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 first-line diagnostic test for stroke, as it quickly differentiates between ischemic and hemorrhagic stroke. It is widely available, fast, and highly effective in detecting brain bleeding.

Explanation of other options:

(a) MRI: MRI offers high-resolution imaging and is useful for detecting minor ischemic strokes, but it is not typically used in emergencies due to its longer scan time.

(b) CT Scan: CT scans are fast, reliable, and effective in identifying bleeding or blockage in the brain.

(c) EEG: EEG is primarily used for diagnosing seizure disorders and does not provide brain structural details needed for stroke diagnosis.

(d) X-ray: X-rays are used for bone imaging and cannot detect brain abnormalities caused by a stroke.

Q.2

Which practice helps prevent tooth decay the most?

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 remove plaque and food particles from the teeth and gum line, preventing the buildup of harmful bacteria that cause tooth decay and gum disease.

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

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 and keep the wound moist: As ointments create an optimal healing environment.
(d) To disinfect the wound: Ointments protect the wound but do not have disinfecting properties. Disinfection is typically done during the cleaning process.

Q.4
Why should menopausal women consume calcium-rich foods?

A. To manage weight
B. To reduce mood swings
C. To prevent bone thinning
D. To improve digestion

Answer:
C
Sol:

Sol. During menopause, hormonal changes, especially the decline in estrogen levels, increase the risk of osteoporosis and bone thinning. Consuming calcium-rich foods helps maintain bone density, reduces fracture risk, and supports overall bone health in menopausal women.
Explanation of other options:
(a) To manage weight: Calcium intake does not directly influence weight management, although it supports metabolic functions.
(b) To reduce mood swings: Mood swings during menopause are primarily caused by hormonal fluctuations and are not directly managed by calcium intake.
(c) To prevent bone thinning: This is the correct answer, as calcium plays a key role in preventing osteoporosis and maintaining bone strength during menopause.
(d) To improve digestion: Calcium has no significant role in improving digestion; fiber-rich foods are generally recommended for digestive health.

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 to manage fear and anxiety associated with pain in preoperative patients is:

A. Teach diversion activities
B. Encourage the patient to communicate with others who underwent the same procedure
C. Explain the procedures associated with surgery and pain management
D. Help the patient to ventilate their feelings

Answer:
C
Sol:

Ans. (c) Explain the procedures associated with surgery and pain management is the most effective nursing intervention to manage fear and anxiety related to pain in preoperative patients. Providing clear, honest information about what to expect during surgery, including pain management options (e.g., anesthesia, analgesics), helps reduce uncertainty and fear. When patients understand the procedures and the steps taken to manage pain, they feel more in control and less anxious. While teaching diversion activities, encouraging communication with others, and helping the patient ventilate their feelings can be helpful, education about the surgery and pain management directly addresses the root cause of fear and anxiety.

Q.7

AIDS is due to :-

A. Inheritance of genes

B. Reduction in number of T- Helper cells

C. Reduction in number of killer T-cells

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 bodies

D. Mitochondria

Answer:

A

Sol:

· Specifically designed organelles found in cells, lysosomes are packed with enzymes that can degrade every kind of biological polymer, including proteins, nucleic acids, carbohydrates, and lipids. These enzymes are efficient in breaking down food particles, absorbed viruses or bacteria, and trash from cells because they are active at the acidic pH present inside lysosomes. Lysosomes are commonly known as the cell's "waste disposal system" because of their vital function in breaking down and recycling foreign contaminants and cellular waste.

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 disabilities caused by nerve damage.
Explanation of other options:
(a) Staphylococcus aureus: This bacterium typically causes skin infections, boils, and cellulitis but does not cause leprosy. It is commonly found on the skin and mucous membranes.
(b) Mycobacterium tuberculosis: This bacterium is responsible for causing tuberculosis (TB), which mainly affects the lungs but can also affect other organs. It spreads through airborne droplets.
(c) Mycobacterium leprae: It is the causative bacterium of leprosy, primarily affecting skin, nerves, and mucous membranes and can cause deformities if untreated.
(d) Escherichia coli: Commonly found in the human gut, it is primarily associated with gastrointestinal infections, urinary tract infections, and food poisoning but has no link to leprosy.

Q.11
Which second-line antitubercular drug is used in leprosy treatment?

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

Answer:
B
Sol:

Sol. Ethionamide is classified as a second-line antitubercular drug and is occasionally used in the treatment of leprosy, particularly in cases where resistance to primary drugs is observed. It works by inhibiting bacterial cell wall synthesis, thereby limiting 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 brain regions, and strokes here are relatively less common.
(b) Basilar artery: Supplies the brainstem and cerebellum, and strokes in this artery are rare but often life-threatening.
(c) Middle cerebral artery: MCA strokes are the most common and often cause significant motor and sensory impairments.
(d) Posterior cerebral artery: This artery supplies the occipital lobe, and strokes here primarily lead to visual disturbances.

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 headache

Answer:
C
Sol:

Sol. Thrombolytic therapy, using drugs like Alteplase (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: Correct; this therapy targets the clots blocking brain arteries.
(d) Control headache: Painkillers are used for headaches, not thrombolytic therapy.

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 temperature
D. Support uterine contractions

Answer:
A
Sol:

Sol. The fetal membrane, specifically the chorioamnion, acts as a protective barrier against infections, preventing harmful pathogens from crossing into the amniotic sac and reaching the fetus. It also supports the fetus by producing prostaglandins that help in labor initiation.
Explanation of other options:
(a) Prevent infection: The chorioamnion serves as a protective shield, preventing bacterial and viral infections from reaching the fetus, ensuring a sterile intrauterine environment.
(b) Aid in digestion: The fetal gastrointestinal system handles digestion, and the fetal membrane has no role in digestive processes.
(c) Regulate maternal temperature: Maternal temperature is controlled by the hypothalamus in the brain, and the fetal membrane has no involvement in this process.
(d) Support uterine contractions: Uterine contractions are 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 included in the operating budget of the management of nursing?

A. Personnel salaries and wages
B. Books, periodicals, and subscriptions
C. Medical and surgical supplies
D. Illegal fees

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 speech and language, often affected in stroke?

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

Answer:
C
Sol:

- (a) Occipital lobe –
  This lobe is mainly responsible for visual processing. It interprets visual information like color, shape, and motion. It has no major role in speech or language.
- (b) Temporal lobe –
  It contains Wernicke's area, which is essential for language comprehension, not speech production. Damage here causes Wernicke's aphasia, where speech is fluent but meaningless.
- (c) Frontal lobe –
  The correct answer. It houses Broca's area, especially in the left hemisphere, which is responsible for speech production and articulation. Stroke in this area causes Broca's aphasia, where understanding is intact but speaking becomes difficult.
- (d) Parietal lobe –
  This lobe deals with sensory processing, touch, spatial awareness, and body positioning, but not with speech or 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 minerals
D. Dairy products only

Answer:
C
Sol:

Sol. Protein and minerals are essential for teenagers as they play a crucial role in muscle growth, bone development, and overall physical health during this rapid growth phase. Adequate intake of protein supports muscle repair, while minerals like calcium and iron strengthen bones and improve oxygen transport in the body.
Explanation of other options:
(a) High fiber foods: While dietary fiber is important for digestive health and preventing constipation, it is not the primary nutritional focus during teenage growth spurts.
(b) Essential fatty acids: Fatty acids, such as omega-3 and omega-6, are more critical during early childhood for brain development and are not the key focus during teenage years.
(c) Protein and minerals: This is the correct answer because protein is essential for growth and repair, while minerals like calcium, iron, and zinc are vital for bone health and immune function.
(d) Dairy products only: While dairy products are a good source of calcium and protein, they are not sufficient alone to meet all the diverse nutritional needs of teenagers.

Q.20
What is the first step in providing first aid for a cut or wound?

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.

(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.

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 omega-3 fatty acids, which are essential for heart health, reducing inflammation, and supporting brain function. Regular consumption of avocados can help individuals aged 40-60 maintain cardiovascular health and reduce the risk of age-related cognitive decline.
Explanation of other options:
(a) Avocado: It is the correct answer as avocados are packed with healthy fats, including omega-3 fatty acids, which support heart and brain health.
(b) Lentils: Lentils are an excellent source of protein, dietary fiber, and iron, but they do not contain significant amounts of omega-3 fatty acids.
(c) Milk: Milk is a good source of calcium and vitamin D, which are essential for bone health, but it does not provide omega-3 fatty acids in significant amounts.
(d) Bread: Bread is primarily a source of carbohydrates and provides energy, but it is not a source of omega-3 fatty acids.

Q.22
Which food is rich in 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 for hemorrhagic stroke, primarily due to chronic hypertension. The small blood vessels in this region are highly vulnerable to increased blood pressure, leading to rupture and bleeding.

Explanation of other options:

(a) Cerebellum: Hemorrhage in the cerebellum is less common but can lead to impaired balance, coordination issues, and dizziness.

(b) Brainstem: A stroke in the brainstem is rare but extremely dangerous as it controls vital functions like breathing and heart rate.

(c) Basal Ganglia: This region is commonly affected in hypertensive hemorrhagic stroke due to fragile blood vessels.

(d) Occipital Lobe: Hemorrhage in the occipital lobe is rare and typically causes visual disturbances when it occurs.

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. This often suggests fetal distress or hypoxia in utero, as the fetus may pass meconium in response to reduced oxygen supply. Immediate medical intervention is required to prevent complications like meconium aspiration syndrome.

Explanation of other options:

(a) Rh incompatibility: In cases of Rh incompatibility, the amniotic fluid may appear golden yellow due to the breakdown of red blood cells and bilirubin release.

(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: Correct; damage to the brain's motor control areas impairs signal transmission to the muscles, resulting in weakness or paralysis on one side of the body.
(c) Hair loss: Hair loss is not associated with stroke. It is usually linked to hormonal imbalances, stress, or nutritional deficiencies.
(d) Skin rash: Stroke does not cause skin rashes. Rashes are more commonly associated with allergic reactions, infections, or autoimmune disorders.

Q.26
What is one precaution you should take when you're sick to prevent spreading germs?

A. Share utensils with family
B. Avoid wiping shared surfaces
C. Use antibacterial wipes on shared surfaces
D. Go to public gatherings frequently

Answer:
C
Sol:

Sol. Using antibacterial wipes on shared surfaces helps minimize the spread of germs, reducing the risk of others getting infected. Proper hygiene practices are essential when you're sick to protect those around you.
Explanation of other options:
(a) Share utensils with family: Sharing utensils can spread germs easily and should be avoided when you're sick.
(b) Avoid wiping shared surfaces: Not cleaning shared surfaces increases the risk of germ transmission.
(c) Use antibacterial wipes on shared surfaces: As disinfecting frequently touched surfaces effectively prevents the spread of illness-causing germs.
(d) Go to public gatherings frequently: Attending public gatherings while sick can increase 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 body hygiene?

A. It eliminates all germs from the body
B. It prevents tooth decay
C. It keeps the skin supple and flushes toxins
D. It reduces hair fall

Answer:

C

Sol:

Sol. Staying hydrated helps maintain skin elasticity and supports the body's natural detoxification processes by flushing out toxins through sweat and urine. Proper hydration contributes to overall skin health and body hygiene.
Explanation of other options:
(a) It eliminates all germs from the body: Hydration does not directly eliminate germs; the immune system and hygiene practices handle germ removal.
(b) It prevents tooth decay: Hydration supports saliva production, which helps prevent tooth decay, but drinking water alone is not sufficient for dental hygiene.
(c) It keeps the skin supple and flushes toxins: As hydration directly impacts skin health and the body's ability to remove toxins efficiently.
(d) It reduces hair fall: Hair fall is influenced by various factors, such as genetics, nutrition, and stress. While hydration supports overall health, it is not a direct solution for hair fall prevention.

Q.29

Assertion: Syphilis, gonorrhoea, AIDS are STDs.
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 is recommended to relieve hot flushes during menopause?

A. High-fat, high-protein diet
B. High-fiber, low-fat diet
C. High-sugar, low-fiber diet
D. Low-protein, high-carb diet

Answer:

B

Sol:

Sol. A high-fiber, low-fat diet is recommended during menopause to reduce the frequency and intensity of hot flushes. Fiber-rich foods help stabilize blood sugar levels, while low-fat intake prevents additional hormonal imbalances that might worsen symptoms.

Explanation of other options:

(a) High-fat, high-protein diet: High-fat diets can worsen hot flushes by increasing body heat and hormonal imbalance.

(b) High-fiber, low-fat diet: This is the correct answer as it helps in regulating hormone levels and reducing menopause symptoms like hot flushes.

(c) High-sugar, low-fiber diet: High sugar intake can cause spikes in blood sugar levels, which may exacerbate menopause symptoms like hot flushes.

(d) Low-protein, high-carb diet: A diet low in protein can affect muscle mass and overall health, which is not suitable during menopause.

Q.31

AIDS is detected by

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 sweating

Answer:

B

Sol:

Sol. Washing your hair 1–2 times a week helps remove oil, dirt, and product buildup without over-drying the scalp. This frequency maintains a balance between cleanliness and preserving natural scalp oils.

Explanation of other options:

(a) Daily: Washing hair daily can strip the scalp of its natural oils, leading to dryness, irritation, and increased oil production as the scalp compensates.

(b) 1–2 times a week: As it ensures scalp and hair health without causing damage or dryness.

(c) Once a month: Washing hair only once a month is insufficient to remove oil, dirt, and buildup, potentially causing scalp infections and unpleasant odors.

(d) Only after sweating: While washing hair after excessive sweating is important, relying solely on this approach may lead to inadequate hair hygiene for individuals who don't sweat heavily.

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 usually normal, unlike bacterial meningitis, where they are often low.
(b) Decreased white blood cells: In encephalitis, the white blood cell count increases as part of the immune response, not decreases.
(c) Increased lymphocytes: Increased lymphocytes indicate the body is actively fighting a viral infection in the brain and spinal cord.
(d) Presence of bacteria: Presence of bacteria in CSF suggests bacterial meningitis, not viral encephalitis.

Q.35
How long should pressure be applied to a wound to stop bleeding before seeking medical care?

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 typically sufficient to control bleeding. If it doesn't stop within this time, seeking professional medical care is necessary to prevent excessive blood loss.
Explanation of other options:
(a) 5–10 minutes: This duration might not be sufficient to stop significant or severe bleeding, especially in deep wounds.
(b) 10–15 minutes: While this duration may stop mild bleeding, it might not be enough for more severe cases.
(c) 15–20 minutes: This is the recommended duration to apply pressure for controlling bleeding before seeking medical attention.
(d) 25–30 minutes: Waiting this long could result in unnecessary blood loss and delay critical medical intervention.

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 ischemic attack (TIA) commonly referred to as?

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

Answer:
A
Sol:

Sol. A Transient Ischemic Attack (TIA) is often called a "minor stroke" because it causes temporary stroke-like symptoms such as weakness, numbness, or speech difficulties. These symptoms resolve within 24 hours without causing permanent brain damage. However, a TIA is considered a warning sign for a potential full stroke.
Explanation of other options:
(a) Minor stroke: Correct; TIA mimics stroke symptoms due to a temporary blockage of blood flow to the brain but does not cause permanent damage. It serves as an important warning sign for a major stroke.
(b) Permanent stroke: A permanent stroke results in lasting brain damage and long-term complications. TIA symptoms, on the other hand, are temporary and reversible.
(c) Silent stroke: A silent stroke occurs without noticeable symptoms but still causes brain damage, often detected incidentally on brain imaging. TIA, however, presents with clear and temporary symptoms.
(d) Hemorrhagic stroke: A hemorrhagic stroke is caused by bleeding in the brain due to a ruptured blood vessel, whereas TIA results from a temporary clot or reduced blood flow in a brain artery.

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 wounds as it protects the wound without sticking to it. This prevents further damage and minimizes pain during dressing changes.
Explanation of other options:
(a) Adhesive tape directly on the wound: Adhesive tape should not be applied directly on the wound as it can stick to the wound surface and cause damage during removal.
(b) Non-stick or gentle dressing: it prevents sticking and protects the wound during the healing process.
(c) Cotton wool dressing: Cotton wool can leave fibers in the wound, increasing the risk of infection and hindering proper healing.
(d) Rough bandage: Rough bandages can cause irritation, friction, and potential damage to the wound tissue.

Q.40
Which other antibiotics are mentioned 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.