

# National Board of Examinations

<b>Question Paper Name :</b>	DNB Microbiology Paper1
<b>Subject Name :</b>	DNB Microbiology Paper1
<b>Creation Date :</b>	2022-06-25 17:18:23
<b>Duration :</b>	180
<b>Share Answer Key With Delivery Engine :</b>	No
<b>Actual Answer Key :</b>	No

## DNB Microbiology Paper1

<b>Group Number :</b>	1
<b>Group Id :</b>	3271871123
<b>Group Maximum Duration :</b>	0
<b>Group Minimum Duration :</b>	180
<b>Show Attended Group? :</b>	No
<b>Edit Attended Group? :</b>	No
<b>Break time :</b>	0
<b>Group Marks :</b>	100
<b>Is this Group for Examiner? :</b>	No
<b>Examiner permission :</b>	Cant View
<b>Show Progress Bar? :</b>	No

## DNB Microbiology Paper1

<b>Section Id :</b>	3271871126
<b>Section Number :</b>	1

**Section type :** Offline  
**Mandatory or Optional :** Mandatory  
**Number of Questions to be attempted :** 10  
**Section Marks :** 100  
**Enable Mark as Answered Mark for Review and Clear Response :** Yes  
**Maximum Instruction Time :** 0  
**Sub-Section Number :** 1  
**Sub-Section Id :** 3271871130  
**Question Shuffling Allowed :** No

**Question Number : 1 Question Id : 32718710282 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Please write your answers in the answer booklet within the allotted pages as follows:-**

Question Number	Answer to be attempted within	Question Number	Answer to be attempted within
Q. 1	Page 1-5	Q. 6	Page 26-30
Q. 2	Page 6-10	Q. 7	Page 31-35
Q. 3	Page 11-15	Q. 8	Page 36-40
Q. 4	Page 16-20	Q. 9	Page 41-45
Q. 5	Page 21-25	Q. 10	Page 46-50

1. Enumerate the virulence factors in bacteria with examples and their role in pathogenicity in humans. [10]

**Question Number : 2 Question Id : 32718710283 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

- a) What are the components of innate immunity. [5]  
b) Describe the role of innate immunity in disease. [5]

**Question Number : 3 Question Id : 32718710284 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction**

**Time : 0**

- a) What are immunopotentiators and their role in vaccines. [5]
- b) State the principle of subunit vaccines along with their advantages and limitations. [5]

**Question Number : 4 Question Id : 32718710285 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Name various types of gene transfer and their role in drug resistance. [10]

**Question Number : 5 Question Id : 32718710286 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

- a) Define device associated infections and their significance. [2]
- b) Define Catheter associated urinary tract infections and approach to prevention. [3+5]

**Question Number : 6 Question Id : 32718710287 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

- a) What is the principle of MALDI-TOF and its role in the microbiology laboratory? [3]
- b) What are its advantages and limitations? [2]
- c) Cytokine storm. [5]

**Question Number : 7 Question Id : 32718710288 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

- a) What are the various methods of sequencing of microorganisms? [5]
- b) Describe their applications in clinical Microbiology. [5]

**Question Number : 8 Question Id : 32718710289 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Discuss the mechanism of Quorum sensing in bacteria and its significance. [6+4]

**Question Number : 9 Question Id : 32718710290 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Discuss the various modifications of BMW management in context of COVID-19 along with the basis for such modifications. [10]

**Question Number : 10 Question Id : 32718710291 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

- a) Define Endotoxins. How do they differ from Exotoxins? [5]
- b) Discuss the mechanism of action of endotoxins. [5]