## **National Board of Examinations**

Question Paper Name :DNB Forensic Medicine Paper1Subject Name :DNB Forensic Medicine Paper1Creation Date :2023-10-15 14:11:55Duration :180Share Answer Key With Delivery Engine :NoActual Answer Key :No

## **DNB Forensic Medicine Paper1**

**Group Number:** 1 Group Id: 3271872498 **Group Maximum Duration:** 0 180 **Group Minimum Duration: Show Attended Group?:** Nο **Edit Attended Group?:** No 100 **Group Marks:** Is this Group for Examiner?: No **Examiner permission: Cant View Show Progress Bar?:** No

## **DNB Forensic Medicine Paper1**

**Section Id:** 3271872501

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:** 3271872505

**Question Shuffling Allowed:** No

Is Section Default?: null

Question Number: 1 Question Id: 32718725213 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. A tragic incident of deaths of a number of neonates in a NICU of a private nursing home due to faulty oxygen supply was reported.
- a) Describe the various structures of the brain in a coronal section through the mamillo-thalamic tract. [3]
- b) Mention the parts of the brain most suitable for seeking histo-pathological changes in such cases. [3]
- c) What are the gross and histo-pathological changes that you will expect to find at autopsy? [4]

Question Number : 2 Question Id : 32718725214 Question Type : SUBJECTIVE Consider As

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

Time: 0

**Correct Marks: 10** 

Explain the term asphyxiophilia. Discuss the psychosocial physiological basis, cause and manner of

death and autopsy findings in these cases. [4+6]

Question Number: 3 Question Id: 32718725215 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 pathophysiology, gross and microscopic autopsy findings and biochemical markers of

DIC. Discuss the pathological features of maternal death from HELLP syndrome. [6+4]

Question Number: 4 Question Id: 32718725216 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 various criteria's and infrastructure requirement for the various Biosafety levels (BSL)

as per International guidelines. Name the bio-hazardous agents for different Biosafety levels. How

will you create an autopsy room to undertake COVID like cases? [4+2+4]

Question Number: 5 Question Id: 32718725217 Question Type: SUBJECTIVE Consider As

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

Time: 0

**Correct Marks: 10** 

a) 3<sup>rd</sup> generation sequencing in criminal investigations. [5]

b) Ewing's postulates. [5]

Question Number: 6 Question Id: 32718725218 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 various methods of dental age estimation in the living. Discuss why the Demirjian method is considered as gold standard in DAE. [5+5]

Question Number: 7 Question Id: 32718725219 Question Type: SUBJECTIVE Consider As

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

Time: 0

**Correct Marks: 10** 

Vitreous humor is the ideal sample for various postmortem biochemical analysis:

- a) Explain why the above statement is true by giving examples. [5]
- b) Discuss the use of vitreous humor chemistry in estimating time since death. [5]

Question Number: 8 Question Id: 32718725220 Question Type: SUBJECTIVE Consider As

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

Time: 0

**Correct Marks: 10** 

An adult woman was brought to the hospital with prolonged history of grass pea consumption followed by acute onset spastic paralysis:

- a) Identify the condition given in the clinical scenario. [1]
- b) What is the causative agent and toxin involved and its mechanism of action? [3]
- c) Write down the signs and symptoms, prevention, diagnosis and management of the case. [6]

Question Number: 9 Question Id: 32718725221 Question Type: SUBJECTIVE Consider As

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

Time: 0

**Correct Marks: 10** 

- a) Give your commentary on the evolution of Forensic radiology from X-rays to deep learning methods for death investigation. [5]
- b) Describe the radiological methods of Greulich-Pyle method and Tanner and Whitehouse methods of bone age estimation. [5]

Question Number: 10 Question Id: 32718725222 Question Type: SUBJECTIVE Consider As

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

Time: 0

**Correct Marks: 10** 

Critically analyze the method of psychological autopsy in criminal investigations. Briefly discuss the role of criminal psychology and criminal profiling. [5+5]