

M.Sc. Immunology

KAHER's Dr. Prabhakar Kore Basic Science Research Center [BSRC]
J. N. Medical College, KLE Academy of Higher Education and Research, Belagavi

Duration: 2 years [4 Semesters]

Eligibility:

Candidates must have B.Sc (Honors) in Physiology, Zoology, Biochemistry, Biotechnology, and Microbiology or in any branches of Biology, along with Chemistry as a Pass subject, from any recognized University.

Proposed Intake of Students: 20

Proposed Syllabus:

M.Sc. Immunology

Semester I: 300 Marks		Semester II: 300 Marks		Semester III: 300 Marks		Semester IV: 300 Marks		Total Marks: 1200	
Theory	Practical	Theory	Practical	Theory	Practical	Theory	Practical	Theory	Practical
160	140	160	140	160	140	160	140	640	560

FIRST SEMESTER: 300 MARKS

Theory / Practical	Paper	Unit	Name	Marks	Lecture
THEORY	Paper – I	01	Basic Immunology	40	30L
		02	Cell & Molecular Biology	40	33L
	Paper – II	03	Stem Cell Immunology & Gene Therapy	40	21L
		04	Recombinant DNA Technology & Tissue Culture	40	20L
PRACTICAL (Research oriented experiments)	Paper – III	05	Basic Immunology, Cell & Molecular Biology.	70	20L
		06	Stem Cell Immunology & Gene Therapy, Tissue Culture, Recombinant DNA Technology	70	20L

SECOND SEMESTER: 300 MARKS

Theory / Practical	Paper	Unit	Name	Marks	Lecture
THEORY	Paper – IV	07	Clinical Immunology & Immuno-hematology Infection & Immunity	40	26L
		08		40	24L
	Paper – IV	09	Basic & Clinical Biochemistry Genomics & Proteomics	40	24L
		10		40	16L
PRACTICAL experiments)	Paper – VI	11	Clinical Immunology, Immuno-hematology and Infection & Immunity	70	20L
		12		70	20L

THIRD SEMESTER: 300 MARKS

Theory / Practical	Paper	Unit	Name	Marks	Lecture
THEORY	Paper – VII	13	Immuno-regulation & cytokines Advanced Immunology	40	20L
		14		40	25L
	Paper – VIII	15	Immunological Technique & Methodology (Instrumentation) Review Paper	40	24L
		16		40	24L
PRACTICAL	Paper – IX	17	Immuno-regulation & Cytokines and Advanced Immunology Enzymology and Instrumentation	70	20L
		18		70	20L

FOURTH SEMESTER: 300 MARKS

Theory / Practical	Paper	Unit	Name	Marks	Lecture
THEORY	Paper – X	19	Biostatistics & Computer Application in Biology	40	20L
	Paper – XI	20	Immunological Disease Management	40	20L
PRACTICAL	Paper – XII	21, 22	Biostatistics and Computer Application	80	20L

Unit: 23,24 – 100 Marks:

Project Work: Duration Six Months