## National Board of Examinations

Question Paper Name :DNB Microbiology Paper4Subject Name :DNB Microbiology Paper4Creation Date :2023-10-16 09:54:24Duration :180Share Answer Key With Delivery Engine :NoActual Answer Key :No

## **DNB Microbiology Paper4**

**Group Number:** 1 Group Id: 3271872527 **Group Maximum Duration:** 0 180 **Group Minimum Duration:** No **Show Attended Group?: Edit Attended Group?:** No **Group Marks:** 100 Is this Group for Examiner?: No **Examiner permission: Cant View Show Progress Bar?:** No

## **DNB Microbiology Paper4**

**Section Id:** 3271872530

Section Number: 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:** 3271872534

**Question Shuffling Allowed:** No

Is Section Default?: null

**Question Number: 1 Question Id: 32718725503 Question Type: SUBJECTIVE Consider As** 

Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction

Time: 0

**Correct Marks: 10** 

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. Describe various methods of sterilization and disinfection of reusable devices. [10]

Question Number: 2 Question Id: 32718725504 Question Type: SUBJECTIVE Consider As

Subjective: Yes Calculator: None Response Time: N.A Think Time: N.A Minimum Instruction

Time: 0

**Correct Marks: 10** 

Define zoonoses. Describe the environmental or epidemiological factors and biological characteristics of zoonotic organisms that promote the relevant diseases to achieve pandemic potential. [2+4+4]

Question Number: 3 Question Id: 32718725505 Question Type: SUBJECTIVE Consider As

Subjective: Yes Calculator: None Response Time: N.A Think Time: N.A Minimum Instruction

Time: 0

**Correct Marks: 10** 

Discuss one health approach to combat antimicrobial resistance. [10]

Question Number: 4 Question Id: 32718725506 Question Type: SUBJECTIVE Consider As

Subjective: Yes Calculator: None Response Time: N.A Think Time: N.A Minimum Instruction

Time: 0

**Correct Marks: 10** 

Outline the steps of investigating an outbreak. Describe the role of Microbiologist in investigating an outbreak. [5+5]

Question Number: 5 Question Id: 32718725507 Question Type: SUBJECTIVE Consider As

Subjective: Yes Calculator: None Response Time: N.A Think Time: N.A Minimum Instruction

Time: 0

**Correct Marks: 10** 

Define and enumerate microbial typing techniques. Describe the various genotypic techniques.

[(1+3)+6]

Question Number: 6 Question Id: 32718725508 Question Type: SUBJECTIVE Consider As

Subjective: Yes Calculator: None Response Time: N.A Think Time: N.A Minimum Instruction

Time: 0

**Correct Marks: 10** 

Compare and contrast the advantages and limitations of rapid viral antigen detection methods.

[10]

Question Number: 7 Question Id: 32718725509 Question Type: SUBJECTIVE Consider As

Subjective: Yes Calculator: None Response Time: N.A Think Time: N.A Minimum Instruction

Time: 0

**Correct Marks: 10** 

Describe the diagnostic components under Tuberculoiss Control Program. Outline salient differences between Revised National TB Control Program and National TB elimination programme. [5+5]

Question Number: 8 Question Id: 32718725510 Question Type: SUBJECTIVE Consider As

Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction

Time: 0

**Correct Marks: 10** 

Discuss use of nanotechnology in the diagnosis and management of infectious diseases. [10]

Question Number: 9 Question Id: 32718725511 Question Type: SUBJECTIVE Consider As

Subjective: Yes Calculator: None Response Time: N.A Think Time: N.A Minimum Instruction

Time: 0

**Correct Marks: 10** 

Write briefly about various biomarkers and describe their role in diagnosis of infectious disease. [10]

Question Number: 10 Question Id: 32718725512 Question Type: SUBJECTIVE Consider As

Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction

Time: 0

**Correct Marks: 10** 

a) Isothermal amplification techniques in Microbiology. [5]

b) Gnotobiotic animals. [5]