MP Board Class 12, 2026 Home Science Question Paper with Solutions

Time Allowed :3 Hours	**Maximum Marks :**100	**Total questions :**34

General Instructions

Read the following instructions very carefully and strictly follow them:

1. The paper is divided into two sections – Section A (Compulsory) and Section B (Elective).
2. Section A is compulsory for all candidates and generally includes objective-type questions, short answer questions, and long answer questions from the prescribed syllabus.
3. In Section A, candidates are required to answer all questions. The questions will cover topics from ancient, medieval, and modern history as prescribed by the syllabus.
4. Section B consists of elective questions. Candidates are required to attempt questions from the chosen topic according to the provided options.
5. The questions in Section A will be in the form of multiple-choice, short answer, and essay-type questions.
6. Answers to all questions must be written in neat and legible handwriting. Candidates must adhere strictly to the word limit mentioned in the questions.
7. Use of unfair means or electronic devices during the examination is strictly prohibited.
8. Candidates must ensure that they write their answers in the correct format, following the instructions given for each section.

1. Which one is not a Consumer right?

(a) Selection

(b) Compensation

(c) Getting a shop raided

(d) Filing a complaint

Correct Answer: (c) Getting a shop raided

Solution:

Consumer rights are legal entitlements that protect buyers from unfair trade practices and ensure fair treatment in the marketplace.

Major Consumer Rights (India):

Under the Consumer Protection Act, 2019, consumers have the following rights:

1. **Right to Safety:** Protection against hazardous goods/services
2. **Right to be Informed:** About quality, quantity, potency, purity, standard, price
3. **Right to Choose:** Access to variety at competitive prices
4. **Right to be Heard:** Consumer interests will be considered
5. **Right to Seek Redressal:** Against unfair practices or exploitation
6. **Right to Consumer Education:** Awareness about rights

Analysis of Given Options:

- **(a) Selection:**
  - This relates to **Right to Choose**
  - Consumers have right to select from various options
  - **Valid consumer right**
- **(b) Compensation:**
  - This relates to **Right to Seek Redressal**
  - Consumers can claim compensation for loss/damage

  - **Valid consumer right**

- **(d) Filing a complaint:**
  - This relates to **Right to be Heard** and **Right to Redressal**
  - Consumers can file complaints in consumer courts
  - **Valid consumer right**
- **(c) Getting a shop raided:**
  - **NOT a consumer right**
  - Raiding shops is a law enforcement action (police, legal authorities)
  - Consumers cannot personally conduct raids
  - Consumers can complain to authorities who may take action

Consumer Protection Mechanism:

Consumer Action	Authority Action
File complaint	Consumer court hears case
Report unfair practice	Legal authorities may inspect/raid
Claim compensation	Court orders compensation

Final Answer: Getting a shop raided

Quick Tip

Consumer rights include: Choice, Information, Safety, Redressal (compensation), Hearing, Education. ”Raiding shops” is an enforcement action by authorities, not a consumer right. Consumers can complain; authorities raid if needed.

---

2. Which emotion of a baby is visible from birth?

(a) Love

(b) Fear

(c) Anger

(d) Dislike

Correct Answer: (d) Dislike

Solution:

Emotional development in infants follows a predictable sequence. Some basic emotions are present from birth, while others develop later as the brain matures.

Emotions Present at Birth:

Research in developmental psychology shows that newborns display:

- **Distress/Pain:** Crying in response to discomfort, hunger, or pain
- **Contentment:** Calmness when comfortable and fed
- **Interest:** Attention to novel stimuli, faces
- **Dislike/Disgust:** Aversion to unpleasant tastes or smells

Why Dislike is Visible from Birth:

- **Innate Preference:** Newborns show clear aversion to bitter or sour tastes
- **Facial Expressions:** Babies make distinct ”disgust” faces (nose wrinkling, tongue protrusion) when given unpleasant tastes
- **Survival Mechanism:** Dislike of potentially harmful substances (bitter=poison) is evolutionarily programmed
- **Sensory Reflex:** This is a primitive response, not learned

Why Other Options Develop Later:

- **(a) Love:**
  - Attachment and love develop over first year
  - Babies show preference for caregivers by 2-3 months
  - Genuine attachment forms around 6-8 months

- **(b) Fear:**
  - Fear emerges around 6-9 months
  - Stranger anxiety appears at this time
  - Requires cognitive development to recognize potential threats
- **(c) Anger:**
  - Frustration/anger emerges around 4-6 months
  - Babies show anger when goals are blocked (e.g., toy taken away)
  - Requires some cognitive awareness of cause-effect

Emotional Development Timeline:

Age	Emotions Displayed
Birth	Contentment, Distress, Disgust, Interest
2-3 months	Social smile
4-6 months	Anger, Surprise
6-9 months	Fear (stranger anxiety)
12+ months	Love/Attachment, Jealousy, Shyness

Final Answer: Dislike

Quick Tip

Newborns show basic emotions: contentment (pleasure) and distress/dislike (displeasure). Complex emotions like love, fear, and anger develop later with brain maturation and social experience.

---

3. Which one is not a source of water?

(a) Food

(b) Drinking water

(c) Beverages

(d) Sweets

Correct Answer: (d) Sweets

Solution:

Water enters our body through various sources. Understanding these sources is important for maintaining proper hydration.

Sources of Water for the Body:

1. **Drinking Water:** Direct consumption of water (tap, bottled, filtered)
2. **Beverages:** Tea, coffee, juice, milk, soft drinks, etc.
3. **Food:** Many foods contain significant water content
4. **Metabolic Water:** Water produced inside body during chemical reactions

Why Sweets is NOT a Source of Water:

- **Low Water Content:** Most sweets (candy, chocolate, toffees, mithai) have very low water content
- **High Sugar Concentration:** Sweets primarily contain sugar, fats, and dry ingredients
- **Dehydrating Effect:** High sugar concentration can actually draw water from body cells (osmotic effect)
- **Not Hydrating:** Sweets do not contribute meaningfully to daily water intake

Water Content in Different Sources:

Source	Approx. Water Content (%)
Drinking water	100%
Milk	87-90%
Fruits (watermelon, orange)	80-95%
Vegetables (cucumber, lettuce)	95-97%
Cooked rice	60-70%
Bread	35-40%
Sweets (typical)	5-15%
Chocolate	1-2%

Why Other Options are Sources of Water:

- **(a) Food:**
  - Fruits, vegetables, soups, and even solid foods contain water
  - Approximately 20-30% of daily water intake comes from food
- **(b) Drinking water:** Primary and most direct source of water
- **(c) Beverages:**
  - All drinks (except alcoholic beverages with diuretic effect) contribute to hydration
  - Tea, coffee, juice, milk all contain water

Final Answer: Sweets

Quick Tip

Body water comes from: drinking water (60%), beverages (30%), and food (10%). Sweets are not a significant water source—they contain minimal water and high sugar that may increase thirst.

---

4. Which of the following is the best means of Investment?

(a) NSC (National Saving Certificate)
(b) Gold
(c) Land
(d) House

Correct Answer: (c) Land

Solution:
Investment means allocating money with the expectation of generating future income or appreciation. Different investment options have varying characteristics in terms of returns, risk, liquidity, and stability.

Comparison of Investment Options:

- **(a) NSC (National Saving Certificate):**
  - **Type:** Government-backed small savings scheme
  - **Risk:** Very low (sovereign guarantee)
  - **Returns:** Fixed interest rate (around 6-7% currently)
  - **Liquidity:** Lock-in period (5 years), penalty for premature withdrawal
  - **Tax:** Eligible for tax deduction under Section 80C
  - **Limitation:** Fixed returns, may not beat inflation significantly
- **(b) Gold:**
  - **Type:** Precious metal
  - **Risk:** Moderate, price fluctuates based on global markets
  - **Returns:** Historically appreciates but with volatility
  - **Liquidity:** High (can be sold easily)
  - **Concerns:** No regular income; storage and purity issues; no compounding
- **(c) Land:**
  - **Type:** Real estate (physical asset)
  - **Risk:** Relatively low if chosen wisely; location-dependent
  - **Returns:** High appreciation potential over long term
  - **Income:** Can generate rental income
  - **Advantages:**
    - Limited supply (scarce resource)
    - Always in demand (population growth)
    - Hedge against inflation
    - Multiple uses (residential, commercial, agricultural)
    - Can be used as collateral for loans
- **(d) House:**
  - **Type:** Real estate (constructed property)

- **Risk:** Moderate; subject to depreciation of structure
- **Returns:** Appreciation plus rental income
- **Concerns:** Maintenance costs, depreciation of building

Why Land is Often Considered Best:

1. **Scarcity:** Land is limited in supply while population grows
2. **Appreciation:** Historically, land values increase significantly over time
3. **No Depreciation:** Unlike houses (buildings depreciate), land does not wear out
4. **Multiple Uses:** Can be sold, leased, developed, or used as collateral
5. **Inflation Hedge:** Land prices typically rise with inflation
6. **Passive Income:** Can generate rental/lease income
7. **Tangible Asset:** Physical asset that can be seen and controlled

Investment Comparison Table:

Factor	NSC	Gold	Land	House
Safety	High	Moderate	High	Moderate
Returns	Fixed/Low	Variable	High	Moderate-High
Liquidity	Low (locked)	High	Moderate	Moderate
Inflation Protection	Poor	Good	Excellent	Good
Regular Income	No	No	Possible	Possible
Depreciation	No	No	No	Yes (structure)

Final Answer: Land

Quick Tip

Land is often considered the best long-term investment because it is scarce, appreciates, doesn't depreciate, generates income, and hedges against inflation. However, all investments depend on individual goals, risk appetite, and market conditions.

5. Which of the following is not a vegetable stain?

(a) Vegetable curry

(b) Coffee

(c) Fruit

(d) Flower

Correct Answer: (b) Coffee

Solution:

Stains are classified based on their origin and composition. Vegetable stains come from plant-based sources, while other stains may have different origins (mineral, animal, synthetic, etc.).

Classification of Stains:

- **Vegetable Stains (Plant-based):** Come from plant materials
- **Animal Stains:** Come from animal products
- **Mineral Stains:** Come from earth/soil/minerals
- **Synthetic Stains:** Man-made chemicals/dyes
- **Protein Stains:** Blood, egg, milk, etc.

Analysis of Options:

- **(a) Vegetable curry:**
  - Contains plant-based ingredients (vegetables, spices, oils)
  - Derived from vegetables and plant products
  - **This IS a vegetable stain**
- **(b) Coffee:**
  - Comes from coffee beans (seeds of coffee plant)

  - However, coffee stains are classified as **tannin stains** or **organic stains**, not typically as ”vegetable stains” in stain removal terminology
  - Coffee contains tannins and other compounds that behave differently from typical vegetable stains
  - Often grouped separately due to its chemical composition
  - **This is NOT typically classified as a vegetable stain**

- **(c) Fruit:**
  - Clearly plant-based (fruit juices, pulp)
  - Classic example of vegetable stain
  - **This IS a vegetable stain**

- **(d) Flower:**
  - Plant-based (flower petals, pollen)
  - Can leave vegetable stains
  - **This IS a vegetable stain**

Stain Classification in Home Science/Laundry:

Stain Type	**Examples**
Vegetable Stains	Fruits, vegetables, grass, flowers, curry
Tannin Stains	Coffee, tea, wine
Protein Stains	Blood, milk, egg, sweat
Oil/Grease Stains	Cooking oil, butter, cosmetics
Dye Stains	Ink, synthetic colors
Mineral Stains	Rust, mud

Why Coffee is Different:

- Coffee contains tannic acid and complex organic compounds
- Requires different removal methods than typical vegetable stains
- Often responds to different stain removers

Final Answer: Coffee

Quick Tip

In stain removal classification: Vegetable stains = fruits, vegetables, grass, flowers, curry. Coffee and tea are tannin stains, not vegetable stains, requiring different treatment.

---

6. Which of the disease does not spread through air?

(A) Measles

(B) Cholera

(C) Cold

(D) Tuberculosis

Correct Answer: (B) Cholera

Solution:

Diseases spread through different modes of transmission. Some are airborne, while others spread through water, food, or contact.

Analysis of Options:

- **(A) Measles:** Caused by virus. Spreads through air via respiratory droplets from coughs/sneezes. **Airborne disease.**
- **(B) Cholera:** Caused by bacterium *Vibrio cholerae*. Spreads through contaminated water or food (fecal-oral route). **Does NOT spread through air.** This is the correct answer.
- **(C) Cold:** Caused by various viruses. Spreads through air via droplets and also through contaminated surfaces. **Airborne disease.**
- **(D) Tuberculosis:** Caused by bacterium *Mycobacterium tuberculosis*. Spreads through air when infected person coughs or sneezes. **Airborne disease.**

Conclusion: Cholera is waterborne, not airborne.

Final Answer: (B) Cholera

---

7. At the time of birth average weight of ”Baby” is?

(A) 5 Kg.
(B) 7 Kg.
(C) 6 Kg.
(D) 2.5-3.5 Kg.

Correct Answer: (D) 2.5-3.5 Kg.

Solution:
The average birth weight of a full-term newborn baby is an important indicator of health and nutrition.

- **Normal Range:** The average birth weight for full-term babies (37-40 weeks gestation) is between **2.5 kg to 3.5 kg** (approximately 5.5 lbs to 7.7 lbs).
- **Global Average:** Worldwide, the average birth weight is approximately **3.2 kg** (7 lbs).
- **Low Birth Weight:** Below 2.5 kg is considered low birth weight, which may indicate prematurity or intrauterine growth restriction.
- **High Birth Weight:** Above 4.0 kg is considered high birth weight (macrosomia), which may have implications for delivery.

Why Other Options are Incorrect:

- **(A) 5 Kg:** Too high; this would be considered very large (macrosomia) and is not average.
- **(B) 7 Kg:** Extremely high; not possible for a newborn—this is toddler weight.
- **(C) 6 Kg:** Still far above normal average birth weight.

Final Answer: (D) 2.5-3.5 Kg.

---

8. Molecular formula of water is ?

(A) H_2O

(B) H_2O_2

(C) HO_2

(D) H_2O_3

Correct Answer: (A) H_2O

Solution:

Water is one of the most essential and abundant compounds on Earth. Its molecular formula represents the number and type of atoms in one molecule.

- **Composition:** Water consists of two hydrogen atoms bonded to one oxygen atom.
- **Formula:** H_2O — The subscript "2" indicates two hydrogen atoms, and no subscript after O means one oxygen atom.
- **Chemical Name:** Dihydrogen monoxide (though rarely used in common language).
- **Molecular Weight:** 18.015 g/mol (approximately 18 g/mol).

Why Other Options are Incorrect:

- **(B)** H_2O_2**:** This is hydrogen peroxide, a different compound used as a disinfectant and bleaching agent.
- **(C)** HO_2**:** This is hydroperoxyl radical, an unstable free radical, not water.
- **(D)** H_2O_3**:** This is trioxidane or hydrogen trioxide, an unstable molecule, not water.

Final Answer: (A) H_2O

---

9. Washing machine saves?

(A) labour and time

(B) Money and labour

(C) Time

(D) None of these.

Correct Answer: (A) labour and time

Solution:

A washing machine is a household appliance designed to clean clothes automatically. Understanding its benefits helps in appreciating its role in modern life.

- **Labour Saving:** Washing machines eliminate the need for manual scrubbing, rubbing, and wringing of clothes. This reduces physical effort and fatigue.
- **Time Saving:** A washing machine can wash clothes much faster than manual washing. It allows multitasking—while clothes are being washed, people can do other work.
- **Other Benefits:**
  - Consistency in cleaning
  - Better rinsing and water extraction
  - Less wear and tear on clothes compared to harsh manual scrubbing
- **What it does NOT save directly:** While washing machines may save some water compared to manual washing (if used efficiently), they do not directly save money—in fact, they involve electricity cost, machine cost, and maintenance.

Why Option (A) is Correct: The primary and most direct benefits of a washing machine are saving **labour (physical effort)** and **time**.

Why Other Options are Incorrect:

- **(B) Money and labour:** Washing machines do not save money; they cost money to buy, run, and maintain.
- **(C) Time:** This is partially correct but incomplete—labour saving is equally important.
- **(D) None of these:** Incorrect because option (A) correctly identifies both labour and time.

Final Answer: (A) labour and time

---

10. During Pregnancy which elements gets lost in blood?

(A) Thiamine

(B) Calcium

(C) Niacine

(D) Calorie.

Correct Answer: (B) Calcium

Solution:

During pregnancy, a woman's body undergoes significant physiological changes to support the growing fetus. Various nutrients are transferred from mother to baby through the placenta.

- **Calcium Requirement in Pregnancy:**
  - Calcium is essential for fetal skeletal development, tooth formation, heart function, and muscle contraction.
  - The developing baby draws calcium from the mother's blood to build its own bones and teeth.
  - If maternal calcium intake is inadequate, the fetus will still extract calcium from the mother's bones and teeth, leading to calcium depletion in the mother.
- **Why Calcium Gets "Lost" in Blood:**
  - Maternal blood calcium levels may decrease because calcium is continuously transferred to the fetus.
  - This can lead to hypocalcemia (low blood calcium) in the mother if not compensated by diet or supplements.
- **Consequences of Calcium Deficiency:**
  - Increased risk of pre-eclampsia
  - Muscle cramps

  - Dental problems in mother
  - Osteoporosis risk later in life
- **Recommended Intake:** Pregnant women need about 1000-1300 mg of calcium daily.

Why Other Options are Incorrect:

- **(A) Thiamine:** Vitamin B1; important for metabolism but not significantly depleted in blood during pregnancy.
- **(C) Niacine:** Vitamin B3; also important but not the primary element lost.
- **(D) Calorie:** Calories are energy units, not an element or nutrient that gets ”lost in blood.” Calorie requirement increases but it’s not a substance.

Other Nutrients Needed During Pregnancy:

- Iron (prevents anemia)
- Folic Acid (prevents neural tube defects)
- Protein
- Iodine
- Vitamin D

Final Answer: (B) Calcium

---

11. What is transmitting agent of cholera?

(A) Vibro-coma
(B) Tetanus
(C) Influenza
(D) None of these

Correct Answer: (D) None of these

Solution:

Cholera is an acute diarrheal disease caused by infection of the intestine. Understanding its causative agent and transmission is essential.

- **Actual Causative Agent:** Cholera is caused by the bacterium ***Vibrio cholerae*** (not "Vibro-coma").
- **Transmission:**
  - Spreads through **contaminated water and food** (fecal-oral route)
  - Not directly transmitted from person to person through casual contact
  - Poor sanitation and hygiene are major risk factors
- **Options Analysis:**
  - **(A) Vibro-coma:** Incorrect spelling; the correct name is *Vibrio cholerae*. Even if intended as Vibrio, the option is misspelled and not the standard answer format.
  - **(B) Tetanus:** This is a different disease caused by *Clostridium tetani*. It causes muscle stiffness and lockjaw, not cholera.
  - **(C) Influenza:** This is a viral respiratory disease caused by influenza virus, unrelated to cholera.
- **Why (D) is Correct:**
  - None of the given options correctly name the transmitting agent of cholera.
  - "Vibro-coma" is not the correct scientific name.
  - Tetanus and Influenza are completely different diseases.

Correct Information:

Feature	**Details**
Causative Agent	*Vibrio cholerae* (bacterium)
Transmission	Contaminated water/food
Symptoms	Severe watery diarrhea, vomiting, dehydration
Prevention	Clean water, sanitation, oral vaccine
Treatment	Oral rehydration, antibiotics

Final Answer: (D) None of these

12. Vinegar is?

(A) Acidic re-agent

(B) Alkaline re-agent

(C) Greasy solvent

(D) Greasy absorbent

Correct Answer: (A) Acidic re-agent

Solution:

Vinegar is a common household liquid used in cooking, cleaning, and food preservation. Understanding its chemical nature is important.

- **Chemical Composition:**
  - Vinegar is typically **4-8% acetic acid** (CH_3COOH) dissolved in water.
  - The remaining 92-96% is water along with trace amounts of flavoring compounds.
- **Acidic Nature:**
  - Acetic acid gives vinegar its sour taste and characteristic pungent smell.
  - The pH of vinegar ranges from **2.5 to 3.5**, making it acidic.
  - It turns blue litmus paper red, confirming its acidic property.
- **Uses as an Acidic Re-agent:**
  - **Cooking:** Adds sour flavor to foods, used in pickling (preservation)
  - **Cleaning:** Dissolves mineral deposits, grease, and some stains due to acidity
  - **Laboratory:** Used as a mild acid in various experiments
  - **Traditional medicine:** Sometimes used as a mild disinfectant

Why Other Options are Incorrect:

- **(B) Alkaline re-agent:** Incorrect. Alkaline substances have pH above 7 (e.g., baking soda, bleach). Vinegar is acidic, not alkaline.

- **(C) Greasy solvent:** While vinegar can help cut through grease to some extent, this is not its primary classification. ”Greasy solvent” is not a standard chemical term, and vinegar is not primarily a solvent for grease (degreasers are usually alkaline).
- **(D) Greasy absorbent:** Incorrect. Vinegar does not absorb grease; it may help dissolve or remove it through chemical action, but ”absorbent” is not an accurate description.

Final Answer: (A) Acidic re-agent

---

13. Which of the following does a newly born need with breast milk?

(A) Honey

(B) Glucose

(C) Water

(D) None of these

Correct Answer: (D) None of these

Solution:

Breast milk is uniquely designed to meet all the nutritional needs of a newborn infant. Understanding what newborns require is crucial for proper infant care.

- **Breast Milk Composition:**
  - Contains the perfect balance of nutrients: carbohydrates (lactose), proteins, fats, vitamins, and minerals
  - Provides antibodies and immune factors that protect against infections
  - Changes composition as the baby grows to meet changing needs
  - Contains approximately **87% water**, which fulfills the baby’s hydration needs
- **Why Newborns Don’t Need Extra Water:**
  - Breast milk is about 87% water, enough to keep the baby well-hydrated even in hot weather
  - Giving extra water can:

    - Fill the baby's small stomach, reducing appetite for nutrient-rich breast milk
    - Lead to water intoxication (diluting electrolytes in blood)
    - Increase risk of infections if water is contaminated
  - World Health Organization (WHO) recommends **exclusive breastfeeding for first 6 months**—no other liquids or solids, not even water

- **Why Other Options are Incorrect:**
  - **(A) Honey:**
    - **Never give honey to infants under 1 year**
    - Risk of infant botulism (spores of *Clostridium botulinum* in honey)
    - Can cause serious illness or death
  - **(B) Glucose:**
    - Not needed—breast milk provides lactose (milk sugar)
    - Extra glucose can disrupt blood sugar balance
    - Not recommended unless medically prescribed for specific conditions
  - **(C) Water:**
    - Not needed as explained above
    - Exclusive breastfeeding provides all necessary hydration

WHO/UNICEF Recommendations:

- Initiate breastfeeding within first hour of birth
- Exclusive breastfeeding for first 6 months (no water, no other milk, no foods)
- Continue breastfeeding with complementary foods up to 2 years or beyond

Final Answer: (D) None of these

---

14. To make ORS drink it should be mixed with?

(A) Milk

(B) Soup

(C) Juice

(D) Water

Correct Answer: (D) Water

Solution:

ORS (Oral Rehydration Solution) is a life-saving mixture used to prevent and treat dehydration caused by diarrhea, especially in children.

- **What is ORS:**
  - ORS is a specific combination of clean water, salts (sodium chloride, potassium chloride), and sugar (glucose)
  - It helps replace fluids and electrolytes lost during diarrhea or vomiting
  - WHO and UNICEF recommend a standard formula
- **Why Water is the Correct Mixing Liquid:**
  - ORS powder is designed specifically to be dissolved in **clean drinking water**
  - Water ensures correct concentration of salts and sugar for proper absorption
  - Other liquids alter the composition and can be harmful
- **Why Other Options are Incorrect:**
  - **(A) Milk:**
    - Milk contains proteins, fats, and lactose
    - Can be difficult to digest during diarrhea
    - Alters electrolyte balance and may worsen diarrhea
  - **(B) Soup:**
    - Contains salt and other ingredients
    - Unknown concentration—cannot ensure correct ORS formula
    - May not have proper glucose-electrolyte balance
  - **(C) Juice:**
    - High sugar content (fructose)

    * Too much sugar can draw water into intestine (osmotic diarrhea)
    * Wrong electrolyte concentration

ORS Preparation Guidelines:

- Use clean drinking water (boiled and cooled if unsure)
- Follow package instructions exactly
- Use entire packet for correct amount of water (usually 1 liter)
- Do not boil after mixing
- Discard after 24 hours

ORS Recipe (if packet unavailable):

- 1 liter clean water
- 6 teaspoons sugar
- 1/2 teaspoon salt

Final Answer: (D) Water

---

15. Two to Six years of age is called ?

(A) Baby hood
(B) Child hood
(C) Adolescence
(D) Adult hood

Correct Answer: (B) Child hood

Solution:
Human development is divided into distinct stages based on age. Each stage has characteristic physical, cognitive, and social developments.

- **Stages of Human Development:**

- **Infancy (0-2 years):** Babyhood—rapid physical growth, dependence on caregivers
- **Early Childhood (2-6 years): Childhood**—preschool years, language development, independence growing
- **Middle Childhood (6-12 years):** School age, logical thinking develops
- **Adolescence (13-19 years):** Puberty, identity formation
- **Adulthood (20+ years):** Maturity, independence

- **Why 2-6 Years is Called Childhood:**
  - This period is specifically referred to as **"Early Childhood"**
  - Characterized by:
    * Rapid language acquisition
    * Development of motor skills (running, jumping)
    * Socialization begins
    * Imagination and play become important
    * Toilet training typically completed

Why Other Options are Incorrect:

- **(A) Baby hood:** Refers to infancy (0-2 years), not 2-6 years.
- **(C) Adolescence:** Refers to teenage years (13-19 years), characterized by puberty.
- **(D) Adult hood:** Refers to mature years (20+ years), complete physical and mental maturity.

Quick Tip

Remember developmental stages: Babyhood = 0-2 years Early Childhood = 2-6 years Middle Childhood = 6-12 years Adolescence = 13-19 years Adulthood = 20+ years The 2-6 year period is called "Early Childhood" or simply "Childhood."

---

16. Which of the following does a newly born need with breast milk?

(A) Honey

(B) Glucose

(C) Water

(D) None of these

Correct Answer: (D) None of these

Solution:

Breast milk is uniquely designed to meet all the nutritional needs of a newborn infant. Understanding what newborns require is crucial for proper infant care.

- **Breast Milk Composition:**
  - Contains the perfect balance of nutrients: carbohydrates (lactose), proteins, fats, vitamins, and minerals
  - Provides antibodies and immune factors that protect against infections
  - Changes composition as the baby grows to meet changing needs
  - Contains approximately **87% water**, which fulfills the baby's hydration needs
- **Why Newborns Don't Need Extra Water:**
  - Breast milk is about 87% water, enough to keep the baby well-hydrated even in hot weather
  - Giving extra water can:
    * Fill the baby's small stomach, reducing appetite for nutrient-rich breast milk
    * Lead to water intoxication (diluting electrolytes in blood)
    * Increase risk of infections if water is contaminated
  - World Health Organization (WHO) recommends **exclusive breastfeeding for first 6 months**—no other liquids or solids, not even water
- **Why Other Options are Incorrect:**
  - **(A) Honey:**
    * **Never give honey to infants under 1 year**

    - Risk of infant botulism (spores of *Clostridium botulinum* in honey)
    - Can cause serious illness or death
  - **(B) Glucose:**
    - Not needed—breast milk provides lactose (milk sugar)
    - Extra glucose can disrupt blood sugar balance
    - Not recommended unless medically prescribed for specific conditions
  - **(C) Water:**
    - Not needed as explained above
    - Exclusive breastfeeding provides all necessary hydration

WHO/UNICEF Recommendations:

- Initiate breastfeeding within first hour of birth
- Exclusive breastfeeding for first 6 months (no water, no other milk, no foods)
- Continue breastfeeding with complementary foods up to 2 years or beyond

Final Answer: (D) None of these

Quick Tip

Newborns need ONLY breast milk for first 6 months—no water, no honey, no glucose. Breast milk is 87% water and provides complete nutrition. Honey can cause infant botulism and is dangerous under 1 year.
