## **National Board of Examinations**

**Question Paper Name: DrNB Medical Genetics Paper3 Subject Name: DrNB Medical Genetics Paper3 Creation Date:** 2022-06-25 17:21:23 **Duration:** 180 **Share Answer Key With Delivery Engine:** Nο **Actual Answer Key:** No

## **DrNB Medical Genetics Paper3**

**Group Number:** 1 Group Id: 3271871206 **Group Maximum Duration:** 0 180 **Group Minimum Duration: Show Attended Group?:** No **Edit Attended Group?:** No Break time: 0 100 **Group Marks:** Is this Group for Examiner?: No **Examiner permission: Cant View Show Progress Bar?:** No

## **DrNB Medical Genetics Paper3**

Section Id: 3271871209

**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** 

Yes Clear Response:

**Maximum Instruction Time:** 0

Sub-Section Number: 1

**Sub-Section Id:** 3271871213

**Question Shuffling Allowed:** No

Question Number: 1 Question Id: 32718711112 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. Explain and discuss the possibility of a three parent baby. [10]

Question Number: 2 Question Id: 32718711113 Question Type: SUBJECTIVE Consider As

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

Time: 0

a) Discuss the role of liquid biopsy in cancers. [5]

b) Describe non-invasive prenatal diagnosis for monogenic disorders. [5]

Question Number: 3 Question Id: 32718711114 Question Type: SUBJECTIVE Consider As

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

Time: 0

Question Number: 4 Question Id: 32718711115 Question Type: SUBJECTIVE Consider As

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

Time: 0

Describe briefly preimplantation genetic screening and diagnosis. [5+5]

Question Number : 5 Question Id : 32718711116 Question Type : SUBJECTIVE Consider As

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

Time: 0

What are the different strategies for therapeutic genome editing. List the associated challenges?

[7+3]

Question Number: 6 Question Id: 32718711117 Question Type: SUBJECTIVE Consider As

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

Time: 0

Describe the diffrent treatment strategies of spinal muscular atrophy. [10]

Question Number: 7 Question Id: 32718711118 Question Type: SUBJECTIVE Consider As

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

Time: 0

Define Repurposing. Give two examples to explain it. [5+5]

Question Number: 8 Question Id: 32718711119 Question Type: SUBJECTIVE Consider As

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

Time: 0

Discuss cascade screening and presymptomatic screening with examples. Describe feasibility and challenges on implementing carrier screening in India in NGS era. [6+4]

Question Number : 9 Question Id : 32718711120 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction

## Time: 0

Discuss briefly RNA sequencing and its applications. [4+6]

**Question Number: 10 Question Id: 32718711121 Question Type: SUBJECTIVE Consider As** 

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

Time: 0

Enumerate advances in the management of skeletal dysplasias. [10]