

# National Board of Examinations

<b>Question Paper Name :</b>	DrNB Neonatology Paper1
<b>Subject Name :</b>	DrNB Neonatology Paper1
<b>Creation Date :</b>	2023-10-15 14:11:59
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## DrNB Neonatology Paper1

<b>Group Number :</b>	1
<b>Group Id :</b>	327187768
<b>Group Maximum Duration :</b>	0
<b>Group Minimum Duration :</b>	180
<b>Show Attended Group? :</b>	No
<b>Edit Attended Group? :</b>	No
<b>Group Marks :</b>	100
<b>Is this Group for Examiner? :</b>	No
<b>Examiner permission :</b>	Cant View
<b>Show Progress Bar? :</b>	No

## DrNB Neonatology Paper1

<b>Section Id :</b>	327187771
<b>Section Number :</b>	1
<b>Section type :</b>	Offline

<b>Mandatory or Optional :</b>	Mandatory
<b>Number of Questions to be attempted :</b>	10
<b>Section Marks :</b>	100
<b>Enable Mark as Answered Mark for Review and Clear Response :</b>	Yes
<b>Maximum Instruction Time :</b>	0
<b>Sub-Section Number :</b>	1
<b>Sub-Section Id :</b>	327187775
<b>Question Shuffling Allowed :</b>	No
<b>Is Section Default? :</b>	null

**Question Number : 1 Question Id : 32718721073 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) What is the target range of SpO<sub>2</sub> as per NRP algorithm 2020? [2]
- b) What should be the initial FiO<sub>2</sub> for the resuscitation in term and preterm neonates at different gestation? [2]
- c) Describe as to how resuscitation with 100% oxygen affects the neonatal outcome. [6]

**Question Number : 2 Question Id : 32718721074 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) Describe components of critical appraisal checklist for diagnostic studies. [5]

b) Non parametric tests. [5]

**Question Number : 3 Question Id : 32718721075 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) Enumerate factors affecting gut microbiota and describe the risk factors for necrotising enterocolitis. [5]

b) Critically analyse the evidence for or against therapeutic use of probiotics in the management of necrotising enterocolitis. [5]

**Question Number : 4 Question Id : 32718721076 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) Describe various biomarkers available for diagnosis of neonatal sepsis. [5]

b) Tabulate the advantages and disadvantages of each of the biomarker. [5]

**Question Number : 5 Question Id : 32718721077 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) Describe components of verbal autopsy as per WHO death audit tool for neonatal death. [5]

b) Describe the pros and cons of SpO<sub>2</sub> screening for critical congenital heart disease. [5]

**Question Number : 6 Question Id : 32718721078 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) Illustrate diagrammatically the developmental handicaps of preterm brain. [4]

b) Describe clinical manifestations of insult to the preterm brain during the neonatal period and enumerate its long term consequences. [3+3]

**Question Number : 7 Question Id : 32718721079 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) Enumerate critical events and timelines during fetal cardiac development predisposing to structural congenital heart defects. [5]

b) Critically appraise the utility of Near Infrared Spectroscopy (NIRS) in Neonatology. [5]

**Question Number : 8 Question Id : 32718721080 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) Enumerate the different types of triggering devices used in neonatal mechanical ventilators and with pros and cons of each. [5]

b) Describe the pulmonary graphics and critically analyse the utility of these in optimizing ventilatory settings. [5]

**Question Number : 9 Question Id : 32718721081 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) Describe the infrastructure, human resource, equipment and capacity building required for operationalising Newborn Stabilisation Units (NBSU). [1+1+2+2]

b) Enumerate the admission criteria in NBSU and discuss utility of NBSU in neonatal public health system. [1+3]

**Question Number : 10 Question Id : 32718721082 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) Describe the ergonomics and role of human factors in neonatal resuscitation. [4]
- b) Map the process flow of ILCOR neonatal group for reaching the 'Consensus on Science and Treatment Recommendations'. [6]