## National Board of Examinations

Question Paper Name :DNB Biochemistry Paper3Subject Name :DNB Biochemistry Paper3Creation Date :2021-08-26 19:33:51Duration :180Total Marks :100Display Marks:No

## **DNB Biochemistry Paper3**

**Group Number:** 1 Group Id: 327187229 **Group Maximum Duration:** 0 180 **Group Minimum Duration:** No **Show Attended Group?: Edit Attended Group?:** No Break time: 0 100 **Group Marks:** Is this Group for Examiner?: No

## **DNB Biochemistry Paper3**

**Section Id:** 327187232

Section Number: 1

Section type: Offline

Mandatory or Optional: Mandatory

Number of Questions: 10

Number of Questions to be attempted: 10

Section Marks: 100

**Enable Mark as Answered Mark for Review and** 

**Clear Response:** 

Yes

Sub-Section Number: 1

**Sub-Section Id:** 327187236

**Question Shuffling Allowed:** No

Question Number: 1 Question Id: 327187810 Question Type: SUBJECTIVE

**Correct Marks: 10** 

a) What are oncogenes and mechanism of oncogene activation? [5]

b) Write briefly about genetic testing of familial cancers. [5]

Question Number: 2 Question Id: 327187811 Question Type: SUBJECTIVE

**Correct Marks: 10** 

a) What are different types of hypersensitivity reactions? [5]

b) Explain the mechanism of delayed type hypersensitivity with illustration. [5]

Question Number: 3 Question Id: 327187812 Question Type: SUBJECTIVE

**Correct Marks: 10** 

Enumerate distinguishing features of Genomics, Proteomics and Bioinformatics. [10]

Question Number: 4 Question Id: 327187813 Question Type: SUBJECTIVE

**Correct Marks: 10** 

a) Explain the steps and molecules that catalyse mRNA splicing. [5]

b) How errors or changes in synthesis, processing, splicing, stability or function of mRNA

transcripts cause diseases? [5]

Question Number: 5 Question Id: 327187814 Question Type: SUBJECTIVE

## **Correct Marks: 10**

- a) Discuss the salient features of autoimmune disorders. [4]
- b) Explain the mechanisms involved in generating autoimmunity. [4]
- c) Name one autoimmune disease and related defect in the same. [2]

**Question Number: 6 Question Id: 327187815 Question Type: SUBJECTIVE** 

**Correct Marks: 10** 

- a) Chromosome walking. [5]
- b) RFLP and its application. [5]

Question Number: 7 Question Id: 327187816 Question Type: SUBJECTIVE

**Correct Marks: 10** 

- a) Mechanisms by which cancer cells can develop drug resistance. [5]
- b) The concepts of genomic instability, aneuploidy and angiogenesis in tumours. [5]

**Question Number: 8 Question Id: 327187817 Question Type: SUBJECTIVE** 

**Correct Marks: 10** 

Outline the key differences between:

- a) Polyclonal and monoclonal antibodies. [5]
- b) Allotype and idiotype. [5]

Question Number: 9 Question Id: 327187818 Question Type: SUBJECTIVE

**Correct Marks: 10** 

Briefly discuss growth factors and growth factor receptors in carcinogenesis. [5+5]

**Question Number: 10 Question Id: 327187819 Question Type: SUBJECTIVE** 

**Correct Marks: 10** 

Compare and contrast stem cells and cancer cells. [10]