobacterium leprae
- D. Escherichia coli

Answer:

C

Sol:

Sol. Leprosy is caused by the bacterium Mycobacterium leprae, which primarily affects the skin, peripheral nerves, and mucous membranes. It spreads mainly through prolonged close contact via nasal droplets from an infected person. Early detection and proper treatment can prevent permanent disability.

Explanation of options:

- (a) Staphylococcus aureus: A common bacterium causing various infections. It is commonly found on the skin and in the nose.
- (b) Mycobacterium tuberculosis: Causes tuberculosis, which primarily affects the lungs but can also affect other parts of the body.
- (c) Mycobacterium leprae: The causative agent of leprosy, primarily affecting the skin, nerves, and mucous membranes and can cause deformities.
- (d) Escherichia coli: A common bacterium found in the gut, primarily associated with gastrointestinal infections, and food poisoning.

Q.11

Which second-line drug is used in leprosy treatment?

- A. Rifampicin
- B. Ethionamide
- C. Dapsone
- D. Clofazimine

Answer:

B

Sol:

Sol. Ethionamide is a second-line drug used in the treatment of leprosy, particularly in cases where resistance to first-line drugs is observed. It is used in combination with other drugs to inhibit bacterial growth.

Explanation of other options:

- (a) Rifampicin: Rifampicin is considered a first-line drug in the treatment of leprosy and is highly effective in killing Mycobacterium leprae.
- (b) Ethionamide: This is the correct option and is used as a second-line drug in cases of resistance or intolerance to primary medications.
- (c) Dapsone: Dapsone is a sulfone drug, primarily used in combination therapy for leprosy, not classified as a second-line drug.
- (d) Clofazimine: Clofazimine is a phenazine derivative and is mainly used for its anti-inflammatory properties and effectiveness against dapsone-resistant strains.

Q.12

Which artery is most commonly affected in a stroke?

-
- A. Vertebral artery
 - B. Basilar artery
 - C. Middle cerebral artery
 - D. Posterior cerebral artery

Answer:

C

Sol:

Sol. The Middle Cerebral Artery (MCA) is the most commonly affected artery in strokes due to its large size and the extensive area of the brain it supplies, including regions responsible for motor and sensory functions.

Explanation of other options:

- (a) Vertebral artery: This artery supplies the posterior part of the brain, including the cerebellum and brainstem.
- (b) Basilar artery: This artery supplies the anterior part of the brain, including the cerebral hemispheres.
- (c) Middle cerebral artery: This artery supplies the lateral part of the brain, including the motor and sensory cortex.
- (d) Posterior cerebral artery: This artery supplies the posterior part of the brain, including the cerebellum and brainstem.

Q.13

What is the primary purpose of thrombolytic therapy in stroke treatment?

- A. Prevent infection
- B. Reduce blood pressure
- C. Dissolve blood clots
- D. Control head pain

Answer:

C

Sol:

Sol. Thrombolytic therapy (using tissue plasminogen activator, tPA), aims to dissolve blood clots in ischemic stroke, restoring blood flow to the brain.

Explanation of other options:

- (a) Prevent infection: Antibiotics are used for infections, not for thrombolytic therapy.
- (b) Reduce blood pressure: Blood pressure control is essential, but it is not the purpose of thrombolytics.
- (c) Dissolve blood clots: This is the primary purpose of thrombolytic therapy.
- (d) Control head pain: Head pain management is not the primary purpose of thrombolytics.

Q.14

What is a stroke (CVA) primarily caused by?

- A. Hypertension
- B. Brain Tumor
- C. Head Injury
- D. Dehydration

Answer:

A

Sol:

Sol. Stroke is caused by an interruption or reduction of blood supply to the brain, either due to a blockage (ischemic stroke) or rupture

of a blood vessel (hemorrhagic stroke). It results in brain cell damage and requires immediate medical attention.

Explanation of other options:

- (a) Hypertension: Long-term high blood pressure weakens blood vessels, increasing the risk of hemorrhagic stroke due to vessel rupture.
- (b) Brain Tumor: While tumors can cause pressure on brain tissue and neurological symptoms, they are not a direct cause of stroke.
- (c) Head Injury: A traumatic brain injury may cause bleeding, but it is classified as a traumatic brain injury, not a stroke.
- (d) Dehydration: Severe dehydration can cause electrolyte imbalances and confusion but does not directly cause stroke.

Q.15

What is the main function of the fetal membrane (chorioamnion)?

- A. Prevent infection
- B. Aid in digestion
- C. Regulate maternal blood pressure
- D. Support uterine contractions

Answer:

A

Sol:

Sol. The fetal membrane (chorioamnion) serves as a protective barrier between the mother and the fetus, preventing harmful pathogens from crossing into the fetal circulation. It also supports the development of the fetus and plays a role in labor initiation.

Explanation of other options:

- (a) Prevent infection: The chorioamnion acts as a protective barrier, preventing harmful pathogens from reaching the fetus, ensuring a sterile environment.
- (b) Aid in digestion: The placenta handles digestion, and the fetus's digestive system is responsible for processing nutrients.
- (c) Regulate maternal blood pressure: The chorioamnion has no direct involvement in regulating maternal blood pressure.
- (d) Support uterine contractions: The chorioamnion does not directly support uterine contractions; instead, it is primarily regulated by the hormone oxytocin, along with prostaglandins, but the fetal membrane does not actively support these contractions.

Q.16

Which of the following is not a component of the management of a stroke?

- A. Personal care
- B. Books
- C. Medication
- D. Illegal substances

Answer:

A

Sol:

Ans. (a)

Personnel salaries and wages are a significant part of the operating budget in nursing management. The operating budget encompasses all expenses required for daily operations, including staff salaries, equipment maintenance, and consumable supplies necessary for patient care.

Explanation of Other Options:

Books, periodicals, and subscriptions (Incorrect - b):

These are typically part of the educational or administrative budget, not the operating budget.

Medical and surgical supplies (Incorrect - c):

While these are essential for hospital operations, they fall under the category of consumables or material budgets, not directly under personnel operating costs.

Illegal fees (Incorrect - d):

Illegal fees are not part of any legitimate budget and are irrelevant in this context.

Key Components of the Operating Budget in Nursing Management:

Personnel Costs: Salaries, wages, overtime, and benefits for nursing staff.

Supplies and Equipment: Day-to-day consumables used in patient care.

Utilities and Services: Costs for electricity, water, and waste management.

The operating budget is critical for ensuring smooth hospital operations and quality patient care delivery.

Q.17

Which part of the brain is responsible for visual processing?

- A. Occipital lobe
- B. Temporal lobe
- C. Frontal lobe
- D. Parietal lobe

Answer:

C

Sol:

- (a) Occipital lobe: This lobe is primarily responsible for visual processing. It interprets visual information received from the eyes. It has no direct role in language production.
- (b) Temporal lobe: It contains the primary auditory cortex and is involved in hearing and understanding language. Wernicke's area, located in the left temporal lobe, is crucial for language comprehension, not speech production. Damage here causes receptive aphasia.
- (c) Frontal lobe: The Broca's area, located in the frontal lobe, is responsible for speech production and articulation. Damage here causes expressive aphasia, where understanding is intact but speaking is difficult.
- (d) Parietal lobe: This lobe is involved in sensory processing and spatial awareness. It does not have a direct role in language functions.

Q.18

Which of the following is a common sign of Encephalitis?

- A. Seizures
- B. Joint pain
- C. Increased thirst
- D. Dry skin

Answer:

A

Sol:

Sol. Seizures are a common sign of encephalitis, indicating abnormal electrical activity in the brain caused by inflammation. They

often present alongside confusion, unconsciousness, or abnormal movements.

Explanation of other options:

- (a) Seizures: seizures occur due to inflammation disrupting normal brain electrical activity, often causing convulsions or loss of awareness.
- (b) Joint pain: Joint pain is typically associated with autoimmune diseases or arthritis and rarely indicates brain inflammation caused by encephalitis.
- (c) Increased thirst: Increased thirst is a common symptom of diabetes or dehydration and does not indicate neurological inflammation seen in encephalitis.
- (d) Dry skin: Dry skin usually results from dehydration, skin disorders, or environmental factors, not from brain inflammation.

Q.19

What is the key focus for nutrition in teens?

- A. High fiber foods
- B. Essential fatty acids
- C. Protein and calcium
- D. Dairy products

Answer:

C

Sol:

Sol. Protein and calcium are the key focus for nutrition in teens. Protein plays a crucial role in building and repairing tissues, supporting overall physical health, and strengthening bones. Adequate calcium intake is essential for bone health and growth. While essential fatty acids, high fiber foods, and dairy products are important for overall health, they are not the primary focus for nutrition in teens.

Explanation of other options:

- (a) High fiber foods: High fiber foods are important for digestive health and preventing constipation, but they are not the key focus for nutrition in teens.
- (b) Essential fatty acids: Essential fatty acids are important for brain development and overall health, but they are not the key focus for nutrition in teens.
- (c) Protein and calcium: This is the correct answer because protein is essential for growth and repair, while calcium is crucial for bone health and immune function.
- (d) Dairy products: While dairy products are a good source of calcium and protein, they are not sufficient to meet all the diverse nutritional needs of teens.

Q.20

What is the first step in wound care?

- A. Control bleeding
- B. Wash your hands
- C. Clean the wound
- D. Apply ointment

Answer:

B

Sol:

Sol. Washing hands is the first step to prevent infection from bacteria or dirt on your hands transferring to the wound. Proper hand hygiene minimizes the risk of complications during wound care.

Explanation of other options:

- (a) Control bleeding: Controlling bleeding is an important step but comes after ensuring your hands are clean to prevent infection.

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- (b) Wash your hands: This is the first and most crucial step to reduce the risk of infection during wound care.
- (c) Clean the wound: Once hands are washed and bleeding is controlled, the wound is cleaned to remove dirt and debris.
- (d) Apply ointment: After the wound is cleaned, ointment is applied to keep it moist and reduce scarring.
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Q.21

What is a suitable source of omega-3 fatty acids for individuals aged 40-60?

- A. Avocado
- B. Lentils
- C. Milk
- D. Bread

Answer:

A

Sol:

Sol. Avocados are a rich source of monounsaturated fats, which support heart health and reduce the risk of age-related cognitive decline. They also contain antioxidants that protect brain function.

Explanation of other options:

(a) Avocado: It is a healthy source of omega-3 fatty acids, which support heart and brain health.

(b) Lentils: Lentils are a good source of fiber and iron, but they do not contain significant amounts of omega-3 fatty acids.

(c) Milk: Milk is a source of calcium and protein, which are essential for bone health, but it does not contain omega-3 fatty acids in significant amounts.

(d) Bread: Bread is a source of carbohydrates and provides energy, but it does not contain omega-3 fatty acids.

Q.22

Which food is the best source of calcium for growing children?

- A. Lean meat
- B. Low-fat cheese
- C. Legumes
- D. Seafood

Answer:

B

Sol:

Sol. Low-fat cheese is an excellent source of calcium, which is essential for bone growth, teeth development, and overall skeletal health in growing children. Regular consumption of calcium-rich foods helps prevent deficiencies like rickets and osteoporosis.

Explanation of other options:

(a) Lean meat: Lean meat is an excellent source of protein and iron, which support muscle growth and oxygen transport in the blood, but it is not a significant source of calcium.

(b) Low-fat cheese: It is the correct answer as it is packed with calcium, which is crucial for maintaining strong bones and teeth in children.

(c) Legumes: Legumes are rich in protein, dietary fiber, and iron but do not provide substantial amounts of calcium.

(d) Seafood: Seafood is a good source of iodine, omega-3 fatty acids, and vitamin D, but it is not primarily recognized for its calcium content.

Q.23

What is the most common site of hemorrhagic stroke?

- A. Cerebellum
- B. Brainstem
- C. Basal Ganglia
- D. Occipital Lobe

Answer:

C

Sol:

Sol. The Basal Ganglia is the most common site of hemorrhagic stroke. It is a collection of subcortical structures that control voluntary movements. It is located in the center of the brain, below the cerebral cortex. It is surrounded by white matter and is connected to the rest of the brain by the internal capsule. It is a common site for hemorrhagic stroke because of its rich blood supply.

Explanation of options:

- (a) Cerebellum: The cerebellum is a small, cone-shaped structure located at the back of the brain. It is responsible for coordinating movement and balance. It is not a common site for hemorrhagic stroke.
- (b) Brainstem: The brainstem is the part of the brain that connects the cerebrum to the spinal cord. It is responsible for many basic functions, including breathing and heart rate. It is not a common site for hemorrhagic stroke.
- (c) Basal Ganglia: The basal ganglia is a collection of subcortical structures that control voluntary movements. It is located in the center of the brain, below the cerebral cortex. It is a common site for hemorrhagic stroke.
- (d) Occipital Lobe: The occipital lobe is the part of the brain at the back of the head. It is responsible for processing visual information. It is not a common site for hemorrhagic stroke.

Q.24

What does green-colored amniotic fluid indicate?

- A. Rh incompatibility
- B. Intrauterine death
- C. Fetal distress
- D. Concealed hemorrhage

Answer:

C

Sol:

Sol. Green-colored amniotic fluid indicates the presence of meconium, which is the first stool of the fetus. It suggests fetal distress or hypoxia. Meconium is a dark, sticky substance that is passed by the fetus during labor. It is a sign of fetal distress and requires immediate intervention.

Explanation of options:

- (a) Rh incompatibility: Rh incompatibility is a condition that occurs when a pregnant woman has a different blood type than her fetus. It can lead to complications during pregnancy and delivery. It does not cause green-colored amniotic fluid.
- (b) Intrauterine death: Dark brown (tobacco juice-like) amniotic fluid indicates prolonged intrauterine fetal death (IUD) and tissue breakdown.
- (c) Fetal distress: Green-colored amniotic fluid suggests meconium release due to fetal hypoxia or distress during pregnancy or labor.
- (d) Concealed hemorrhage: Concealed hemorrhage in pregnancy can lead to dark-colored amniotic fluid, indicating the presence of old blood.

Q.25

What is a common complication of stroke?

- A. Increased appetite
- B. Muscle weakness
- C. Hair loss

D. Skin rash

Answer:

B

Sol:

Sol. Muscle weakness is one of the most common complications of stroke, often presenting as hemiparesis (weakness on one side of the body) or hemiplegia (complete paralysis of one side). This occurs when the part of the brain responsible for controlling voluntary muscle movements is damaged due to disrupted blood supply.

Explanation of other options:

- (a) Increased appetite: Stroke does not directly affect appetite. In fact, some stroke patients may experience difficulty swallowing (dysphagia), which can reduce appetite and lead to weight loss.
- (b) Muscle weakness: Common complication of stroke, often presenting as hemiparesis or hemiplegia, resulting in weakness or paralysis on one side of the body.
- (c) Hair loss: Hair loss is not a direct complication of stroke, but some medications used for stroke treatment may cause hair loss as a side effect.
- (d) Skin rash: Skin rash is not a direct complication of stroke, but some medications used for stroke treatment may cause skin reactions, or autoimmune disorders may be associated with stroke.

Q.26

What is one primary method to prevent the spread of COVID-19?

- A. Share utensils
- B. Avoid wearing masks
- C. Use antibiotics
- D. Go to public gatherings

Answer:

C

Sol:

Sol. Using antibiotics on surfaces helps minimize the spread of germs, reducing the risk of others getting infected. Proper hygiene is also essential when you're sick to protect those around you.

Explanation of other options:

- (a) Share utensils: Sharing utensils can spread germs, so it should be avoided when you're sick.
- (b) Avoid wearing masks: Wearing masks helps prevent the spread of germs, so it should be encouraged when you're sick.
- (c) Use antibiotics: Antibiotics are used to treat bacterial infections, but they do not prevent the spread of illness-causing germs.
- (d) Go to public gatherings: Public gatherings often involve close contact with many people, increasing the risk of spreading germs to a larger number of people.

Q.27

What is the most common risk factor for a hemorrhagic stroke?

- A. Smoking
- B. Diabetes
- C. Hypertension
- D. Alcohol abuse

Answer:

C

Sol:

Sol. Hypertension is the most common risk factor for hemorrhagic stroke as it weakens the walls of blood vessels, making them prone to rupture under pressure. Proper blood pressure management is critical to reducing stroke risk.

Explanation of other options:

- (a) Smoking: Smoking primarily increases the risk of ischemic stroke by causing plaque buildup in blood vessels, reducing blood flow.
- (b) Diabetes: Diabetes contributes to ischemic stroke risk due to damage to small blood vessels and poor circulation.
- (c) Hypertension: High blood pressure directly damages blood vessel walls, increasing the likelihood of rupture and hemorrhagic stroke.
- (d) Alcohol abuse: Chronic alcohol consumption can increase stroke risk, but it is not the primary cause of hemorrhagic stroke.

Q.28

Why is staying hydrated important for skin health?

- A. It eliminates toxins from the body.
- B. It prevents skin dryness and itching.
- C. It keeps the skin cool and reduces sunburn risk.
- D. It reduces hair loss and promotes faster wound healing.

Answer:

C

Sol:

Sol. Staying hydrated is crucial for skin health as it helps maintain the skin's natural barrier, preventing dryness and itching. Hydration also supports the body's natural detoxification process, helping to flush out toxins through sweat and urine, which contributes to overall skin health and a clearer complexion.

Explanation of other options:

- (a) It eliminates toxins from the body: While hydration does support the body's natural detoxification process, it does not directly eliminate toxins from the body. Practices like sweating and urination are responsible for toxin removal.
- (b) It prevents skin dryness and itching: Hydration is essential for preventing skin dryness and itching, but it is not the sole factor. Proper skincare and moisture retention are also important.
- (c) It keeps the skin cool and reduces sunburn risk: Hydration helps regulate body temperature and can help the skin feel cooler, but it does not directly reduce sunburn risk. Sun protection is the primary method for preventing sunburn.
- (d) It reduces hair loss and promotes faster wound healing: Hydration is important for overall health, but it is not the primary factor in reducing hair loss or promoting faster wound healing. Proper nutrition and medical care are more directly involved in these processes.

Q.29

Assertion: Syphilis, gonorrhea, and AIDS are transmitted through sexual intercourse.

Reason: Syphilis, gonorrhoea and AIDS are transmitted through sexual intercourse.

- A. Both assertion and reason are true
- B. Assertion is true but reason is false
- C. Reason is true but assertion is false
- D. Both assertion and reason are false

Answer:

A

Sol:

Sol. Both the **assertion and reason are true**. Syphilis, gonorrhoea, and AIDS are classified as **Sexually Transmitted Diseases (STDs)** because they are primarily transmitted through **unprotected sexual intercourse** with an infected person.

Explanation of other options:

- **(a) Both assertion and reason are true:Correct option;** the assertion correctly identifies syphilis, gonorrhoea, and AIDS as STDs, and the reason accurately states their primary mode of transmission.
- **(b) Assertion is true but reason is false:** Incorrect, as both the assertion and reason are factually accurate.
- **(c) Reason is true but assertion is false:** Incorrect, because the assertion is scientifically valid.
- **(d) Both assertion and reason are false:** Incorrect, as both the assertion and reason are true and well-supported by scientific evidence.

Q.30

What kind of diet

- A. High-fat
- B. High-fiber
- C. High-sugar
- D. Low-protein

Answer:

B

Sol:

Sol. A high-fiber diet can help manage hot flashes during menopause. Fiber-rich foods help stabilize blood sugar levels, which can reduce the frequency and severity of hot flashes. Fiber-rich foods also promote overall health and may help with other symptoms.

Explanation of other options:

- (a) High-fat, high-sugar diet: High-fat and high-sugar diets can increase insulin resistance, which may worsen hot flashes by increasing estrogen levels. High-fat diets can also lead to weight gain, which may exacerbate symptoms like hot flashes.
- (b) High-fiber, low-sugar diet: High-fiber, low-sugar diets are beneficial for managing hot flashes. Fiber-rich foods help stabilize blood sugar levels, which can reduce the frequency and severity of hot flashes. Fiber-rich foods also promote overall health and may help with other symptoms like hot flashes.
- (c) High-sugar, low-fiber diet: High-sugar, low-fiber diets can increase insulin resistance, which may worsen hot flashes by increasing estrogen levels. High-sugar diets can also lead to weight gain, which may exacerbate symptoms like hot flashes.
- (d) Low-protein diet: Low-protein diets can lead to muscle loss and bone density loss, which is not recommended during menopause.

Q.31

AIDS is detected

- A. Widal test
- B. ELISA
- C. Radiography
- D. Both a and c

Answer:

B

Sol:

Sol.ELISA (Enzyme-Linked Immunosorbent Assay) is the most commonly used test for the **detection of HIV antibodies** in the blood, which helps diagnose AIDS at an early stage. It is a highly sensitive and specific diagnostic tool.

Explanation of other options:

- **(a) Widal test:** This test is used to detect **typhoid fever**, not AIDS or HIV infection.
 - **(b) ELISA:** **Correct option;** ELISA detects antibodies produced against the **HIV virus**, helping in early diagnosis of AIDS.
 - **(c) Radiography:** Radiography (like X-rays) is used for imaging purposes (e.g., detecting tuberculosis in AIDS patients) but **cannot detect HIV infection** itself.
 - **(d) Both a and c:** Incorrect, as neither Widal test nor radiography is used for diagnosing AIDS.
-

Q.32

How often should you ideally wash your hair with shampoo?

- A. Daily
- B. 1–2 times a week
- C. Once a month
- D. Only after swimming

Answer:

B

Sol:

Sol. Washing your hair with shampoo at a frequency of 1–2 times a week maintains a balance on the scalp and prevents dandruff.

Explanation of other options:

- (a) Daily: Washing hair daily with shampoo strips natural oils, leading to dryness and irritation as the scalp compensates by producing more oil, leading to dandruff.
- (b) 1–2 times a week: Ideal frequency for most people, cleaning without causing damage.
- (c) Once a month: Insufficient to remove oil and dirt, leading to scalp infections and unpleasant odor.
- (d) Only after swimming: Excessive sweating is important for health, and frequent hair washing can lead to dryness and scalp irritation.

Q.33

Which solution should not be used to clean a wound?

- A. Hydrogen peroxide
- B. Lukewarm water
- C. Saline solution
- D. Mild soap

Answer:

A

Sol:

Sol. Hydrogen peroxide can damage healthy tissue and delay the natural healing process of wounds. It is not recommended for wound cleaning because it can irritate the wound and harm surrounding cells.

Explanation of other options:

- (a) Hydrogen peroxide: Not recommended for wound cleaning due to its tissue-damaging properties.
 - (b) Lukewarm water: Safe and gentle, lukewarm water effectively cleans dirt and debris from the wound without causing irritation.
 - (c) Saline solution: Saline is sterile and commonly used in medical settings for safe wound cleaning.
 - (d) Mild soap: Mild soap can be used to clean the area around the wound but should not be applied directly into the wound as it can cause irritation.
-

Q.34

Which cerebrospinal fluid (CSF) finding suggests viral Encephalitis?

- A. Increased glucose levels
- B. Decreased white blood cells
- C. Increased lymphocytes
- D. Presence of bacteria

Answer:

C

Sol:

Sol. Increased lymphocytes in cerebrospinal fluid (CSF) are a key indicator of viral encephalitis, showing the body's immune response to fight the viral infection.

Explanation of other options:

- (a) Increased glucose levels: In viral encephalitis, glucose levels are often low.
- (b) Decreased white blood cells: White blood cell counts are not decreased.
- (c) Increased lymphocytes: This is the correct finding, as lymphocytes are increased in the CSF.
- (d) Presence of bacteria: Bacteria are not typically found in the CSF in viral encephalitis.

Q.35

How long should a newborn be breastfed before a feeding bottle is introduced?

- A. 5–10 minutes
- B. 10–15 minutes
- C. 15–20 minutes
- D. 25–30 minutes

Answer:

C

Sol:

Sol. Applying pressure for 15–20 minutes is typical for a newborn. It is necessary to prevent excessive blood loss.

Explanation of other options:

- (a) 5–10 minutes: This duration might not be sufficient to stop significant bleeding, especially in severe cases.
- (b) 10–15 minutes: This duration might be enough to stop bleeding in some cases, but it might not be enough in more severe cases.
- (c) 15–20 minutes: This is the correct duration, as it is sufficient to stop bleeding in most cases.
- (d) 25–30 minutes: This duration is not necessary and might cause unnecessary attention.

Q.36

Which drug belongs to the sulfone class used in leprosy treatment?

- A. Rifampicin
- B. Clofazimine
- C. Dapsone
- D. Minocycline

Answer:

C

Sol:

Sol. Dapsone (Diamino diphenyl sulfone) is the most commonly used sulfone drug in leprosy treatment. It works by inhibiting the

bacterial synthesis of dihydrofolic acid, essential for the growth and survival of *Mycobacterium leprae*. Dapsone is usually administered orally and is considered cost-effective and highly effective in leprosy management.

Explanation of other options:

- (a) Rifampicin: Rifampicin is a powerful antibiotic used in combination therapy for leprosy. It works by inhibiting bacterial RNA synthesis but does not belong to the sulfone class of drugs.
- (b) Clofazimine: This drug belongs to the phenazine class and is effective in managing both leprosy and its inflammatory reactions. It also helps reduce skin lesions associated with leprosy.
- (c) Dapsone: It is the correct drug classified under the sulfone class and widely used in the treatment of leprosy.
- (d) Minocycline: Minocycline is a tetracycline antibiotic and is occasionally used as an alternative treatment in leprosy but does not belong to the sulfone class.

Q.37

What is a transient ischaemic attack (TIA)?

- A. Minor stroke
- B. Permanent stroke
- C. Silent stroke
- D. Hemorrhagic stroke

Answer:

A

Sol:

Sol. A Transient Ischaemic Attack (TIA) is often referred to as a "minor stroke" because its symptoms, such as weakness, numbness, or confusion, typically last for a short duration, usually within 24 hours, and do not cause permanent damage. However, a TIA is a warning sign of a potential full stroke.

Explanation of options:

- (a) Minor stroke: This is the correct answer. A TIA is a temporary blockage of blood flow to a part of the brain, causing symptoms that resolve within 24 hours. It does not cause permanent damage.
- (b) Permanent stroke: Permanent strokes result in long-term complications. TIA, on the other hand, are temporary and reversible.
- (c) Silent stroke: Silent strokes occur without noticeable symptoms but still cause brain damage, often detected incidentally on brain imaging. TIA, however, presents with clear and temporary symptoms.
- (d) Hemorrhagic stroke: This is caused by bleeding in the brain due to a ruptured blood vessel. It is not a TIA result.

Q.38

How often is Rifampicin administered in leprosy treatment?

- A. Daily
- B. Weekly
- C. Once a month
- D. Every 3 months

Answer:

C

Sol:

Sol. Rifampicin is administered once a month in both Multibacillary Leprosy (MBL) and Paucibacillary Leprosy (PBL) regimens. It is

a powerful antibiotic that rapidly kills *Mycobacterium leprae* and reduces the risk of resistance.

Explanation of other options:

- (a) Daily: Rifampicin is not administered daily; it is given monthly to avoid side effects and optimize its bactericidal action.
- (b) Weekly: Weekly administration is not standard practice for Rifampicin in leprosy treatment.
- (c) Once a month: This is the correct frequency for Rifampicin administration in both MBL and PBL regimens.
- (d) Every 3 months: Administering Rifampicin every 3 months is incorrect and not part of the standard treatment protocol.

Q.39

What type of dressing is recommended for a wound?

- A. Adhesive tape directly on the wound
- B. Non-stick or gentle dressing
- C. Cotton wool dressing
- D. Rough bandage

Answer:

B

Sol:

Sol. Non-stick or gentle dressing is recommended for a wound as it protects the wound from further damage and minimizes the risk of infection.

Explanation of other options:

- (a) Adhesive tape: Adhesive tape should not be applied directly to the wound as it can stick to the wound surface and cause further damage when removed.
- (b) Non-stick or gentle dressing: This type of dressing is recommended as it protects the wound from further damage and minimizes the risk of infection.
- (c) Cotton wool dressing: Cotton wool dressing is not recommended as it can absorb moisture from the wound, increasing the risk of infection and delaying healing.
- (d) Rough bandage: A rough bandage is not recommended as it can cause friction, irritation, and potential damage to the wound.

Q.40

Which other antibiotics are mentioned as additional antibiotics for leprosy treatment?

- A. Azithromycin
- B. Minocycline and Clarithromycin
- C. Penicillin and Amoxicillin
- D. Doxycycline

Answer:

B

Sol:

Sol. Minocycline and Clarithromycin are mentioned as additional antibiotics for leprosy treatment, especially in cases where standard drugs cannot be used. Minocycline, a tetracycline antibiotic, and Clarithromycin, a macrolide, both show significant activity against *Mycobacterium leprae*.

Explanation of other options:

- (a) Azithromycin: Azithromycin is a macrolide antibiotic but is not commonly mentioned as part of the standard or alternative treatment regimen for leprosy.
- (b) Minocycline and Clarithromycin: These two antibiotics have been recognized as effective alternatives in leprosy treatment, particularly in cases of drug resistance or intolerance.
- (c) Penicillin and Amoxicillin: These antibiotics are generally effective against bacterial infections but have no significant role in treating leprosy.

(d) Doxycycline: While Doxycycline is a tetracycline antibiotic, it is not specifically listed among the primary or alternative drugs for leprosy.

