

# National Board of Examinations

<b>Question Paper Name :</b>	DNB Biochemistry Paper2
<b>Subject Name :</b>	DNB Biochemistry Paper2
<b>Creation Date :</b>	2024-10-18 15:26:26
<b>Duration :</b>	180
<b>Total Marks :</b>	100
<b>Display Marks:</b>	No
<b>Share Answer Key With Delivery Engine :</b>	No
<b>Actual Answer Key :</b>	No

## DNB Biochemistry Paper2

<b>Group Number :</b>	1
<b>Group Id :</b>	3271872705
<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>Break time :</b>	0
<b>Group Marks :</b>	100

## DNB Biochemistry Paper2

<b>Section Id :</b>	3271872708
<b>Section Number :</b>	1
<b>Section type :</b>	Offline
<b>Mandatory or Optional :</b>	Mandatory
<b>Number of Questions :</b>	10
<b>Number of Questions to be attempted :</b>	10
<b>Section Marks :</b>	100
<b>Maximum Instruction Time :</b>	0
<b>Sub-Section Number :</b>	1
<b>Sub-Section Id :</b>	3271872712
<b>Question Shuffling Allowed :</b>	No

**Question Number : 1 Question Id : 32718734314 Question Type : SUBJECTIVE Consider As Subjective : Yes**

**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. Define dyslipoproteinemias. What are Frederickson classification of dyslipoproteinemias? Add a note on novel monoclonal antibody for treatment as hypolipidemic drug. [10]

**Question Number : 2 Question Id : 32718734315 Question Type : SUBJECTIVE Consider As Subjective : Yes**

**Correct Marks : 10**

Explain anaplerotic role of TCA cycle. Describe role of vitamins and minerals required for TCA cycle. Justify that the fat is burnt on the wick of carbohydrates. [10]

**Question Number : 3 Question Id : 32718734316 Question Type : SUBJECTIVE Consider As Subjective : Yes**

**Correct Marks : 10**

What are inborn errors of metabolism (IEM)? Discuss about biochemical test in laboratory for screening and role of tandem mass spectrometry for diagnosis of IEM diseases. [10]

**Question Number : 4 Question Id : 32718734317 Question Type : SUBJECTIVE Consider As Subjective : Yes**

**Correct Marks : 10**

Describe oxidative phosphorylation and substrate level phosphorylation. What are uncouplers and inhibitors of electron transport chain? [10]

**Question Number : 5 Question Id : 32718734318 Question Type : SUBJECTIVE Consider As Subjective : Yes**

**Correct Marks : 10**

Describe hormones of hunger and satiety. Explain regulation of eating behavior of humans. [10]

**Question Number : 6 Question Id : 32718734319 Question Type : SUBJECTIVE Consider As Subjective : Yes**

**Correct Marks : 10**

Describe the pathway of gluconeogenesis from glycerol and alanine. How are glycolysis and gluconeogenesis regulated reciprocally? [10]

**Question Number : 7 Question Id : 32718734320 Question Type : SUBJECTIVE Consider As Subjective : Yes**

**Correct Marks : 10**

Describe biochemical basis of complications of diabetes mellitus and its lab biomarker parameters in blood and urine. What is continuous glucose monitoring (CGM)? [10]

**Question Number : 8 Question Id : 32718734321 Question Type : SUBJECTIVE Consider As Subjective : Yes**

**Correct Marks : 10**

What is protein quality and how protein quality is assessed? [10]

**Question Number : 9 Question Id : 32718734322 Question Type : SUBJECTIVE Consider As Subjective : Yes**

**Correct Marks : 10**

What is methyl Folate trap? Explain biochemical basis of B<sub>12</sub> and folic acid for prevention of neural tube defect. [10]

**Question Number : 10 Question Id : 32718734323 Question Type : SUBJECTIVE Consider As Subjective : Yes**

**Correct Marks : 10**

a) Excess vitamin C causes stone formation. [5]

b) GIK (Glucose insulin potassium) therapy used for diabetic ketoacidosis. [5]