



ROHINI COLLEGE OF ENGINEERING AND TECHNOLOGY

AUTONOMOUS INSTITUTION

Approved by AICTE & Affiliated to Anna University
NBA Accredited for BE (ECE, EEE, MECH) | Accredited by NAAC with A+ Grade

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DEPARTMENT OF BIOMEDICAL ENGINEERING

VII Semester

OBT357 BIOTECHNOLOGY IN HEALTH CARE

UNIT- I PUBLIC HEALTH

1.5 Unique Features of Public Health

Feature	Description
1. Population-Based Approach	Focuses on the health of entire populations rather than individual patients.
2. Prevention-Oriented	Emphasizes disease prevention (e.g., vaccinations, health education) over treatment.
3. Multidisciplinary in Nature	Involves a range of fields: epidemiology, sociology, economics, environmental science , etc.
4. Social Justice and Equity	Aims to reduce health disparities and promote health equity across all social groups.
5. Policy and Regulation Driven	Uses laws, policies, and regulations (e.g., tobacco control laws) to improve public health.
6. Community Participation	Encourages active involvement of communities in planning and implementing interventions.
7. Focus on Health Promotion	Promotes healthy lifestyles and environments (e.g., exercise, nutrition, mental well-being).
8. Intersectoral Collaboration	Requires cooperation between sectors like education, transport, housing, agriculture , etc.
9. Evidence-Based Practice	Relies on scientific data and research to design, implement, and evaluate programs.
10. Ethical and Collective Responsibility	Views health as a shared responsibility , guided by ethical principles .

How These Features Reflect Evolving Concepts

The unique features of public health align with its historical evolution:

- ❖ From **sanitation** (19th century, e.g., clean water systems) to **epidemiology** (tracking diseases like cholera).
- ❖ From **vaccination campaigns** (20th century, e.g., smallpox eradication) to **health equity** and **digital health** (21st century, e.g., AI surveillance).
- ❖ Modern public health integrates **technology** (e.g., precision public health using genomics) and **global cooperation** (e.g., pandemic preparedness), reflecting its dynamic, forward-looking nature.
