

Q1. Define Human Relations.

:- Definition of Human Relations

Human Relations refers to the study and practice of **interpersonal relationships** in various social, professional, and organizational settings. It focuses on **effective communication, teamwork, conflict resolution, and emotional intelligence** to improve interactions between individuals.

Key Aspects of Human Relations:

- **Understanding human behaviour and emotions** 🧠
- **Building positive relationships** in workplaces and society
- **Enhancing teamwork, cooperation, and leadership**
- **Managing conflicts and fostering mutual respect**

Importance of Human Relations:

- ✓ Improves **workplace productivity and job satisfaction**
- ✓ Strengthens **social and professional connections**
- ✓ Promotes **effective communication and teamwork**
- ✓ Helps in **resolving conflicts and reducing misunderstandings**

Conclusion:

Human relations play a crucial role in **personal, social, and professional success**, as they help individuals interact effectively and build **harmonious relationships**. 💬 🤝

(B) Explain the stages of group development.

Groups develop through a series of stages as members interact, build relationships, and work towards common goals. **Bruce Tuckman** introduced a widely accepted model of group development, consisting of **five stages**:

1. Forming (Orientation Stage) 🌀

- Members come together and get to know each other.
- There is **politeness and uncertainty** as roles are not yet defined.
- Leaders emerge, and objectives are discussed.

2. Storming (Conflict Stage) ⚡

- Differences in **opinions, personalities, and work styles** lead to conflicts.
- Power struggles and resistance to authority may occur.
- Effective conflict resolution and leadership help the group move forward.

3. Norming (Cohesion Stage) 🤝

- The group **develops trust and cooperation**.

- Members start **accepting roles and working together** efficiently.
- **Communication and collaboration improve**, leading to stronger team bonding.

4. Performing (Productivity Stage) 🚀

- The group becomes **fully functional and goal-oriented**.
- Members **work efficiently, resolve problems, and achieve objectives**.
- There is **high motivation, trust, and commitment** to success.

5. Adjourning (Dissolution Stage) 🗨️ (for temporary groups)

- The group **completes its tasks and disbands**.
- Members may feel **satisfaction, accomplishment, or sadness**.
- Reflection on **success and learning experiences** takes place.

Conclusion:

Understanding these **stages of group development** helps in **effective teamwork, leadership, and problem-solving**, ensuring that the group moves smoothly from formation to achieving its objectives.



(C) Discuss the strategies to be followed for building up a successful team.

:- Building a **successful team** requires a combination of **strong leadership, clear communication, collaboration, and motivation**. The following **key strategies** can help in developing an efficient and high-performing team:

1. Define Clear Goals & Objectives 🎯

- Set **specific, measurable, and achievable** goals.
- Ensure that every team member understands their **roles and responsibilities**.

2. Encourage Open Communication 💬

- Foster an environment where team members can **express ideas and concerns** freely.
- Use **active listening, regular meetings, and feedback sessions** to improve collaboration.

3. Promote Teamwork & Collaboration 🤝

- Encourage **team-building activities** to strengthen relationships.
- Assign **group tasks** that require cooperative efforts and shared responsibility.

4. Build Trust & Respect Among Members 🏆

- Establish **mutual respect** by recognizing and valuing each team member's contributions.
- Maintain **transparency and fairness** in decision-making.

5. Provide Training & Skill Development 📚

- Organize **workshops and training programs** to enhance team members' skills.
- Encourage **continuous learning** for personal and professional growth.

6. Motivate & Reward Team Members 🌟

- Recognize and appreciate **team efforts and achievements**.
- Offer **incentives, rewards, or career growth opportunities** to boost motivation.

7. Resolve Conflicts Effectively ⚖️

- Address misunderstandings or disputes **immediately and fairly**.
- Encourage **constructive feedback** and mediation techniques for conflict resolution.

8. Lead by Example & Provide Strong Leadership 👤 👤

- Leaders should **demonstrate accountability, dedication, and a positive attitude**.
- Encourage team members to take **ownership of their tasks** and support one another.

Conclusion:

A **successful team** is built on **trust, collaboration, communication, and strong leadership**. By following these strategies, teams can achieve **efficiency, productivity, and long-term success**.



Q2. (a) Explain the signs and symptoms of food borne disease.

:- Signs and Symptoms of Foodborne Diseases

Foodborne diseases, also known as **food poisoning**, occur due to the **consumption of contaminated food or water** containing harmful bacteria, viruses, parasites, or toxins. The symptoms vary depending on the type of pathogen or toxin ingested but generally affect the **digestive system**.

Common Signs and Symptoms:

1. Gastrointestinal Symptoms:

- **Nausea** 🤢 – Feeling of uneasiness in the stomach, often leading to vomiting.
- **Vomiting** 🤮 – Expelling food and fluids due to irritation in the stomach.
- **Diarrheal** 💩 – Frequent loose or watery stools, sometimes with **blood or mucus** (severe cases).
- **Abdominal Pain & Cramps** 🤕 – Pain and discomfort in the stomach due to irritation of the intestines.

2. Systemic Symptoms:

- **Fever** 🌡️ – A common response to infection, often seen in bacterial or viral foodborne illnesses.
- **Fatigue & Weakness** 🥱 – Due to dehydration and loss of nutrients.
- **Muscle Aches & Joint Pain** 🦵 – Common in certain infections like **Listeria**.

3. Neurological Symptoms (in severe cases):

- **Dizziness & Headache** 🤯 – Due to dehydration or toxin effects.
- **Numbness or Tingling** 🖐️ – Seen in food poisoning caused by certain toxins (e.g., botulism).
- **Blurred Vision & Difficulty Swallowing** 👁️ – Possible in **severe bacterial infections** (e.g., Clostridium botulinum).

When to Seek Medical Help?

🚨 Immediate medical attention is needed if:

- **Severe dehydration** (dry mouth, dizziness, little or no urination).
- **High fever** (>102°F or 39°C).
- **Blood in stools or vomiting blood.**
- **Persistent vomiting and diarrhea** lasting more than **3 days**.

Conclusion:

Foodborne diseases cause **digestive issues, fever, weakness, and sometimes severe complications**. **Proper food handling, hygiene, and cooking practices** help prevent foodborne infections. 🚫🦠🍴

(B) Discuss the basic food hygienic practices which should be observed by every food handler.

:- Basic Food Hygiene Practices for Food Handlers

Food hygiene is essential in **preventing foodborne diseases** and ensuring that food is **safe for consumption**. Food handlers must follow strict hygiene practices to **avoid contamination** and protect public health.

1. Personal Hygiene 💎

- **Wash hands properly** before handling food and after using the toilet.
- Keep **nails short, clean, and avoid wearing jewellery**.
- Wear **clean clothing, aprons, and hairnets** to prevent contamination.
- Avoid **handling food when sick** (e.g., flu, diarrhea, skin infections).

2. Safe Food Handling & Storage 🥗

- **Store raw and cooked foods separately** to prevent cross-contamination.
- Keep **perishable foods refrigerated** (below 5°C) and hot foods above 60°C.
- Use **clean utensils and cutting boards** for different food types (e.g., separate for meat and vegetables).
- Ensure food is **cooked thoroughly**, especially meat, poultry, and seafood.

3. Cleanliness of Kitchen & Equipment 🧼

- Regularly **clean and disinfect** surfaces, equipment, and utensils.
- Use **safe water and clean raw ingredients** properly before cooking.
- Keep food preparation areas **free from pests** (rodents, insects).

4. Proper Waste Management

- Dispose of **food waste properly** to prevent bacterial growth.
- Keep trash bins **covered and regularly emptied**.
- Avoid **leaving food exposed** to dust, insects, or chemicals.

5. Avoid Cross-Contamination

- Use **separate chopping boards** for raw meat, vegetables, and cooked food.
- Do not **use the same utensils** for raw and cooked food without washing.
- Keep hands and surfaces clean when switching between food items.



6. Safe Food Serving Practices

- Serve food at the **right temperature** (hot food hot, cold food cold).
- Avoid **touching food directly** with bare hands—use gloves or utensils.
- Cover food properly when not in use.

7. Regular Health Check-ups

- Food handlers should undergo **regular medical check-ups**.
- Report **any illness or infections** to prevent contamination.

Conclusion:

Following **proper food hygiene practices** ensures **food safety, prevents contamination, and reduces the risk of foodborne illnesses**. Every food handler should **maintain personal cleanliness, handle food safely, and keep the cooking environment hygienic**.   

(C) Describe the five keys to safer food.

:- Five Keys to Safer Food (WHO Guidelines)

The **World Health Organization (WHO)** has developed the **Five Keys to Safer Food** to prevent foodborne diseases and ensure food safety. These principles help food handlers and consumers maintain hygiene and prevent contamination.

1. Keep Clean

- Wash hands **before handling food and after using the toilet**.
- Clean **all kitchen surfaces, utensils, and equipment regularly**.
- Protect food from **insects, rodents, and other animals**.

2. Separate Raw and Cooked Foods

- Keep **raw meat, poultry, seafood, and eggs separate** from other foods.
- Use **separate cutting boards and knives** for raw and cooked food.
- Store raw food **in sealed containers** away from cooked or ready-to-eat food.

3. Cook Food Thoroughly 🔥

- Cook food to the **right temperature** ($\geq 75^{\circ}\text{C}$ for meats) to kill harmful bacteria.
- Ensure food is **steaming hot all the way through**, especially meat, poultry, and seafood.
- Reheat food **thoroughly before eating**.

4. Keep Food at Safe Temperatures ❄️🔥

- Store perishable foods **below 5°C (refrigeration) or above 60°C (hot holding)**.
- Do not leave cooked food at room temperature for **more than 2 hours**.
- Avoid refreezing thawed food.

5. Use Safe Water and Raw Materials 🚰

- Use **clean, treated, or boiled water** for cooking and drinking.
- Wash **fruits and vegetables** before consumption.
- Avoid using **expired, mouldy, or contaminated food ingredients**.

Conclusion:

Following these **Five Keys to Safer Food** helps **prevent foodborne diseases**, ensuring that food remains **hygienic, safe, and healthy** for consumption. 🍽️✅

Q3. (a) Explain the importance of family planning. (4 Marks)

: - Importance of Family Planning (4 Marks)

Family planning is essential for the **health, well-being, and economic stability** of individuals, families, and society. It helps couples plan pregnancies and ensures **better maternal and child health**.

1. Promotes Maternal & Child Health 👩👶

- Reduces **unwanted or high-risk pregnancies**, lowering **maternal and infant mortality**.
- Ensures **proper spacing between children**, leading to healthier mothers and babies.

2. Controls Population Growth 🌍

- Helps in managing **overpopulation**, reducing pressure on resources like **food, water, healthcare, and education**.
- Supports sustainable **economic and social development**.

3. Empowers Women & Improves Quality of Life 👩👧

- Allows women to pursue **education, career, and personal growth**.

- Enhances **gender equality** and **economic stability** within families.

4. Prevents Unintended Pregnancies & STDs 🏠

- Reduces **unsafe abortions and pregnancy-related complications**.
- Promotes the use of **contraceptives**, preventing **sexually transmitted diseases (STDs)**.

Conclusion:

Family planning plays a crucial role in **improving health, reducing poverty, and enhancing quality of life** for individuals and society. **Access to contraceptives and reproductive health education** ensures better decision-making for families. 🧑🧑👉✅

(B) List the various family planning methods.

:- Various Family Planning Methods (3 Marks)

Family planning methods help individuals and couples **prevent unintended pregnancies** and plan their families effectively. These methods are categorized into **natural, temporary, and permanent** methods.

1. Natural Methods 🌿

- **Rhythm Method** (Tracking the menstrual cycle to avoid fertile days)
- **Withdrawal Method** (Pulling out before ejaculation)
- **Lactational Amenorrhea Method (LAM)** (Using breastfeeding as a temporary contraceptive)

2. Temporary Methods 🧴🩺

- **Barrier Methods** (e.g., Condoms, Diaphragms)
- **Hormonal Methods** (e.g., Birth Control Pills, Injections, Patches, Implants)
- **Intrauterine Devices (IUDs)** (Copper T, Hormonal IUD)
- **Emergency Contraceptive Pills (ECPs)** (Morning-after pill)

3. Permanent Methods 🔥

- **Male Sterilization (Vasectomy)**
- **Female Sterilization (Tubal Ligation)**

Conclusion:

Different family planning methods offer **varied levels of effectiveness**, and the choice depends on **personal health, lifestyle, and reproductive goals**. ✅

(C) Explain any method of family planning, including their advantages and disadvantages.

:- Intrauterine Device (IUD) – A Family Planning Method

An **Intrauterine Device (IUD)** is a **small, T-shaped device** inserted into the uterus to **prevent pregnancy**. It is a **long-term, reversible** contraception method and comes in two types:

1. **Copper IUD (e.g., Copper-T)** – Uses copper to prevent fertilization.

2. **Hormonal IUD (e.g., Mirena, Skyla)** – Releases **progestin hormone** to thicken cervical mucus and prevent ovulation.



Advantages of IUD

- ✓ **Highly Effective** – More than **99% success rate** in preventing pregnancy.
- ✓ **Long-Lasting** – Can last **5-10 years** (Copper IUD) or **3-5 years** (Hormonal IUD).
- ✓ **No Daily Maintenance** – Unlike pills, no need to remember daily doses.
- ✓ **Fertility Returns Quickly** – After removal, pregnancy can occur soon.
- ✓ **Safe for Breastfeeding Mothers** – Does not affect milk production.
- ✓ **Non-Hormonal Option (Copper IUD)** – Suitable for those avoiding hormones.

Disadvantages of IUD

- ⚠ **Possible Irregular Periods** – Hormonal IUDs may cause spotting or missed periods.
- ⚠ **Increased Menstrual Cramps & Bleeding** – Common with Copper IUD.
- ⚠ **Requires Medical Insertion & Removal** – Must be done by a trained healthcare provider.
- ⚠ **Risk of Expulsion** – In rare cases, the IUD can move or be expelled from the uterus.
- ⚠ **Does Not Protect Against STDs** – Unlike condoms, it does not prevent sexually transmitted diseases.

Conclusion:

The **IUD is a safe, effective, and long-term family planning method**. It is ideal for **women seeking hassle-free contraception**, but it should be chosen after discussing with a healthcare provider to assess **suitability and possible side effects**.  

Q4. Write Short Note on :-

(A) Dengue Fever.

:- Short Note on Dengue Fever

Dengue fever is a mosquito-borne viral infection caused by the **Dengue virus (DENV)**, transmitted primarily by **Aedes aegypti** and **Aedes albopictus** mosquitoes. It is common in **tropical and subtropical regions**.

Causes & Transmission

- Spread through the bite of an **infected Aedes mosquito**, which breeds in **stagnant water**.
- The **Dengue virus has four serotypes (DENV-1, DENV-2, DENV-3, DENV-4)**, meaning a person can get infected multiple times.

Signs & Symptoms (Appear 4-10 days after the mosquito bite)

Mild Cases:

- **High fever (104°F or 40°C)**
- **Severe headache & body pain ("breakbone fever")**
- **Skin rash & red spots**

- **Nausea & vomiting**

⚠️ **Severe Cases (Dengue Haemorrhagic Fever/Dengue Shock Syndrome):**

- **Bleeding gums, nosebleeds, or internal bleeding**
- **Severe abdominal pain**
- **Low blood pressure & shock (can be fatal)**

Prevention & Control

Mosquito Control:

- **Remove stagnant water** (flowerpots, tires, water containers).
- Use **mosquito nets, repellents, and full-sleeved clothing**.

Vaccination:

- Dengue vaccine (Dengvaxia) is available for people who have had a **previous infection**.

Treatment:

- **No specific antiviral drug**, only **supportive care** (fluids, pain relievers like paracetamol).
- **Avoid aspirin or ibuprofen** (increases bleeding risk).

Conclusion:

Dengue fever is a **serious viral disease**, but **preventive measures and early detection** can help reduce complications and fatalities. 🚫🦟

(B) Disadvantage of nuclear family.

:- Disadvantages of Nuclear Family

A **nuclear family** consists of **parents and their children living together** without extended relatives. While it offers **independence and privacy**, it also has some disadvantages:

1. Lack of Support System 🧓👴

- No **immediate help** from grandparents or relatives in times of need.
- Parents may struggle with **childcare and household responsibilities** alone.

2. Increased Financial Burden 💰

- Parents bear **all financial responsibilities** (education, healthcare, housing).
- No shared expenses, unlike in **joint families**.

3. Emotional & Social Isolation 😞

- Children and elderly **miss out on family bonding and cultural values**.
- In times of stress or emergencies, **less emotional support** is available.

4. Increased Responsibility for Parents 👨👩👧👦

- Parents have to **balance work, household duties, and childcare** alone.
- Lack of **guidance from elders** can lead to **parenting challenges**.

5. Risk of Weak Family Bonds 💔

- Children may feel **lonely** and lack interaction with extended family.
- Less exposure to **traditional values and cultural practices**.

Conclusion:

While a **nuclear family** provides **privacy and independence**, it can also lead to **emotional, financial, and social challenges** due to the lack of **extended family support**. 🧑🧒💡

(C) Disposal of wastes.

- Short Note on Disposal of Wastes

Waste disposal refers to the **proper management and elimination of waste** to prevent environmental pollution and health hazards. It includes various methods depending on the type of waste.

Methods of Waste Disposal

1. **Landfilling** 🗑️

- Waste is buried in **designated landfill sites**.
- Can cause **soil and water pollution** if not managed properly.

2. **Incineration** 🔥

- Waste is **burned at high temperatures**, reducing its volume.
- Used for **hazardous and medical waste**, but may release toxic gases.

3. **Recycling & Reuse** ♻️

- Waste materials like **plastic, paper, glass, and metal** are processed into new products.
- Reduces **pollution and conserves resources**.

4. **Composting** 🌱

- Organic waste (food scraps, leaves) is decomposed into **natural fertilizer**.
- Promotes **soil health and reduces landfill waste**.

5. **Sewage Treatment** 💧

- **Wastewater is treated** before being released into water bodies.
- Prevents **water pollution and the spread of diseases**.

Conclusion:

Proper **waste disposal** is essential for **environmental protection and public health**. Using **eco-friendly methods like recycling and composting** can reduce pollution and promote sustainability.



(D) Tuberculosis

:- Short Note on Tuberculosis (TB)

Tuberculosis (TB) is a **bacterial infection** caused by *Mycobacterium tuberculosis*. It primarily affects the **lungs** but can also impact other organs like the brain, spine, and kidneys. TB spreads through **airborne droplets** when an infected person **coughs or sneezes**.

Types of TB

1. **Latent TB** – The bacteria remain inactive; the person has no symptoms but can develop active TB later.
2. **Active TB** – The bacteria multiply, causing **symptoms and spreading to others**.



Symptoms of TB

- Persistent **cough for more than 2 weeks** (sometimes with blood).
- **Fever & night sweats**.
- **Unexplained weight loss**.
- **Fatigue and chest pain**.

Prevention & Control

- ✓ **BCG Vaccine** – Protects against severe TB in children.
- ✓ **Early Diagnosis & Treatment** – Using sputum tests and chest X-rays.
- ✓ **Medication (DOTS Therapy)** – A 6-month course of antibiotics (Rifampicin, Isoniazid, Ethambutol, Pyrazinamide).
- ✓ **Good Hygiene & Ventilation** – Avoid close contact with infected individuals.

Conclusion:

TB is a **serious but curable disease** if diagnosed early and treated properly. Public awareness and **proper medication adherence** are essential to prevent drug-resistant TB.  

(E) Epidemiological Triad.

:- Short Note on Epidemiological Triad

The **Epidemiological Triad** is a model used in **public health and epidemiology** to explain how diseases occur and spread. It consists of **three interrelated components**:

1. Agent (Cause of Disease)

- The **microorganism or factor** responsible for the disease.
- Examples: **Bacteria (TB), Viruses (Dengue), Parasites (Malaria), Chemical Agents (Toxins), Physical Agents (Radiation)**.

2. Host (Affected Person/Organism)

- The **individual or population** that is susceptible to disease.
- Factors influencing susceptibility: **Age, Immunity, Genetics, Nutrition, Lifestyle.**

3. Environment (External Conditions) 🌍

- Surroundings that **favor disease transmission.**
- Examples: **Poor sanitation, Crowded living conditions, Climate, Water supply, Socioeconomic factors.**

Conclusion:

The **Epidemiological Triad** helps in **understanding disease transmission** and developing **preventive measures** like **vaccination, sanitation, and health education** to break the chain of infection. 📄 ✅

(F) Women Empowerment.

:- Refer to 2019 Q5 (4)

Q5. Define the following

(a) Demographic Cycle

:- **Definition:-** The **Demographic Cycle** (also known as the **Demographic Transition Model**) refers to the **stages of population growth** that a country undergoes over time. It is based on **birth rates, death rates, and overall population changes.**

Stages of the Demographic Cycle

1. High Stationary Stage (Primitive Stage)

- **High birth rate & high death rate** → Population growth is **slow or stagnant.**
- Found in **pre-industrial societies** with poor healthcare and sanitation.

2. Early Expanding Stage

- **Death rate declines** due to improved healthcare and sanitation.
- **Birth rate remains high** → Rapid population growth.
- Example: **Developing countries.**

3. Late Expanding Stage

- **Birth rate starts to decline**, but population still grows.
- Improved **education, urbanization, and family planning** reduce birth rates.
- Example: **Emerging economies like India.**

4. Low Stationary Stage

- **Low birth and death rates** → Population growth stabilizes.
- Example: **Developed countries like the USA, UK.**

5. Declining Stage (Senile Stage)

- **Birth rate drops below death rate** → Population starts to decline.

- Example: **Japan, Germany**.

Conclusion:

The **Demographic Cycle** explains how **population growth changes over time** with economic and social development. Countries aim to reach a **stable population** through **education, healthcare, and family planning**. 🌍 📊

(B) Mumps

Definition :- Mumps is a **contagious viral infection** caused by the **mumps virus (a paramyxovirus)**. It primarily affects the **salivary glands**, especially the **parotid glands**, leading to **painful swelling**. The disease spreads through **respiratory droplets** (coughing, sneezing) and **direct contact** with an infected person.

Key Features of Mumps:

- ✓ **Caused by:** Mumps virus (Paramyxovirus).
- ✓ **Transmission:** Airborne droplets, saliva, contaminated objects.
- ✓ **Symptoms:**
 - **Swollen, painful parotid glands** (one or both sides of the face).
 - **Fever, headache, muscle pain, and fatigue.**
 - **Difficulty in chewing and swallowing.**

Prevention & Treatment:

- ✓ **MMR Vaccine (Measles, Mumps, Rubella)** – Most effective prevention.
- ✓ **No specific antiviral treatment** – Supportive care (rest, fluids, pain relievers).
- ✓ **Isolation** to prevent spreading the virus.

Conclusion:

Mumps is a **preventable viral disease**, and vaccination is the best way to control its spread. **Early diagnosis and proper care** help in managing symptoms effectively. 🏠 ✅

(C) Chicken Pox

Definition:

Chickenpox is a **highly contagious viral infection** caused by the **Varicella-Zoster Virus (VZV)**. It mainly affects children but can also occur in adults.

Causes & Transmission:

- Spread through **airborne droplets** (coughing, sneezing) or **direct contact** with the fluid from blisters.
- A person remains contagious **1-2 days before the rash appears** until all blisters scab over.

Symptoms:

- ✓ **Fever & fatigue**
- ✓ **Itchy red rash → fluid-filled blisters → scabs** (appears in crops)
- ✓ **Loss of appetite & headache**
- ✓ **Severe itching**

Prevention & Treatment:

- ✓ **Varicella Vaccine (Chickenpox Vaccine)** – Best prevention.
- ✓ **Isolation** to prevent spreading.
- ✓ **Antiviral medications** (for severe cases).
- ✓ **Calamine lotion & antihistamines** to reduce itching.
- ✓ **Plenty of fluids & rest.**

Conclusion:

Chickenpox is a **mild but highly contagious disease**. **Vaccination** and early care help in **preventing complications** like pneumonia and encephalitis. 🏠 ✅

(D) Epidemics.

Definition:

An **epidemic** is the **sudden increase in the number of cases of a disease** in a specific population, area, or community **beyond the expected levels**. It can be caused by infectious agents (bacteria, viruses) or environmental factors.

Causes of Epidemics:

- ✓ **Infectious diseases** (e.g., Influenza, Cholera, Dengue).
- ✓ **Poor sanitation & hygiene.**
- ✓ **Lack of vaccination.**
- ✓ **Climate change & natural disasters** (increase the spread of diseases).
- ✓ **Rapid urbanization & overcrowding.**

Examples of Epidemics:

- ✓ **COVID-19 outbreak (2019-2020, before becoming a pandemic).**
- ✓ **Ebola outbreak (West Africa, 2014-2016).**
- ✓ **Cholera epidemic (Haiti, 2010).**

Prevention & Control:

- ✓ **Vaccination programs** to reduce disease spread.
- ✓ **Early detection & surveillance** of cases.
- ✓ **Quarantine & isolation** of infected individuals.
- ✓ **Public health awareness & hygiene measures.**
- ✓ **Proper sanitation & clean drinking water.**

Conclusion:

Epidemics pose **serious public health risks**, but **early intervention, vaccination, and hygiene measures** can help control and prevent their spread. 🌍 🦠 🏠

(E) Child Abuse.

:- Child Abuse (5 Marks)

Definition:

Child abuse refers to **any form of physical, emotional, sexual, or neglectful harm** inflicted on a child **by a parent, caregiver, or another person**, leading to **physical or psychological damage**.

Types of Child Abuse:

1. **Physical Abuse** – Hitting, beating, burning, or causing bodily harm.
2. **Emotional Abuse** – Threats, humiliation, rejection, or constant criticism.
3. **Sexual Abuse** – Involving a child in **inappropriate sexual activities**.
4. **Neglect** – Failing to provide basic needs like **food, shelter, education, and healthcare**.

Causes of Child Abuse:

- ✓ **Parental stress, mental health issues, or substance abuse.**
- ✓ **Domestic violence & family conflicts.**
- ✓ **Poverty & lack of awareness.**
- ✓ **Cultural & societal acceptance of harsh discipline.**

Effects of Child Abuse:

- ✓ **Physical injuries & developmental delays.**
- ✓ **Depression, anxiety, & low self-esteem.**
- ✓ **Behavioural problems & academic struggles.**
- ✓ **Increased risk of substance abuse & criminal behaviour later in life.**

Prevention & Control:

- ✓ **Educating parents & caregivers on positive parenting.**
- ✓ **Strict laws & enforcement against child abuse.**
- ✓ **School & community awareness programs.**
- ✓ **Reporting abuse to child protection services.**
- ✓ **Providing counselling & rehabilitation for affected children.**

Conclusion:

Child abuse is a **serious social and legal issue** that affects a child's **mental, physical, and emotional well-being**. **Early intervention, education, and legal actions** are crucial to protecting children. 💡 ✖

(F) Level of preventions

:- Levels of Prevention (5 Marks)

Definition:

Levels of prevention refer to **different strategies used to prevent diseases and promote health** at various stages of disease development. These levels were introduced by **Leavell and Clark** and include **three main stages** (some models include a fourth level).

1. Primary Prevention (Before Disease Occurs) 🚫

- **Aims to prevent the onset of disease** by reducing risk factors.
- Examples:
 - ✓ **Vaccination (e.g., Polio, Measles).**
 - ✓ **Health education on hygiene & nutrition.**
 - ✓ **Use of seatbelts & helmets** to prevent injuries.

2. Secondary Prevention (Early Detection & Treatment) 🔍

- **Focuses on early diagnosis & prompt treatment** to stop disease progression.
- Examples:
 - ✓ **Screening tests** (e.g., Mammography for breast cancer, Blood sugar tests for diabetes).
 - ✓ **Early treatment of infections** to prevent complications.

3. Tertiary Prevention (Rehabilitation & Disability Prevention) 🏠

- **Aims to reduce complications and disability** in already diseased individuals.
- Examples:
 - ✓ **Physical therapy for stroke patients.**
 - ✓ **Rehabilitation programs for drug addicts.**
 - ✓ **Lifestyle modifications for heart disease patients.**

(4. Quaternary Prevention - Optional) !

- **Prevention of over-medicalization or unnecessary interventions.**
- Example: Avoiding **excessive use of antibiotics** to prevent resistance.

Conclusion:

The **three (or four) levels of prevention** help in reducing the burden of diseases by focusing on **prevention, early treatment, and rehabilitation**. A **strong healthcare system** must address all levels for better public health. ✓ 🌍