

# National Board of Examinations

**Question Paper Name :** DNB Pathology Paper1  
**Subject Name :** DNB Pathology Paper1  
**Duration :** 180  
**Total Marks :** 100  
**Display Marks:** No

**Maximum Instruction Time :** 0

**Question Number : 1 Question Id : 32718738504 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. Before you start any research, it is important to have a well-built question. One way to construct a well-built question is to use the PICO model. What is the PICO model in clinical research? Explain with examples. [2+8]

**Question Number : 2 Question Id : 32718738505 Consider As Subjective : Yes**

What is protein misfolding disease? Give four examples. Describe the pathobiology of any one of the protein misfolding diseases. [2+4+4]

**Question Number : 3 Question Id : 32718738506 Consider As Subjective : Yes**

What is T-cell and macrophage crosstalk? Give an example of how this phenomenon works. [3+7]

**Question Number : 4 Question Id : 32718738507 Consider As Subjective : Yes**

- a) Pathological effects of free radicals. [5]
- b) Retinoblastoma gene. [5]

**Question Number : 5 Question Id : 32718738508 Consider As Subjective : Yes**

- a) Describe Type II hypersensitivity with examples. [5]
- b) What is central tolerance and what is its role in autoimmune disease? [5]

**Question Number : 6 Question Id : 32718738509 Consider As Subjective : Yes**

- a) What are hepatotropic viruses and why are they hepatotropic? [2+2]
- b) Explain the genomic structure of the Hepatitis B virus and explain how different components control host genes. [6]

**Question Number : 7 Question Id : 32718738510 Consider As Subjective : Yes**

What is graft-versus-host disease? Explain the pathophysiological differences of graft-versus-host disease and post-transplant rejection. [3+7]

**Question Number : 8 Question Id : 32718738511 Consider As Subjective : Yes**

What are epigenetic disorders? Explain the role of epigenetic disorders in carcinogenesis with examples. [3+7]

**Question Number : 9 Question Id : 32718738512 Consider As Subjective : Yes**

- a) Radiation induced systemic changes. [5]
- b) Chemokines in inflammation. [5]

**Question Number : 10 Question Id : 32718738513 Consider As Subjective : Yes**

- a) Trinucleotide repeat diseases. [5]
- b) Toll-like receptors. [5]