

**SRIMAAN COACHING CENTRE-TRICHY-TNMAWS- MUNICIPAL
ADMINISTRATION & WATER SUPPLY DEPARTMENT-(SANITARY
INSPECTOR) STUDY MATERIAL -TO CONTACT:8072230063.**

**2024-25
SRIMAAN**

SRIMAAN

TN MAWS

MUNICIPAL ADMINISTRATION & WATER SUPPLY DEPARTMENT-(MAWS)

PUBLIC HEALTH & SANITATION (SANITARY INSPECTOR)

UNIT-III-MICRO BIOLOGY

TN-MAWS STUDY MATERIALS

**CIVIL/ MECHANICAL / ELECTRICAL / TOWN PLANNING/
ARCHITECTURE / PUBLIC HEALTH & SANITATION**

**TRB-ASSISTANT PROFESSOR-(ALL SUBJECT) STUDY MATERIAL
AVAILABLE.**

**PG-TRB STUDY MATERIALS:-TAMIL/ENGLISH/ MATHEMATICS/PHYSICS
CHEMISTRY/COMMERCE (T/M & E/M)/BOTANY (T/M & E/M)/ ZOOLOGY
HISTORY (T/E)/ECONOMICS (T/E)/ GEOGRAPHY /BIO-CHEMISTRY
PGTRB-COMPUTER INSTRUCTOR GRADE-I -TO CONTACT -8072230063.**

**SRIMAAN COACHING CENTRE-TRICHY-TNMAWS- MUNICIPAL
ADMINISTRATION & WATER SUPPLY DEPARTMENT-(SANITARY
INSPECTOR) STUDY MATERIAL -TO CONTACT:8072230063.**

**2024-25
SRIMAAN**

TRB-POLYTECHNIC LECTURER MATERIALS:

**MATHEMATICS / ENGLISH / PHYSICS / CHEMISTRY / COMPUTER SCIENCE / IT /
EEE / ECE / EIE / ICE / MECHANICAL / CIVIL / MOP AVAILABLE.**

UG-TRB & SGT: ALL SUBJECT STUDY MATERIALS AVAILABLE.

SCERT/DIET/GTTI STUDY MATERIAL AVAILABLE.

DEO & BEO (T/M & E/M) STUDY MATERIALS AVAILABLE.

TRB-ASST.PROFESSOR STUDY MATERIAL AVAILABLE.

**PG-TRB: COMPUTER INSTRUCTOR GRADE-1 -FULL
STUDY MATERIAL WITH QUESTION BANK AVAILABLE**

**TNPSC-ASSISTANT DIRECTOR OF CO-OPERATIVE AUDIT STUDY
MATERIAL AVAILABLE.**

TNEB-(ASSESSOR/AE/JA) MATERIALS WITH QUESTION BANK AVAILABLE

**UG-TRB / PG-TRB / TRB-POLYTECHNIC / DEO & BEO
MATERIALS ARE SENDING THROUGH COURIER.**

TO CONTACT

8072230063

**PG-TRB STUDY MATERIALS:-TAMIL/ENGLISH/ MATHEMATICS/PHYSICS
CHEMISTRY/COMMERCE (T/M & E/M)/BOTANY (T/M & E/M)/ ZOOLOGY
HISTORY (T/E)/ECONOMICS (T/E)/ GEOGRAPHY /BIO-CHEMISTRY
PGTRB-COMPUTER INSTRUCTOR GRADE-I -TO CONTACT -8072230063.**

**SRIMAAN COACHING CENTRE-TRICHY-TN-MAWS
PUBLIC HEALTH & SANITATION (SANITARY
INSPECTOR)- TO CONTACT: 8072230063.**

**2024-25
SRIMAAN**

SRIMAAN COACHING CENTRE-TRICHY.

TO CONTACT: 8072230063.

TN-MAWS



**(SANITARY INSPECTOR)
PUBLIC HEALTH & SANITATION**



UNIT-3- MICRO BIOLOGY

Beneficial & harmful micro-organisms

What is a microorganism?

- A microorganism is an organism that can be seen only with the aid of a microscope. They include bacteria, protozoans, algae, and fungi.
- Beneficial microorganisms produce a favorable result. They are helpful and useful.
- Harmful microorganisms are likely to have a damaging result. They are often called germs.
- ❖ Any entity that possesses characteristics of life such as the ability to reproduce, respond to environmental stimuli, constitutes a living organism. Furthermore, living organisms need sustenance to survive, hence they need to eat. Also, movement and mobility are a crucial aspect of an organism if it needs to acquire food.
- ❖ Most organisms are visible to us. But some living organisms are extremely small, so a microscope is required to view them. These organisms are known as microbes or microorganisms and are single-celled or unicellular. They exist in nature in almost every habitat. They are ubiquitous.
- ❖ Microorganisms are crucial in maintaining a balance in our ecological system. They live around us and inside us. They maintain the health of organisms and help clean up our environment. They help produce different foods too.
- ❖ While microorganisms have tons of benefits, they can be harmful and cause deadly diseases too. For

**MATERIALS: TET / PG-TRB / TRB-COMPUTER INSTRUCTOR / UG-TRB / SGT / BEO / DEO
SCERT/ DIET / TRB-ASST.PROF / TN-MAWS / TNEB / TNUSRB / TNPSC-VAO & JSO /
TRB POLYTECHNIC: ENGLISH / PHYSICS / CHEMISTRY / MATHS / COMPUTER SCIENCE / IT / ECE /
EEE / MOP / EIE / ICE / CIVIL / MECHANICAL AVAILABLE. TO CONTACT : 8072230063.**

**SRIMAAN
8072230063**

SRIMAAN COACHING CENTRE-TRICHY-TN-MAWS PUBLIC HEALTH & SANITATION (SANITARY INSPECTOR)- TO CONTACT: 8072230063.

2024-25
SRIMAAN

example, we see fungus growing on bread when left unused for a couple of days. This is because bread is moist, making it one of the most favorable conditions for the breeding of microbes.

Classification of Microorganism

Microbes are categorized into four major groups:

- Bacteria
- Fungi
- Algae
- Protozoa

Viruses, on the other hand, are microscopic but differ from microbes. Differ in their reproduction aspects, as they reproduce only in the cells of their hosts. These host organisms can be of animals, bacteria or even plants for that matter. A [virus](#) is typically coated by protein and has a nucleic acid molecule.

Useful Microorganisms

Following are a few examples of useful microorganisms:

- Extensively used in the baking industry to make cakes, bread, pastry etc.
- Used in the production of milk products. Example: Lactobacillus bacteria is used in the formation of curd from milk
- Since ages, microbes are being used in the production of alcohol
- It is also used to make organic acids. Acids such as citric acid, lactic acid, fumaric acid, gluconic acids are made using microbial activity
- Used in the production of steroids
- Antibiotics are produced using microorganisms
- Used in the production of vitamins: Vitamins such as Vitamin B complex, Riboflavin is produced by *Ashbya gossypii*, *Eremothecium ashbyii* and *Clostridium butyricum*. Ascorbic acid, also known as

**MATERIALS: TET / PG-TRB / TRB-COMPUTER INSTRUCTOR / UG-TRB / SGT / BEO / DEO
SCERT/ DIET / TRB-ASST.PROF / TN-MAWS / TNEB / TNUSRB / TNPSC-VAO & JSO /
TRB POLYTECHNIC: ENGLISH/ PHYSICS / CHEMISTRY / MATHS / COMPUTER SCIENCE / IT / ECE /
EEE / MOP / EIE / ICE / CIVIL / MECHANICAL AVAILABLE. TO CONTACT : 8072230063.**

SRIMAAN
8072230063

**SRIMAAN COACHING CENTRE-TRICHY-TN-MAWS
PUBLIC HEALTH & SANITATION (SANITARY
INSPECTOR)- TO CONTACT: 8072230063.**

**2024-25
SRIMAAN**

Vitamin C is produced by species of Acetobacter

- Microorganisms synthesize enzymes such as Lipase, Lactase, Amylase, Pectinase, Penicillinase.
- They increase the fertility of the soil and by fixing nitrogen
- Help in the treatment of sewage
- Extensively used to clean up our environment
- Used in pest control

Harmful Microorganisms

- The microorganisms that cause diseases in living beings are known as pathogens.
- The pathogens can enter our bodies through air, water and food.
- Some pathogens are transmitted directly from an infected person.
- The diseases which are transmitted by an infected person directly or indirectly are known as communicable diseases. For e.g., common cold, tuberculosis, etc.
- Microorganisms also grow on food and spoil it. That is why preservatives are added in the food to prevent it from spoilage.

Diseases Caused By Microorganisms

Some [diseases](#) caused by microbes are:

Bacteria	Fungi	Protozoa	Virus
Tuberculosis	Ringworm	Malaria	Flu & Common cold
Typhoid	Athlete's foot	Dysentery	Warts
Cholera	Candidiasis	Chagas disease	Polio

**MATERIALS: TET / PG-TRB / TRB-COMPUTER INSTRUCTOR / UG-TRB / SGT / BEO / DEO
SCERT / DIET / TRB-ASST.PROF / TN-MAWS / TNEB / TNUSRB / TNPSC-VAO & JSO /
TRB POLYTECHNIC: ENGLISH / PHYSICS / CHEMISTRY / MATHS / COMPUTER SCIENCE / IT / ECE /
EEE / MOP / EIE / ICE / CIVIL / MECHANICAL AVAILABLE. TO CONTACT : 8072230063.**

**SRIMAAN
8072230063**

**SRIMAAN COACHING CENTRE-TRICHY-TN-MAWS
PUBLIC HEALTH & SANITATION (SANITARY
INSPECTOR)- TO CONTACT: 8072230063.**

**2024-25
SRIMAAN**

Plague	Tinea versicolor	Sleeping sickness	Herpes and cold sores
Meningitis	Onychomycosis	Intestinal protozoan disease	Chickenpox
Tetanus			Smallpox
Lyme disease			Ebola

Diseases Caused by Microorganisms in Animals

Diseases	Microorganism
Anthrax diseases	Bacillus anthracis
Foot and Mouth disease	Virus

Diseases Caused by Microorganisms in Plants

Diseases	Microorganism
Citrus canker	Bacteria
Rust of wheat	Fungi
Yellow vein mosaic of Okra	Virus

Food Spoilage by Microorganisms

1. Food spoilage refers to the damage in the quality of food that makes it unsuitable for human consumption.
2. Bacteria, molds, and yeast are the main causes of food spoilage.
3. Molds spoil food with reduced water activity. For e.g., dry cereals, cereal products.
4. These microbes produce certain enzymes that decompose the important constituents of food.
5. Bacteria, on the other hand, cause the spoilage of food with increased water activity. For e.g., milk products.

**MATERIALS: TET / PG-TRB / TRB-COMPUTER INSTRUCTOR / UG-TRB / SGT / BEO / DEO
SCERT/ DIET / TRB-ASST.PROF / TN-MAWS / TNEB / TNUSRB / TNPSC-VAO & JSO /
TRB POLYTECHNIC: ENGLISH / PHYSICS / CHEMISTRY / MATHS / COMPUTER SCIENCE / IT / ECE /
EEE / MOP / EIE / ICE / CIVIL / MECHANICAL AVAILABLE. TO CONTACT : 8072230063.**

**SRIMAAN
8072230063**

**SRIMAAN COACHING CENTRE-TRICHY-TN-MAWS
PUBLIC HEALTH & SANITATION (SANITARY
INSPECTOR)- TO CONTACT: 8072230063.**

**2024-25
SRIMAAN**

HUMAN MICROBIAL DISEASES

Microbes and disease

A few harmful microbes, for example less than 1% of bacteria, can invade our body (the host) and make us ill. Microbes cause infectious diseases such as flu and measles.

There is also strong evidence that microbes may contribute to many non-infectious chronic diseases such as some forms of cancer and coronary heart disease. Different diseases are caused by different types of micro-organisms. Microbes that cause disease are called pathogens.

Infectious disease	Microbe that causes the disease	Type of microbe
Cold	Rhinovirus	Virus
Chickenpox	<i>Varicella zoster</i>	Virus
German measles	Rubella	Virus
Whooping cough	<i>Bordatella pertussis</i>	Bacterium
Bubonic plague	<i>Yersinia pestis</i>	Bacterium
TB (Tuberculosis)	<i>Mycobacterium tuberculosis</i>	Bacterium
Malaria	<i>Plasmodium falciparum</i>	Protozoan
Ringworm	<i>Trichophyton rubrum</i>	Fungus
Athletes' foot	<i>Trichophyton mentagrophytes</i>	Fungus

It is important to remember that:

- A **pathogen** is a micro-organism that has the potential to cause disease.
- An **infection** is the invasion and multiplication of pathogenic microbes in an individual or population.
- **Disease** is when the infection causes damage to the individual's vital functions or systems.
- An infection **does not** always result in disease!

**MATERIALS: TET / PG-TRB / TRB-COMPUTER INSTRUCTOR / UG-TRB / SGT / BEO / DEO
SCERT/ DIET / TRB-ASST.PROF / TN-MAWS / TNEB / TNUSRB / TNPSC-VAO & JSO /
TRB POLYTECHNIC: ENGLISH / PHYSICS / CHEMISTRY / MATHS / COMPUTER SCIENCE / IT / ECE /
EEE / MOP / EIE / ICE / CIVIL / MECHANICAL AVAILABLE. TO CONTACT : 8072230063.**

**SRIMAAN
8072230063**

**SRIMAAN COACHING CENTRE-TRICHY-TN-MAWS
PUBLIC HEALTH & SANITATION (SANITARY
INSPECTOR)- TO CONTACT: 8072230063.**

**2024-25
SRIMAAN**

To cause an infection, microbes must enter our bodies. The site at which they enter is known as the portal of entry.

Microbes can enter the body through the four sites listed below:

- Respiratory tract (mouth and nose) e.g. influenza virus which causes the flu.
- Gastrointestinal tract (mouth oral cavity) e.g. *Vibrio cholerae* which causes cholera.
- Urogenital tract e.g. *Escherichia coli* which causes cystitis.
- Breaks in the skin surface e.g. *Clostridium tetani* which causes tetanus.

To make us ill microbes have to:

- reach their target site in the body;
- attach to the target site they are trying to infect so that they are not dislodged;
- multiply rapidly;
- obtain their nutrients from the host;
- avoid and survive attack by the host's immune system.

DISEASES

What is a disease?

Any malfunctioning process which interferes with the normal functioning of the body is called a disease. In other words, disease may be defined as a disorder in the physical, physiological, psychological or social state of a person caused due to nutritional deficiency, physiological disorder, genetic disorder, pathogen or any other reason.

Types of Diseases

The diseases may be classified into two broad categories

Classification of human diseases

Diseases

1. Congenital diseases
2. Acquired diseases

(Present since birth) (Develop after birth)

1. Communicable diseases

2. Non-communicable diseases

(Spread from infected person (do not spread from a diseased person to healthy person to a healthy person)

A. Congenital disease : The disease which is present from birth (e.g. hole in the heart in infants). They are caused by some genetic abnormality or metabolic disorder or malfunctioning of an organ.

B. Acquired disease : The disease which may occur after birth during one's lifetime.

Acquired diseases may generally be classified into :

- ✓ Infectious diseases : The diseases which can be transmitted from diseased healthy person person to e.g. measles.

**MATERIALS: TET / PG-TRB / TRB-COMPUTER INSTRUCTOR / UG-TRB / SGT / BEO / DEO
SCERT / DIET / TRB-ASST.PROF / TN-MAWS / TNEB / TNUSRB / TNPSC-VAO & JSO /
TRB POLYTECHNIC: ENGLISH / PHYSICS / CHEMISTRY / MATHS / COMPUTER SCIENCE / IT / ECE /
EEE / MOP / EIE / ICE / CIVIL / MECHANICAL AVAILABLE. TO CONTACT : 8072230063.**

**SRIMAAN
8072230063**

SRIMAAN COACHING CENTRE-TRICHY-TN-MAWS
PUBLIC HEALTH & SANITATION (SANITARY
INSPECTOR)- TO CONTACT: 8072230063.

2024-25
SRIMAAN

- ✓ Degenerative diseases : The diseases caused by the malfunction of some vital organs of the body e.g. heart failure.
- ✓ Deficiency diseases : These are caused due to nutritional deficiency such as that of minerals or vitamins in the diet e.g. anaemia (Fe), Beri- beri (vitamin)
- ✓ Cancer : This is an abnormal, uncontrolled and unwanted growth of cells. e.g. breast cancer.

(i) Communicable diseases: The diseases which can be transmitted from an infected person to a healthy person.

(ii) Non-communicable diseases: These diseases do not spread from an affected person to a healthy person

Communicable diseases

- a. Caused by some biological agents or pathogens, such as viruses, bacteria, protozoans and helminths (worms).
- b. Spread from one person to another through contact, water, air, and food, etc.
- c. The concern of the diseases involves the society as these are related to community health.

Non-communicable diseases

- Caused due to some specific factor, such as malfunctioning of some vital organ, and deficiency of nutrients.
- Do not spread from one person to another by contact.
- The concern of the disease is restricted to the individual only.

Modes of Spread of Communicable Diseases

Communicable diseases spread from the infected person to a healthy person in the following ways.

Direct transmission

The pathogens of diseases infect a healthy person directly without an intermediate agent. It can take place by various means such as,

(i) Direct contact between the infected person and the healthy person :

Diseases like small pox, chicken pox, syphilis, gonorrhoea spread through direct contact.

(ii) Droplet infection : The infected person throws out tiny droplets of mucus by coughing, sneezing or spitting. These droplets may contain the pathogen. By inhaling the air containing the droplets, a healthy person may get the infection.

Diseases like common cold, pneumonia, influenza, measles, tuberculosis and whooping cough spread through droplet infection.

(iii) Contact with soil contaminated with disease-causing viruses and bacteria.

(iv) Animal bite : Viruses of rabies are introduced through the wound caused by the bite of rabid animals, especially dogs. The virus is present in the saliva of the rabid animals.

Indirect transmission

The pathogens of certain diseases reach the human body through some intermediate agents. It can take place by various means, which are as follows :

- (i) By vectors such as houseflies, mosquitoes, and cockroaches.

MATERIALS: TET / PG-TRB / TRB-COMPUTER INSTRUCTOR / UG-TRB / SGT / BEO / DEO
SCERT/ DIET / TRB-ASST.PROF / TN-MAWS / TNEB / TNUSRB / TNPSC-VAO & JSO /
TRB POLYTECHNIC: ENGLISH / PHYSICS / CHEMISTRY / MATHS / COMPUTER SCIENCE / IT / ECE /
EEE / MOP / EIE / ICE / CIVIL / MECHANICAL AVAILABLE. TO CONTACT : 8072230063.

SRIMAAN
8072230063

**SRIMAAN COACHING CENTRE-TRICHY-TN-MAWS
PUBLIC HEALTH & SANITATION (SANITARY
INSPECTOR)- TO CONTACT: 8072230063.**

**2024-25
SRIMAAN**

Examples:

Houseflies carry the causative organisms of cholera on their legs and mouth parts from the faeces and sputum of infected persons to food and drinks and contaminate them. When this contaminated food is taken by a healthy person, he gets the infection. Similarly, mosquitoes carry virus of dengue and malarial parasite which causes malaria.

(ii) Air-borne : The pathogens may reach humans with air and dust. The epidemic typhus spreads by inhalation of dried faeces of infected fly.

(iii) Object borne (Fomite borne) : Many diseases are transmitted through the use of contaminated articles, such as clothes, utensils, toys, door handles, taps, syringes and surgical instruments.

(iv) Water borne : If potable water (drinking water) is contaminated with pathogens of diseases such as cholera, diarrhoea, hepatitis or jaundice, it reaches a healthy person upon consuming such water.

Pathogen : A living organism which causes a disease.

Parasite : An organism which gets food and shelter from host.

Host : The living body on or inside which the disease-producing organism takes shelter.

Infestation : Presence of a large number of parasitic organisms on the surface of body of the host or on the clothings.

Vector : It is an organism which harbours a pathogen and may pass it on to another person to cause a disease (Mosquitoes harbour malarial parasite and transmits it to humans).

Carrier : It is an organism which itself does not harbour the pathogen but physically transmits it to another person (Housefly is the carrier of cholera germs).

Reservoir : An organism which harbours pathogens in large numbers that do not cause any suffering to it.

Epidemic : Spreading of a disease among a large number of people causing a huge loss of life in the same place for some time e.g. plague.

Endemic : A disease which is regularly found among a particular group of people e.g. goitre, restricted to a certain locality or a country.

**MATERIALS: TET / PG-TRB / TRB-COMPUTER INSTRUCTOR / UG-TRB / SGT / BEO / DEO
SCERT/ DIET / TRB-ASST.PROF / TN-MAWS / TNEB / TNUSRB / TNPSC-VAO & JSO /
TRB POLYTECHNIC: ENGLISH/ PHYSICS / CHEMISTRY / MATHS / COMPUTER SCIENCE / IT / ECE /
EEE / MOP / EIE / ICE / CIVIL / MECHANICAL AVAILABLE. TO CONTACT : 8072230063.**

**SRIMAAN
8072230063**

STUDY MATERIALS AVAILABLE

TN-MAWS (MUNICIPAL ADMINISTRATION & WATER SUPPLY DEPARTMENT)-

PUBLIC HEALTH & SANITATION (SANITARY INSPECTOR)

FULL STUDY MATERIAL AVAILABLE.

TN-MAWS-TAMIL ELIGIBILITY TEST STUDY MATERIAL AVAILABLE.

TN-MAWS-GENERAL STUDIES STUDY MATERIAL AVAILABLE.

STUDY MATERIALS AVAILABLE

TN-MAWS

TN-MAWS (MUNICIPAL ADMINISTRATION & WATER SUPPLY DEPARTMENT)-

MECHANICAL ENGINEERING (DEGREE & DIPLOMA STANDARD)

FULL STUDY MATERIAL AVAILABLE.

DEGREE / DIPLOMA:

*** CIVIL / MECHANICAL / EEE / TOWN PLANNING / ARCHITECTURE/ PUBLIC HEALTH AND SANITATION STUDY MATERIALS WITH Q.BANK AVAILABLE.**

SRIMAAN COACHING CENTRE-TRICHY.

TO CONTACT:8072230063.

FOR MORE DETAILS:

<https://youtube.com/@srimaantetpgrbcoachingcen9477?si=InfiUGsMkH6aM8iZ>

TN-MAWS- (MUNICIPAL ADMINISTRATION & WATER SUPPLY DEPARTMENT)-CIVIL / MECHANICAL / ELECTRICAL / TOWN PLANNING / ARCHITECTURE/ PUBLIC HEALTH AND SANITATION STUDY MATERIALS WITH Q.BANK AVAILABLE.

**SRIMAAN COACHING CENTRE-TRICHY- TET/PG-TRB / UG-TRB
BEO/ DEO/TRB-POLY/ASST.PROF/TN-MAWS /TNEB /SCERT
STUDY MATERIALS AVAILABLE- CONTACT:8072230063.**

**2024-25
SRIMAAN**

**TN-MAWS-MUNICIPAL ADMINISTRATION & WATER SUPPLY
DEPARTMENT-(DEGREE & DIPLOMA) STUDY MATERIALS AVAILABLE.**

**TRB-ASSISTANT PROFESSORS IN GOVERNMENT ARTS AND SCIENCE
COLLEGES & COLLEGES OF EDUCATION STUDY MATERIALS AVAILABLE.**

UG-TRB MATERIALS

GRADUATE TEACHERS / BLOCK RESOURCE TEACHER EDUCATORS (BRTE) & SGT

- **UG TRB: TAMIL MATERIAL WITH QUESTION BANK.**
- **UG TRB: ENGLISH STUDY MATERIAL +Q. BANK.**
- **UG-TRB: MATHEMATICS MATERIAL WITH Q. BANK (E/M)**
- **UG TRB: PHYSICS MATERIAL WITH QUESTION BANK (E/M)**
- **UG TRB: CHEMISTRY MATERIAL + QUESTION BANK (E/M)**
- **UG TRB: HISTORY MATERIAL + Q.BANK (E/M)**
- **UG TRB: ZOOLOGY MATERIAL + QUESTION BANK (E/M)**
- **UG TRB: BOTANY MATERIAL +QUESTION BANK (T/M& E/M)**
- **UG TRB: GEOGRAPHY STUDY MATERIAL (E/M)**

**SCERT/DIET/GTTI (LECTURER) STUDY MATERIAL AVAILABLE.
TNPSC-(CESE)-JSO STUDY MATERIAL AVAILABLE.**

**TANGEDCO (TNEB)-(T/M & E/M)
ASSESSOR/ASSISTANT ENGINEER (A.E)/JUNIOR ASSISTANT (ACCOUNTS)**

**SRIMAAN COACHING CENTRE-TRICHY- TET/PG-TRB / UG-TRB
BEO/ DEO/TRB-POLY/ASST.PROF/TN-MAWS /TNEB /SCERT
STUDY MATERIALS AVAILABLE- CONTACT:8072230063.**

**2024-25
SRIMAAN**

PG-TRB MATERIALS

**PG-TRB: COMPUTER INSTRUCTOR-GRADE-I (NEW SYLLABUS)-
2024-2025 STUDY MATERIAL WITH Q.BANK AVAILABLE**

- **PG TRB: TAMIL STUDY MATERIAL +QUESTION BANK (T/M)**
- **PG TRB: ENGLISH MATERIAL WITH QUESTION BANK.**
- **PG-TRB: MATHEMATICS MATERIAL WITH Q.BANK (E/M)**
- **PG TRB: PHYSICS MATERIAL WITH QUESTION BANK (E/M)**
- **PG TRB: CHEMISTRY MATERIAL + QUESTION BANK (E/M)**
- **PG TRB: COMMERCE MATERIAL WITH Q.BANK (T/M)&(E/M)**
- **PG TRB:ECONOMICS MATERIAL+Q. BANK (T/M & E/M)**
- **PG TRB: HISTORY MATERIAL + Q. BANK (T/M & E/M)**
- **PG TRB: ZOOLOGY MATERIAL + QUESTION BANK (E/M)**
- **PG TRB: BOTANY MATERIAL +QUESTION BANK (T/M& E/M)**
- **PG TRB: GEOGRAPHY STUDY MATERIAL (E/M)**

**TNPSC-DEO (District Educational Officer(Group – I C Services)
(TAMIL & ENGLISH MEDIUM) STUDY MATERIAL AVAILABLE.**

**TRB-BEO (Block Educational Officer)
(TAMIL & ENGLISH MEDIUM) STUDY MATERIAL AVAILABLE.**

**TRB-POLYTECHNIC LECTURER-(NEW SYLLABUS)
STUDY MATERIALS AVAILABLE**

- **MATHEMATICS STUDY MATERIAL with Question Bank.**

**SRIMAAN COACHING CENTRE-TRICHY- TET/PG-TRB / UG-TRB
BEO/ DEO/TRB-POLY/ASST.PROF/TN-MAWS /TNEB /SCERT
STUDY MATERIALS AVAILABLE- CONTACT:8072230063.**

**2024-25
SRIMAAN**

- **ENGLISH STUDY MATERIAL with Question Bank.**
- **PHYSICS STUDY MATERIAL with Question Bank.**
- **CHEMISTRY STUDY MATERIAL with Question Bank.**
- **MODERN OFFICE PRACTICE STUDY MATERIAL with Q.B.**
- **COMPUTER SCIENCE STUDY MATERIAL with Question Bank.**
- **INFORMATION TECHNOLOGY STUDY MATERIAL with Q.Bank.**
- **ECE STUDY MATERIAL with Question Bank.**
- **EEE STUDY MATERIAL With Question Bank.**
- **MECHANICAL STUDY MATERIAL With Question Bank.**
- **CIVIL STUDY MATERIAL With Question Bank.**
- **EIE STUDY MATERIAL with Question Bank.**
- **ICE STUDY MATERIAL with Question Bank.**

10% Discount for all materials. Materials are sending through

COURIER.

TO CONTACT

8072230063

SRIMAAN