UP Board Class 10 Home Science - 823 (CG) - 2025 Question Paper with Solutions

Time Allowed :3 Hours | **Maximum Marks :**70 | **Total questions :**35

General Instructions

Instruction:

- i) *All* questions are compulsory. Marks allotted to each question are given in the margin.
- ii) In numerical questions, give all the steps of calculation.
- iii) Give relevant answers to the questions.
- iv) Give chemical equations, wherever necessary.

- Q1. The most essential requirement for making family budget is –
- (A) increase in income
- (B) cut down in expenditure
- (C) balance between income and expenditure
- (D) arrangement of loan

Correct Answer: (C) balance between income and expenditure

Solution:

Step 1: Understanding family budget.

A family budget is a financial plan that estimates income and expenditure for a fixed period. The aim is to manage resources wisely to meet family needs.

Step 2: Analyze each option.

- **Increase in income** (A): While helpful, it is not always possible and cannot be the only requirement.
- Cut down in expenditure (B): This is one way to adjust, but only reducing expenditure is not sufficient for an ideal budget.
- Balance between income and expenditure (C): This is the core principle of budgeting. The total expenses should not exceed income. Proper allocation ensures savings and stability.
- **Arrangement of loan (D):** Loans may provide temporary relief but cannot be considered essential for a sound budget.

Step 3: Conclusion.

Therefore, the most essential requirement of making a family budget is maintaining a balance between income and expenditure.

Final Answer:

Balance between income and expenditure is the most essential requirement for a family budget.

Quick Tip

A good budget is not about earning more or cutting all expenses, but about balancing income and expenditure wisely to ensure savings.

Q2. How many millilitres are there in one litre?
(A) 10,000
(B) 1,000
(C) 100
(D) 10
Correct Answer: (B) 1,000
Solution:
Step 1: Recall basic conversion.
1 litre (L) = 1000 millilitres (mL).
Step 2: Verify with definition.
"Milli" means one-thousandth. Thus:
$1 \text{ litre} = 1000 \times 1 \text{ millilitre}$
Final Answer:
1 litre = 1000 millilitres
Quick Tip
Always remember: kilo = 1000 times; milli = 1/1000.
Q3. Ram walks 1.5 km per hour to reach school in 2 hours. How far is school from his
house?
(A) 3 km
(B) 4 km
(C) 5 km

(D) 6 km

Correct Answer: (A) 3 km

Solution:

Step 1: Recall formula.

$$Distance = Speed \times Time$$

Step 2: Substitute values.

Speed = 1.5 km/hr, Time = 2 hours.

Distance =
$$1.5 \times 2 = 3 \text{ km}$$

Final Answer:

The school is 3 km from Ram's house.

Quick Tip

Use the triangle: Distance = Speed \times Time, Speed = Distance \div Time, Time = Distance \div Speed.

Q4. What is the unit for measurement of oil?

- (A) kilogram, gram
- (B) millilitre, litre
- (C) centimetre, metre
- (D) none of these

Correct Answer: (B) millilitre, litre

Solution:

Step 1: Identify type of quantity.

Oil is a liquid, so it is measured in terms of volume, not mass or length.

Step 2: Units of liquid measurement.

Volume is measured in litre (L) and millilitre (mL).

Step 3: Eliminate wrong options.

- Kilogram, gram \rightarrow units of mass.
- Centimetre, metre \rightarrow units of length.
- None of these \rightarrow incorrect.

Final Answer:

Oil is measured in millilitre or litre.

Quick Tip

Solids = kg/g, Liquids = L/mL, Length = m/cm. Match the unit with the type of quantity.

- **Q5.** Cleaning done during Dusshera and Diwali is –
- (A) daily
- (B) weekly
- (C) monthly
- (D) yearly

Correct Answer: (D) yearly

Solution:

Step 1: Cultural context.

In Indian tradition, major cleaning of houses is usually done during big festivals like Dusshera and Diwali.

Step 2: Frequency.

This large-scale cleaning is carried out once a year before the festivals.

Final Answer:

Festival cleaning during Dusshera and Diwali is yearly.

Quick Tip

Daily/weekly cleaning is routine, but Diwali cleaning is a once-a-year cultural practice.

Q6. Minimum age to have learning licence for driving is –

- (A) 21 years
- (B) 16 years
- (C) 18 years
- (D) 20 years

Correct Answer: (B) 16 years

Solution:

Step 1: Rule for learner's licence.

According to Indian Motor Vehicle Rules: - Minimum age = 16 years for non-geared two-wheelers (like scooters and mopeds). - Minimum age = 18 years for geared vehicles and cars.

Step 2: Check the question.

Since the question asks about "minimum age for learning licence", it refers to the lower limit, i.e., 16 years.

Final Answer:

The minimum age to obtain a learning licence is 16 years.

Quick Tip

Remember: 16 years = non-geared licence; 18 years = geared/two-wheeler with gears and cars.

Q7. What should be the speed limit of a vehicle?

- (A) Extremely fast
- (B) Extremely slow
- (C) Both (A) and (B)

(D) According to weather and traffic

Correct Answer: (D) According to weather and traffic

Solution:

Step 1: Importance of speed regulation.

Speed limits are imposed to ensure road safety for drivers, passengers, and pedestrians.

Step 2: Eliminate wrong options.

- Extremely fast $(A) \Rightarrow$ dangerous, causes accidents.
- Extremely slow $(B) \Rightarrow$ obstructs traffic flow.
- Both (A) and (B) (C) \Rightarrow contradictory and impractical.

Step 3: Correct principle.

The safe speed depends on traffic density, road condition, and weather.

Final Answer:

Vehicle speed should be maintained according to weather and traffic conditions.

Quick Tip

Always follow displayed speed limits and adjust speed in rain, fog, or heavy traffic.

- **Q8.** Where is red light in traffic signals?
- (A) On the top
- (B) At the bottom
- (C) In the middle
- (D) Anywhere

Correct Answer: (A) On the top

Solution:

Step 1: Standard arrangement of traffic signals.

Traffic lights are arranged vertically: - Red at the top \Rightarrow Stop. - Yellow/Amber in the middle \Rightarrow Ready. - Green at the bottom \Rightarrow Go.

Step 2: Reason.

This arrangement is international to help even colour-blind persons identify signals by position.

Final Answer:

The red light in traffic signals is always at the top.

Quick Tip

Remember: Top = Stop (Red), Middle = Ready (Yellow), Bottom = Go (Green).

- **Q9.** Which of the following is not used to purify water?
- (A) Bleaching powder
- (B) Copper sulphate
- (C) Sodium chloride
- (D) Potassium permanganate

Correct Answer: (B) Copper sulphate

Solution:

Step 1: Water purification chemicals.

- Bleaching powder (CaOCl₂) \rightarrow disinfects by releasing chlorine. - Potassium permanganate (KMnO₄) \rightarrow strong oxidizer used in small amounts. - Sodium chloride (common salt) \rightarrow though not a disinfectant, in some rural practices it is used with other methods.

Step 2: Copper sulphate.

Copper sulphate is used to kill algae in ponds, not for purifying drinking water.

Final Answer:

Copper sulphate is not used to purify drinking water.

For drinking water: Bleaching powder, KMnO₄, chlorine tablets are used — not copper sulphate.

Q10. In which disease is TAB vaccine given?

- (A) Tetanus
- (B) Typhoid
- (C) TB
- (D) Hepatitis

Correct Answer: (B) Typhoid

Solution:

Step 1: Expansion of TAB.

TAB vaccine = Typhoid-Paratyphoid A and B vaccine.

Step 2: Function.

This vaccine protects against typhoid fever caused by *Salmonella typhi* and paratyphoid fever caused by *S. paratyphi A & B*.

Step 3: Elimination.

- Tetanus \rightarrow prevented by TT vaccine.
- TB \rightarrow prevented by BCG vaccine.
- Hepatitis \rightarrow specific Hepatitis vaccines.

Final Answer:

TAB vaccine is given to prevent Typhoid and Paratyphoid.

Quick Tip

Vaccine memory rule: BCG-TB, TT-Tetanus, TAB-Typhoid, OPV-Polio.

Q11. Process done before cutting of cloth is –

- (A) Shrink the cloth
- (B) Ironing
- (C) Necessary marking with Milton chalk
- (D) All of these

Correct Answer: (D) All of these

Solution:

Step 1: Pre-cutting preparation.

Before cutting fabric, certain steps are necessary to ensure accuracy in stitching.

Step 2: Steps involved.

- Shrinking (pre-shrinking) \rightarrow prevents garment shrinking after first wash. - Ironing \rightarrow smoothens fabric for accurate measurement and marking. - Marking with chalk \rightarrow essential to outline pattern pieces correctly.

Step 3: Combined process.

All these steps together ensure perfect fit and professional finish of garments.

Final Answer:

Before cutting, cloth is shrunk, ironed, and marked; hence all of these are correct.

Quick Tip

Remember the sequence: Shrink \rightarrow Iron \rightarrow Mark \rightarrow Cut.

Q12. Which starch is generally applied on silk clothes?

- (A) Gum
- (B) Bran
- (C) Sago
- (D) Rice

Correct Answer: (C) Sago

Solution:

Step 1: Purpose of starching.

Starch is used to give stiffness, shine, and crisp finish to clothes.

Step 2: Silk fabric.

Silk is delicate; strong starch like rice or bran can damage its softness and lustre. Hence, a mild starch is preferred.

Step 3: Best choice.

Sago starch is gentle, gives a soft, glossy finish without harming silk fibres.

Final Answer:

Sago starch is applied to silk clothes.

Quick Tip

Match starch type with fabric: Rice \rightarrow cotton, Bran \rightarrow coarse cloth, Sago \rightarrow silk.

Q13. Which of the following is not used to remove stain from clothes by absorbent method?

- (A) Talcum powder
- (B) Lemon juice
- (C) Maida
- (D) Salt

Correct Answer: (B) Lemon juice

Solution:

Step 1: Understand the absorbent method.

Absorbent method uses substances that soak up stains like oil or grease.

Step 2: Common absorbents.

- Talcum powder \rightarrow absorbs oily stains. - Maida (flour) \rightarrow absorbs excess oil. - Salt \rightarrow absorbs fresh stains like ink or grease.

Step 3: Identify non-absorbent.

Lemon juice is not absorbent; it is a bleaching agent used to lighten stains.

Final Answer:

Lemon juice is not used in absorbent method.

Quick Tip

Absorbents = dry powders (talcum, flour, salt). Liquids like lemon juice act as bleaching agents.

Q14. Instant source of energy drink is –

- (A) Juice
- (B) Milk
- (C) Glucose
- (D) Dal water

Correct Answer: (C) Glucose

Solution:

Step 1: Concept.

Instant energy comes from simple sugars that can be directly absorbed into the blood.

Step 2: Check options.

- Juice \rightarrow contains sugars but also fiber, slower digestion. - Milk \rightarrow contains proteins and fats, slow to digest. - Glucose \rightarrow pure simple sugar, absorbed instantly. - Dal water \rightarrow provides proteins, not instant energy.

Final Answer:

Glucose is the instant source of energy.

Quick Tip

For quick recovery from weakness, dehydration, or fever \rightarrow glucose water is best.

Q15. Which poultice is used for healing of wound?

- (A) Mustard seed poultice
- (B) Onion poultice
- (C) Wheat flour poultice
- (D) None of these

Correct Answer: (B) Onion poultice

Solution:

Step 1: Define poultice.

A poultice is a soft, moist mass of material applied to the body to relieve soreness and promote healing.

Step 2: Uses of common poultices.

- Mustard seed poultice \rightarrow used for stimulating circulation. - Onion poultice \rightarrow used for healing wounds, infections, and inflammation due to its antibacterial effect. - Wheat flour poultice \rightarrow sometimes used for soothing, not mainly for healing.

Step 3: Correct answer.

Onion poultice is specifically used for wound healing.

Final Answer:

Onion poultice is used for healing of wounds.

Quick Tip

Poultices are old home remedies: onion \rightarrow wounds, mustard \rightarrow circulation, wheat \rightarrow soothing.

Q16. Food rich in vitamins and minerals is beneficial because it –

- (A) Provides energy
- (B) Repairs body cells

- (C) Strengthens immunity power
- (D) All of these

Correct Answer: (D) All of these

Solution:

Step 1: Role of vitamins and minerals.

- Provide energy indirectly by helping in metabolism (Vitamin B complex). - Help in repair of cells (Vitamin A, zinc, protein-mineral balance). - Boost immunity (Vitamin C, Vitamin D, iron, etc.).

Step 2: Combine all roles.

Hence, vitamins and minerals perform all these functions together.

Final Answer:

Food rich in vitamins and minerals provides energy, repairs body cells, and strengthens immunity power

Quick Tip

"Vitamins + Minerals = Protective food group" \rightarrow growth, repair, and disease resistance.

Q17. Food rich in is necessary to fulfil energy requirement of a patient having fever.

- (A) Carbohydrate
- (B) Fat
- (C) Vitamin
- (D) Mineral

Correct Answer: (A) Carbohydrate

Solution:

Step 1: Nutrition in fever.

Patients with fever need easily digestible, quick energy foods.

Step 2: Check options.

- Carbohydrates \rightarrow provide instant energy and are easily digestible (rice, glucose water). - Fats \rightarrow hard to digest during fever. - Vitamins/Minerals \rightarrow important for immunity but not primary energy providers.

Final Answer:

Carbohydrate-rich food items are necessary during fever.

Quick Tip

During fever: soft diet, carbohydrate-rich, plenty of fluids. Avoid heavy fats.

Q18. Disease caused due to bacterial infection in alimentary canal is –

- (A) Tuberculosis
- (B) Typhoid
- (C) Malaria
- (D) None of these

Correct Answer: (B) Typhoid

Solution:

Step 1: Identify alimentary canal disease.

The alimentary canal is the digestive tract.

Step 2: Check each option.

- Tuberculosis \rightarrow affects lungs (bacteria: $Mycobacterium\ tuberculosis$). - Typhoid \rightarrow affects intestine, caused by $Salmonella\ typhi$. - Malaria \rightarrow caused by protozoa (Plasmodium), not bacteria.

Step 3: Correct disease.

Typhoid is a bacterial infection of the intestinal tract.

Final Answer:

Typhoid is the bacterial disease affecting the alimentary canal.

Remember: Typhoid \rightarrow bacteria, intestine; Cholera \rightarrow bacteria, intestine; Malaria \rightarrow protozoa, blood; TB \rightarrow bacteria, lungs.

Q19. Glucose is stored in our body in the form of –

- (A) Amino acid
- (B) Fatty acid
- (C) Glycogen
- (D) None of these

Correct Answer: (C) Glycogen

Solution:

Step 1: Understand glucose metabolism.

When we consume food, glucose enters the blood. Excess glucose that is not immediately required for energy is stored.

Step 2: Form of storage.

In humans and animals, glucose is stored as **glycogen** in the liver and muscles. This can be broken down back into glucose when needed.

Step 3: Eliminate wrong options.

- Amino acids \rightarrow building blocks of proteins, not glucose storage.
- Fatty acids \rightarrow stored form of fats, not glucose.
- None of these \rightarrow incorrect, as glycogen is correct.

Final Answer:

Glucose is stored in the body as Glycogen.

Quick Tip

Plants store glucose as starch; animals (including humans) store it as glycogen.

Q20. Pulse rate is related to –

- (A) Human heartbeat
- (B) Digestion of food
- (C) Respiration
- (D) None of these

Correct Answer: (A) Human heartbeat

Solution:

Step 1: Define pulse.

Pulse is the rhythmic throbbing of arteries as blood is pumped through them by the beating of the heart.

Step 2: Relation with heartbeat.

Each pulse corresponds to one heartbeat. Therefore, pulse rate (measured at wrist/neck) directly reflects heart rate.

Step 3: Eliminate wrong options.

- Digestion of food \rightarrow no relation to pulse.
- Respiration \rightarrow connected to heartbeat indirectly, but pulse is not a measure of breathing.
- None of these \rightarrow incorrect.

Final Answer:

Pulse rate is related to human heartbeat.

Quick Tip

Normal adult pulse = 72 beats/min. Pulse is the easiest way to check heart activity.

Q21. What is meant by model budget?

Correct Answer: A model budget is a planned family budget prepared as an example to manage income and expenditure properly.

Solution:

Step 1: Define model budget.

A model budget is a sample or ideal family budget which shows how income should be distributed on essential needs, savings, and other expenses.

Step 2: Purpose.

It serves as a guide for families to control expenditure, avoid waste, and achieve financial balance.

Final Answer:

A model budget is an ideal budget plan showing proper income and expenditure balance.

Quick Tip

Always balance income and expenses in budget planning. Savings are essential.

Q22. Write the names of any four diseases spread due to impure water.

Correct Answer: Cholera, Typhoid, Dysentery, Hepatitis A

Solution:

Step 1: Relation of impure water and disease.

Impure water contains harmful bacteria, viruses, and parasites which spread water-borne diseases.

Step 2: Examples.

- Cholera (caused by Vibrio cholerae) - Typhoid (caused by Salmonella typhi) - Dysentery (caused by Shigella or amoeba) - Hepatitis A (viral infection)

Final Answer:

Diseases spread by impure water: Cholera, Typhoid, Dysentery, Hepatitis A.

Quick Tip

Always drink boiled or filtered water to prevent water-borne diseases.

Q23. Write any two utilities of washing clothes.

Correct Answer: Washing removes dirt and germs; Washing maintains fabric quality.

Solution:

Step 1: Health aspect.

Washing clothes removes dirt, sweat, and germs that cause diseases.

Step 2: Maintenance aspect.

Clean clothes last longer, remain bright, and maintain their fabric texture.

Final Answer:

Utilities: (1) Removes dirt and germs, (2) Maintains fabric quality and durability.

Quick Tip

Regular washing keeps clothes hygienic and fresh.

Q24. Write any two points to be considered while planning kitchen.

Correct Answer: Proper ventilation; Adequate storage space.

Solution:

Step 1: Importance of kitchen planning.

Kitchen is the most used part of the home, so it must be efficient, safe, and hygienic.

Step 2: Main points.

- Proper ventilation and lighting for safety and health. - Adequate storage for utensils, food items, and fuel. Other points: Easy workflow (cooking–washing–storage), cleanliness, safety of gas connection.

Final Answer:

Points: (1) Proper ventilation and lighting, (2) Adequate storage space.

Remember: Kitchen should be safe, well-ventilated, and hygienic.

Q25. When is the injured person transported using hand-seated method?

Correct Answer: When the injured person is conscious and able to sit but cannot walk.

Solution:

Step 1: Define method.

The hand-seated method is a first aid transport technique where two helpers form a seat with their hands.

Step 2: Condition of patient.

This method is used when: - The patient is conscious. - Patient can hold helpers' shoulders for balance. - Patient cannot walk but can sit upright.

Final Answer:

Used when injured is conscious, able to sit, but unable to walk.

Quick Tip

Never use this method if patient is unconscious or has spinal injury.

Q26. What is the main method to obtain artificial immunity?

Correct Answer: By vaccination or immunization.

Solution:

Step 1: Define artificial immunity.

Artificial immunity is acquired by introducing vaccines or antibodies into the body to protect against specific diseases.

Step 2: Vaccination.

Vaccines contain killed or weakened microbes which stimulate the body to produce antibodies. Examples: BCG, Polio, TAB vaccines.

Final Answer:

Artificial immunity is obtained by vaccination/immunization.

Quick Tip

Natural immunity = from birth; Artificial immunity = through vaccines.

Q27. Write any four benefits of house cleaning.

Solution:

Step 1: Define house cleaning.

House cleaning is the process of maintaining cleanliness, order, and hygiene in the home environment.

Step 2: Benefits.

- 1. Prevents spread of diseases by removing dust, germs, and insects.
- 2. Improves comfort and beauty of the home.
- 3. Increases durability of furniture, clothes, and utensils.
- 4. Provides a healthy and stress-free environment for family members.

Step 3: Conclusion.

Thus, house cleaning is essential for hygiene, safety, and comfort of the family.

Final Answer:

Four benefits: prevents diseases, improves comfort, increases durability of goods, and provides a health

Quick Tip

Regular cleaning saves money by increasing the life of household goods.

Q28. Why is boiled drinking water beneficial for health?

Solution:

Step 1: Impurities in water.

Raw water may contain bacteria, viruses, protozoa, and impurities.

Step 2: Role of boiling.

Boiling water for 10–15 minutes kills harmful microorganisms like cholera, typhoid, and dysentery germs.

Step 3: Benefits.

- Reduces risk of water-borne diseases.
- Makes water safe for children and sick persons.
- Improves digestion and overall health.

Final Answer:

Boiled drinking water kills germs, prevents water-borne diseases, and is safe for health.

Quick Tip

Boil water at least 10 minutes for complete disinfection.

Q29. Write the utility of starch on cotton clothes.

Solution:

Step 1: Purpose of starching.

Starch is applied on cotton clothes after washing and ironing to give them stiffness and shine.

Step 2: Utilities.

- Gives crisp and fresh appearance.
- Increases fabric strength temporarily.
- Protects clothes from sticking dust and dirt.

- Helps in easier ironing.

Final Answer:

Starch gives cotton clothes stiffness, shine, strength, dust protection, and easy ironing.

Quick Tip

Use rice starch or ready-made laundry starch for cotton clothes.

Q30. What is an ideal kitchen?

Solution:

Step 1: Define ideal kitchen.

An ideal kitchen is one which is safe, hygienic, well-ventilated, and convenient for cooking.

Step 2: Features.

- Proper ventilation and lighting.
- Adequate storage for utensils, groceries, and fuel.
- Scientific arrangement of cooking, washing, and storage areas.
- Safety arrangements for gas, electricity, and water.

Final Answer:

An ideal kitchen is safe, hygienic, well-ventilated, and has proper storage and workflow arrangement.

Quick Tip

Follow the kitchen work triangle: sink-stove-storage at convenient distance.

Q31. How is pulse rate, breathing rate and temperature related to human health?

Solution:

Step 1: Pulse rate.

Pulse rate (normal 72/min in adults) shows functioning of the heart. Too high or too low pulse indicates heart problems or weakness.

Step 2: Breathing rate.

Normal breathing rate = 16–20 breaths/min. High rate may indicate fever, asthma, or lung disease. Low rate indicates unconsciousness or serious illness.

Step 3: Body temperature.

Normal temperature = 37°C (98.6°F). Higher temperature indicates fever or infection. Lower temperature shows hypothermia or shock.

Step 4: Conclusion.

Thus, pulse, breathing, and temperature are vital signs to assess health status of a person.

Final Answer:

Pulse, breathing rate, and temperature are vital signs that reflect the condition of heart, lungs, and body

Quick Tip

Doctors check pulse, respiration, and temperature first as they are primary health indicators.

Q32. There are three studying children in a family. Total Rs. 600.00 is spent on their fees. If the fees of one child are Rs. 120.00 and fees of the other two children are equal, what are the fees of these two children?

Correct Answer: Rs. 240 for each of the remaining two children.

Solution:

Step 1: Translate to an equation.

Let the fees of each of the other two children be x rupees. Given: total fees = 600 rupees and one child pays 120 rupees. Hence,

$$120 + x + x = 600$$

Step 2: Simplify and solve.

$$120 + 2x = 600$$
 \Rightarrow $2x = 600 - 120 = 480$ \Rightarrow $x = \frac{480}{2} = 240$

Step 3: Sanity check.

$$120 + 240 + 240 = 600$$
 \checkmark

Final Answer:

Fees of each of the other two children = Rs. 240

Quick Tip

When two equal unknown amounts share a known total, first subtract the known part, then halve the remainder.

Q32. (OR) How many types of sewing are there? Write the names of different stitches of hand sewing and write the utility of any two stitches.

Solution:

Step 1: Types of sewing.

There are two main types: (i) Hand sewing and (ii) Machine sewing.

Step 2: Common hand-sewing stitches (names).

Running (basting) stitch; Back stitch; Hemming (slip stitch); Overcasting/Whip stitch; Blanket/Buttonhole stitch; Chain stitch; Herringbone (cross) stitch; Blind stitch.

Step 3: Utility of any two stitches.

(1) **Back stitch:** Strong, durable stitch used for permanent seams and repairs when a machine is not available.

(2) **Hemming (slip) stitch:** Used to finish hems neatly and almost invisibly on skirts, trousers, sleeves, and curtains.

Final Answer:

Two types—hand & machine. Hand stitches include running, back, hemming, overcasting, blanket, cha

Quick Tip

Remember: **Back = Strong seam**, **Hem = Invisible finish**. List 5–6 stitch names to secure full marks.

Q33. What is meant by fracture? What type of first aid is given for fracture? Which nutrient is required in excess for bones?

Solution:

Step 1: Meaning of fracture.

A fracture is a break or crack in a bone due to accident, fall, or excessive pressure. It may be simple (closed) or compound (open, where bone pierces skin).

Step 2: First aid for fracture.

- Do not move the injured part unnecessarily.
- Support the fractured bone with a splint, cardboard, or folded newspaper.
- Immobilize the affected part using a sling or bandage.
- Apply cold compress to reduce swelling.
- Do not attempt to set the bone; take the patient to a doctor immediately.

Step 3: Nutrient required for bones.

Calcium is required in excess for bone strength and healing. Vitamin D is also essential to absorb calcium effectively.

Final Answer:

Fracture = break in bone; First aid = immobilize with splints, cold compress, take to doctor; Nutrient =

Remember: First aid for fracture = "Don't move, support, immobilize, send to hospital."

Nutrient = Calcium.

Q33. (**OR**) What is meant by fever? What type of food should be given to a patient suffering from fever and why?

Solution:

Step 1: Meaning of fever.

Fever is a temporary rise in body temperature, usually above 37°C (98.6°F), caused by infection or illness. It is a common symptom of many diseases.

Step 2: Dietary needs in fever.

During fever, metabolism increases, and digestion becomes weak. Therefore, food should be: - Easily digestible.

- Soft and semi-liquid.
- Rich in carbohydrates (for quick energy).
- Low in fats (as fats are hard to digest).
- Adequate fluids to prevent dehydration.

Step 3: Examples of suitable food.

- Glucose water, fruit juices, dal water, rice gruel, vegetable soup.
- Milk and curd in small quantities.
- Plenty of water and oral rehydration solution (ORS).

Step 4: Reasoning.

Such foods give instant energy, maintain hydration, and support faster recovery without straining the digestive system.

Final Answer:

Fever = rise in body temperature. Food = soft, liquid, carbohydrate-rich diet with fluids to give energy a

In fever: Avoid oily and heavy foods. Give liquids, glucose, juices, and light diet to help easy digestion and recovery.

Q34. Discuss the following points related to environment: (i) Effect of environment on professional life (ii) Effect of environment on population (iii) Effect of environment on food habits

Solution:

Step 1: Environment and professional life.

- A clean and healthy environment improves concentration, efficiency, and productivity in professional life. - Polluted environment (noise, smoke, dust) reduces efficiency and causes health issues like stress, absenteeism, and frequent sickness. - Professionals working in eco-friendly surroundings enjoy better work—life balance.

Step 2: Environment and population.

- Favorable environment (clean air, water, fertile soil) supports increase in population because of better living conditions. - Unhealthy environment leads to diseases, epidemics, and migration, thereby reducing or shifting population density. - Industrialized polluted cities often face overpopulation due to employment opportunities, while rural polluted/infertile areas face depopulation.

Step 3: Environment and food habits.

- Environment decides availability of crops, vegetables, and fruits in a region. - For example, coastal areas prefer fish and rice; desert areas rely on millet and dry foods. - Pollution in soil and water also affects food habits, as people shift to packaged and processed foods instead of fresh produce. - Climate change (floods, droughts) changes food supply and hence modifies eating practices.

Final Answer:

Environment directly affects (i) professional life through efficiency and health, (ii) population by growt

Always link environment with health, occupation, migration, and food supply. Examples make your answers stronger.