

National Board of Examinations

Question Paper Name :	DrNB Medical Genetics Paper3
Subject Name :	DrNB Medical Genetics Paper3
Creation Date :	2023-10-15 15:58:38
Duration :	180
Share Answer Key With Delivery Engine :	No
Actual Answer Key :	No

DrNB Medical Genetics Paper3

Group Number :	1
Group Id :	327187791
Group Maximum Duration :	0
Group Minimum Duration :	180
Show Attended Group? :	No
Edit Attended Group? :	No
Group Marks :	100
Is this Group for Examiner? :	No
Examiner permission :	Cant View
Show Progress Bar? :	No

DrNB Medical Genetics Paper3

Section Id :	327187794
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 :	327187798
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Number : 1 Question Id : 3271876992 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. Outline characteristics of "Newborn Screening Tests" and discuss its advantages. Justify as to why India needs Newborn Screening Program. Discuss it in the light of economic evaluation and impact outcome of such a program. [4+3+3]

Question Number : 2 Question Id : 3271876993 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 10

What is the key concept of 'Population Genetics'? How does it differ from 'Community Genetics'? Explain how Community Genetics can be implemented in our Public health. [3+3+4]

Question Number : 3 Question Id : 3271876994 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 the emerging role of Telemedicine and Telehealth in clinical genetic services in recent times. Describe challenges and disadvantages of the same. [7+3]

Question Number : 4 Question Id : 3271876995 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 a note on CRISPR Gene Editing. Lists important recent practical applications of this technique. Mention its pitfalls. [4+3+3]

Question Number : 5 Question Id : 3271876996 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 10

What do you understand by 'Single Cell Genomics'? Describe the technologies, challenges and its applications in Medical Genetics. [5+(1+1+3)]

Question Number : 6 Question Id : 3271876997 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 10

Role of genetics and genetic testing in 'Assisted Reproductive Technology' (ART). Mention two genetic disorders related to ART. [(4+4)+2]

Question Number : 7 Question Id : 3271876998 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction

Time : 0

Correct Marks : 10

How will you approach tribals for Genetic Research and Services? What do you understand by 'Community Engagement'? [5+5]

Question Number : 8 Question Id : 3271876999 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 a brief note on recent advances in 'Genetics of Epilepsy'. Describe the role of a clinical geneticist and the challenges faced in genetic counselling in a family diagnosed with inherited epilepsy giving an example. [6+4]

Question Number : 9 Question Id : 3271877000 Question Type : SUBJECTIVE Consider As

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

Time : 0

Correct Marks : 10

What are complex traits? Discuss your approach to Complex Traits Genomics. [3+7]

Question Number : 10 Question Id : 3271877001 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 approaches and challenges in detection, genetic counselling and management of mitochondrial disorders - both prenatal and postnatal. [4+6]