FINAL EXAM
DECEMBER 2020

NATIONAL BOARD OF EXAMINATIONS

MICROBIOLOGY
PAPER-I

Time: 3 hours
Max. Marks:100

MICRO/D/20/18/I

Important Instructions:

- ***You are provided with 5 answer sheet booklets. Each individual answer sheet booklet consists of 10 pages excluding the covering jackets.***
- ***Answers to all the questions must be attempted within these 5 answer sheet booklets which must be later tagged together at the end of the exam.***
- ***No additional supplementary answer sheet booklet will be provided.***
- *Attempt all questions in order.*
- *Each question carries 10 marks.*
- *Read the question carefully and answer to the point neatly and legibly.*
- *Do not leave any blank pages between two answers.*
- *Indicate the question number correctly for the answer in the margin space.*
- *Answer all the parts of a single question together.*
- *Start the answer to a question on a fresh page or leave adequate space between two answers.*
- *Draw table/diagrams/flowcharts wherever appropriate.*

Write short notes on:

1.	Discuss properties of an ideal disinfectant. Describe testing for efficiency of disinfectant. Describe Spaulding's classification for devices used in Hospital setting.	3+4+3
2.	Define surgical site infections. Enumerate methods of diagnosis and prevention of Surgical Site Infections (SSIs).	2+(4+4)
3.	Antimicrobial peptides.	10
4.	Describe in brief the immunological mechanism of tissue damage in infection with special reference to COVID-19.	10
5.	Define immunity. Describe in brief about innate immunity in health and disease.	2+(4+4)
6.	Describe collection, segregation, storage & transport, treatment and disposal of biomedical waste in relation to a COVID-19 hospital.	2+2+2+2+2
7.	What are research ethics? Describe in brief ethics related to research on laboratory animals.	3+7
8.	State the principle of real time PCR. Name the methods of detection of amplification products. Mention the applications in clinical microbiology.	3+3+4
9.	Define quality assurance and quality control. What are the pre analytical and analytical factors that can affect quality of a bacteriology report?	3+7
10.	Preservation of microorganisms.	10

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POSSESSION/USE OF CELL PHONES OR ANY SUCH ELECTRONIC GADGETS IS NOT PERMITTED INSIDE THE EXAMINATION HALL.