

BSS SYLLABUS

[BTS003] - BSS DIPLOMA IN MICROBIOLOGY - [ONE YEAR]				
1	PAPER 1	BTS003-01	COMMUNICATIVE ENGLISH AND COMPUTER FUNDAMENTALS	
2	PAPER 2	BTS003-02	ANATOMY & PHYSIOLOGY	
3	PAPER 3	BTS003-03	GENERAL MICROBIOLOGY & IMMUNOLOGY	
4	PAPER 4	BTS003-04	VITROLOGY, MICROBIOLOGY & PARASITROLOGY	
5	PAPER 5	BTS003-05	PRACTICAL - I	
6	PAPER 6	BTS003-06	PRACTICAL - II	
7	PAPER 7	BTS003-07	PRACTICAL - III	
8	PAPER 8	BTS003-08	PRACTICAL - IV	

[BTS003] - BSS DIPLOMA IN MICROBIOLOGY - [ONE YEAR]
[BTS003-01] - COMMUNICATIVE ENGLISH AND COMPUTER FUNDAMENTALS
<p>COMMUNICATIVE ENGLISH</p> <p>UNIT - I Communication – communication Process - verbal communication – Non – Verbal Communication – Pros & Cons of Communication – communicative English Exercises.</p> <p>UNIT - II Phonetics – Organs of Speech – Vowels – Spelling Areas – Diphthongs – Consonants – Stress – Word Accent – The Parts of Speech in English.</p> <p>UNIT - III Communicative grammar – Classification of Nouns and Their functions – Verbs – Symbols – Pronouns – Auxiliary Verbs – Articles – Use of the indefinite article – Use of the definite article – Tenses – Prepositions – Phrasal verbs and adverb particles – Verbs Patterns and structures.</p> <p>UNIT - IV Patterns of Sentences – Direct and indirect speech – Degrees of Comparison – Simple, Complex and compound sentences – Basics of Inter – personal skills – Basics of Body language.</p> <p>COMPUTER FUNDAMENTALS (MS-OFFICE)</p> <p>UNIT - V Windows Introduction – Operating System - Desk Top Icons – My Computer, Recycle Bin, Internet Explorer, Network Neighborhood, My documents. Working with Windows – How to create a Folder, Copying and cutting files, Renaming - Start Icon – Programs, Favorites, Documents, Settings, Find, Run, Shutdown - Application Icons.</p> <p>UNIT - VI An Introduction to Word – The word workspace, Starting and quitting Word, Creating and Manipulating various documents, Editing of proofing files, merging documents and macros. -How to use Mouse and Menu – Working with dialog box - Primary Commands in File Menu – The Open commands, The File name commands - The New Commands, The Save, Save As, and Save all commands, The Close command, The page setup, The Print commands, The exit commands.</p> <p>Edit Menu Commands – The Cut, Copy, and Paste commands, The Undo and Repeat Commands, Find and Replace commands- Format Commands – The view menu, the Insert menu, the tool menu, the table menu, the window menu.</p> <p>UNIT - VII Building a Simple Worksheet- Entering Text, Entering Values, Entering Dates and Times, Moving Around, Scolding Selecting Ranges, Using Menu, Using Tool Bar, Using Tool Bar, Using Shortcut Menus, Changing Entries, Copying Entries, Moving Entries, Inserting Deleting Cells - Formatting Basics – Changing Character Style, Changing Alignment, Changing Column width, Changing Row Height, Sheet Rename, Conditional Formatting,Auto Formatting.</p> <p>Working with Multiple Worksheet – copying entries between workbooks, Moving sheets work books, Deleting sheets, Quitting Excel- Opening Existing Workbooks – Simple calculations, Doing arithmetic, Totaling Column of values, Naming cells and Ranges.Formatting Text – Displaying dollars and cents, Formatting decimal places,Formatting dates, Copying style and formats, Formulas that Make Decisions – Using IF function, using the nested IF function, Copying formulas.</p> <p>Checking spelling, Printing Worksheets, Preview Worksheets, Goal seek, scenarios, Macro, Protection- Sorting data, Keeping leading view, Finding records, Adding and deleting records, Filtering records. Plotting charts, Sizing and moving charts, Updating charts, Changing the charts Type, Using auto format. Creating Macros, Recording Macros, Running Macros</p> <p>UNIT - VII Basics of Ms Office Tools, Ms Office Access, Ms Office Groove, Ms office one note, Ms Office outlook, Ms Office power point.</p>
[BTS003-02] - ANATOMY & PHYSIOLOGY

UNIT-1 Abbreviation- Meaning of the anatomy and physiology- Level of structural organization of the body- Anatomic terminologies- Body planes and sections- body cavities.

UNIT-2 Cell: plasma membrane,cytoplasm,organelles-Cell inclusion-Cells out of control- Tissue:epithelialtissue,glandularepithelium,connective tissue-Muscle tissue-Nervous tissue.

UNIT-3 The integumentary system-The skeleton system-The muscular system-The nervous system-The endocrine system

UNIT-4 The cardiovascular system-The respiratory system-The digestive system-The urinary system

Unit-5 Fluid and electrolyte balance-The reproductive system.

[BTS003-03] - GENERAL MICROBIOLOGY & IMMUNOLOGY

UNIT-1 MICROBIOLOGY

Introduction-Early notions of diseases,lontagion&containment-An invisible world-The birth microbiology-Microbiology toolbox-The science taxonomy-Evolving trees of life-The role of genetics in modern taxonomy

UNIT-2

Naming microbes-Prokaryotic Microorganisms-Eukaryotic microorganism-Protists-Fungi-Helminths-Viruses-Microbiology as a field of study-Bioethics in microbiology

UNIT-3

Interaction of light-Lenses &refraction-Electromagnetic Spectrum &color-Magnification,resolution& contrast-Instruments of microscopy-Differential interferences contrast microscopes-Staining microscopic specimens

UNIT-4

Principles of Vaccination Immunology and Vaccine-Preventable Diseases: Classification of Vaccines- General Recommendations on Immunization- Timing and Spacing of Vaccines-Adverse Reactions Following Vaccination-

UNIT-5

Contraindications and Precautions to Vaccination-Invalid Contraindications to Vaccination-Screening for Contraindications and Precautions to Vaccination: Immunization Strategies for Healthcare Practices and Providers- The Need for Strategies to Increase Immunization Levels

[BTS003-04] - VITROLOGY, MICROBIOLOGY & PARASITROLOGY

UNIT-1

Pathogens - Subcellular Infectious Entities-Prokaryotic and Eukaryotic Microorganisms-Bacteria- Fungi and Protozoa-Animals -Host-Pathogen Interactions- Basic Terminology of Infectiology-Determinants of Bacterial Pathogenicity and Virulence- Adhesion

UNIT-2

Invasion and Spread- Strategies against Nonspecific Immunity -Strategies against Specific Immunity-Clinical Disease- Regulation of Bacterial Virulence- The Genetics of Bacterial Pathogenicity-Defenses against Infection-

UNIT-3

Nonspecific Defense Mechanisms- Specific Defense Mechanisms- Defects in Immune Defenses-Normal Flora-Immune Defects - Immunoregulation-Immunostimulation- Immunosuppression -Adaptive Immunotherapy -Immunological Test Methods-Antigen and Antibody

UNIT-4

Agglutination Reaction- Complement Fixation Test (CFT)-Direct and Indirect Immunofluorescence-Radio immunological and Enzyme Immunological Tests-In-Vitro Cellular Immunity Reactions -Isolation of Lymphocytes-Lymphocyte Function Tests

UNIT-5

Parasitology: Protozoa -Trichomonasvaginalis - Trypanosome -Leishmania-Entamoeba histolytic - Naegleria, Acanthamoeba, and Balamuthia Toxoplasma gondii- Isospora - Cyclosporacayetanensis - Cryptosporidium -Plasmodium- Babesia- Microspora- Balantidium coli

[BTS003-05] - PRACTICAL - I

[BTS003-05]-PRACTICAL - I should be conducted based on PAPER 1

BSS RECORD NOTE must be utilized by the student to complete this Practical.

[BTS003-06] - PRACTICAL - II

[BTS003-06]-PRACTICAL - II should be conducted based on PAPER 2

BSS RECORD NOTE must be utilized by the student to complete this Practical.

[BTS003-07] - PRACTICAL - III

[BTS003-07]-PRACTICAL - III should be conducted based on PAPER 3

BSS RECORD NOTE must be utilized by the student to complete this Practical.

[BTS003-08] - PRACTICAL - IV

[BTS003-08]-PRACTICAL - IV should be conducted based on PAPER 4

BSS RECORD NOTE must be utilized by the student to complete this Practical.