National Board of Examinations

| Question Paper Name : | DNB Physiology Paper |
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| Subject Name : | DNB Physiology Paper2 |

Duration: 180
Total Marks: 100
Display Marks: No

Maximum Instruction Time: 0

Question Number: 1 Question Id: 32718733714 Consider As Subjective: Yes

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. Describe mechanism, clinical features and physiological basis of prevention and treatment of erythroblastosis fetalis. [3+3+4]

Question Number: 2 Question Id: 32718733715 Consider As Subjective: Yes

Discuss and compare the effects of bronchial asthma and pulmonary fibrosis on lung mechanics and lung functions. [5+5]

Question Number: 3 Question Id: 32718733716 Consider As Subjective: Yes

Describe the various types of motility patterns observed in gastrointestinal tract. Add a note on Achalasia cardia. [8+2]

Question Number: 4 Question Id: 32718733717 Consider As Subjective: Yes

- a) Urinary buffers. [3]
- b) Thalassemia. [3]
- c) Pulse wave analysis. [4]

Question Number: 5 Question Id: 32718733718 Consider As Subjective: Yes

Discuss the physiological basis of the circulatory dynamics in compensated and decompensated heart failure. Add a note on mechanism of action of cardiotonic drugs. [(4+4)+2]

Question Number: 6 Question Id: 32718733719 Consider As Subjective: Yes

Compare and contrast:

- a) Cardiovascular responses in isometric and isotonic exercise. [4]
- b) Static and dynamic lung compliance. [3]
- c) Hypoxic and histotoxic hypoxia. [3]

Question Number: 7 Question Id: 32718733720 Consider As Subjective: Yes

- a) Discuss the physiological basis of growth and development. [6]
- b) Draw a normal growth chart in humans and explain the various phases. [4]

Question Number: 8 Question Id: 32718733721 Consider As Subjective: Yes

Describe briefly the physio-clinical significance of:

- a) Reticulocyte response. [3]
- b) Baroreflex sensitivity. [3]
- c) Gut brain axis. [4]

Question Number: 9 Question Id: 32718733722 Consider As Subjective: Yes

- a) Discuss the role of kidney in regulating the acid base balance. [8]
- b) What is anion gap? [2]

Question Number: 10 Question Id: 32718733723 Consider As Subjective: Yes

- a) Autologous transfusion. [4]
- b) Interstitial cells of Cajal. [3]
- c) Activated plasma thromboplastin time. [3]