

# National Board of Examinations

**Question Paper Name :** DNB Pharmacology Paper4  
**Subject Name :** DNB Pharmacology Paper4  
**Duration :** 180  
**Total Marks :** 100  
**Display Marks:** No

**Maximum Instruction Time :** 0

**Question Number : 1 Question Id : 32718733044 Consider As Subjective : Yes**

**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 recent advances in the treatment of neoplastic diseases. [10]

**Question Number : 2 Question Id : 32718733045 Consider As Subjective : Yes**

Describe briefly future of drugs and the microbiome. [10]

**Question Number : 3 Question Id : 32718733046 Consider As Subjective : Yes**

What are various confounding factors in clinical trials? Briefly discuss the double-blind design. [10]

**Question Number : 4 Question Id : 32718733047 Consider As Subjective : Yes**

Discuss briefly the ethical considerations for clinical trials on vulnerable population with special reference to the Indian population. [10]

**Question Number : 5 Question Id : 32718733048 Consider As Subjective : Yes**

Discuss treatment options and recent development for treatment of infertility. [10]

**Question Number : 6 Question Id : 32718733049 Consider As Subjective : Yes**

What are the pros and cons of combining probiotics with antibiotic therapy? Discuss briefly the rationality/irrationality of the combinations available in the Indian market. [10]

**Question Number : 7 Question Id : 32718733050 Consider As Subjective : Yes**

Discuss the materiovigilance programme of India (MvPI) with suitable examples. [10]

**Question Number : 8 Question Id : 32718733051 Consider As Subjective : Yes**

Discuss the concept of organization of economic corporation, development guidelines and pre-clinical toxicity studies. [10]

**Question Number : 9 Question Id : 32718733052 Consider As Subjective : Yes**

Discuss the role of miRNA and siRNA in therapeutics. [10]

**Question Number : 10 Question Id : 32718733053 Consider As Subjective : Yes**

a) Nonadditive drugs of abuse. [5]

b) Drugs that bind to transporters of biogenic amines. [5]