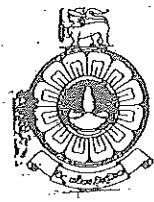


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THE OPEN UNIVERSITY OF SRI LANKA
FACULTY OF HEALTH SCIENCES
DEPARTMENT OF MEDICAL LABORATORY SCIENCES
ACADEMIC YEAR 2020/2021 – SEMESTER I



BACHELOR OF MEDICAL LABORATORY SCIENCES HONOURS

MDU5303 – IMMUNOLOGY & SEROLOGY

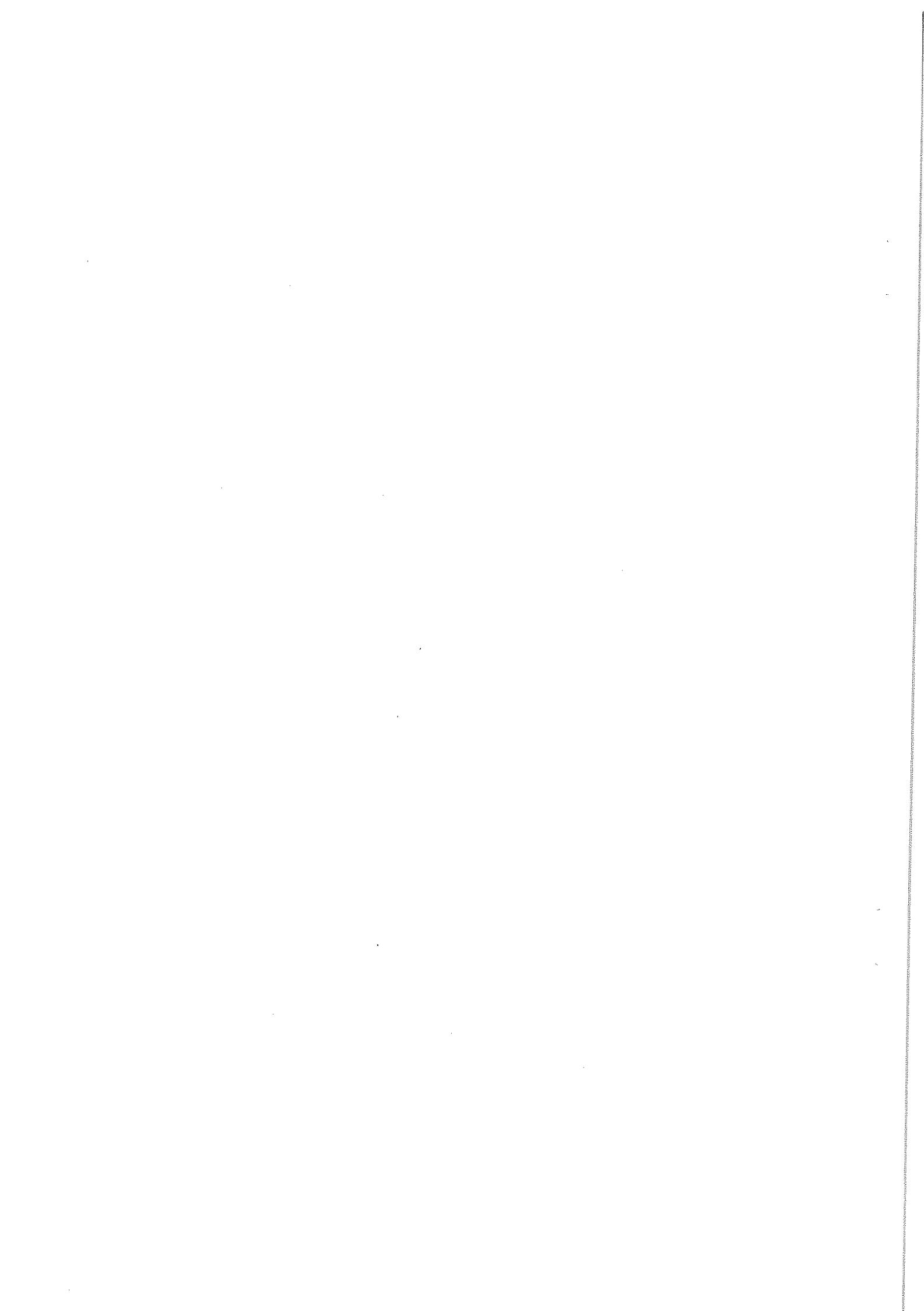
FINAL EXAMINATION

DURATION: THREE HOURS

DATE: 15th March 2022

TIME: 01.30 PM – 4.30 PM

INDEX NO:



Part B: Structured Essay Questions (40 Marks)**Q1** Hypersensitivity reactions causes harm to the host

1.1 Name the antibody isotype which mediates Type I hypersensitivity (01 Mark)

.....

1.2 Name the two (02) antibody isotypes which mediates Type II hypersensitivity (02 Marks)

(i).....

(ii).....

1.3 State three (03) ways that the antibodies could cause damage to host cells and tissues in type II hypersensitivity? (03 Marks)

(i).....

(ii).....

(iii).....

1.4 Briefly describe the hypersensitivity mechanism behind Rheumatic fever (04 Marks)

.....
.....
.....
.....
.....**Total- 10 Marks****Q2** Antigen and antibody reactions are useful in laboratory diagnosis of the diseases

2.1 What does a greater affinity constant indicate in an antigen and antibody reaction?

(02 Marks)

.....
.....

- 2.2 List two (02) types of immuno-diffusion that can be used in precipitation reactions to determine relative concentration or relative purity of antigen preparations (02 Marks)
- (i).....
- (ii).....
- 2.3 List three (03) different types of Enzyme linked immunosorbent assays (03 Marks)
- (i).....
- (ii).....
- (iii).....
- 2.4 Draw and label a diagram of indirect immunofluorescence (03 Marks)

Total- 10 Marks

Q3: Failures in T and B lymphocyte tolerance to self-antigens could result in autoimmunity

3.1 Where does the central tolerance of the following cells occur? (02 Marks)

T cells.....

B cells

3.2 List any four (04) mechanisms of peripheral tolerance in the human body (04 Marks)

- (i).....
- (ii).....
- (iii).....
- (iv).....

3.3 List four (04) mechanisms used by autoantibodies to cause autoimmune diseases

(04 Marks)

- (i).....
- (ii).....
- (iii).....
-
- (iv).....
-

Total- 10 Marks

Q4 Immunity is the host defence mechanism against foreign microorganisms

4.1 List two (02) functions of a lymph node (02 Marks)

- (i).....
- (ii).....
-

4.2 List three (03) purposes of inflammation (03 Marks)

- (i).....
- (ii).....
- (iii).....

4.3 List five (05) main stages of phagocytosis (05 Marks)

- (i).....
- (ii).....
- (iii).....
- (iv).....
- (v).....

Total- 10 Marks

Part C: Essay Questions (30 Marks)

1. Describe the mechanisms that the tumours use to avoid host immune responses. (15 Marks)
2. Describe five (05) functions of antibodies against foreign organisms in the host. (15 Marks)

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