

Nov. 2012

**BLDE UNIVERSITY**

**PRE – PH.D COURSE WORK EXAMINATION**

**Paper II : Background Paper (Physiology)**

**QP CODE – 6004**

**Duration : 1 ½ Hrs**

**Max Marks : 50**

**I. Answer the following**

**5x2= 10 Marks.**

1. Hemophilia : Definition, Types, causes and treatment .
2. Dyspnoea : Definition and causes.
3. Blood Indices : Definition and Normal values.
4. Dead space air : Definition , Normal values and Importance.
5. Polycythemia : Definition, types and causes.

**II. Answer ANY FOUR of the following**

**4X5=20 Marks.**

6. Lung Surfactant : Definition, Source, Chemical nature, mode of action and applied aspect.
7. Discuss the effects of dust exposure on pulmonary functions in an individual .
8. T Lymphocyte.
9. Reticulo Endothelial system: Definition and functions.
10. Platelet : Morphology, functions and applied aspect.

**III. Answer ANY TWO of the following  
Marks.**

**2X10=20**

11. What is the principle for recording a normal ECG.

Describe various waves and intervals of normal ECG in lead II and its clinical implications.

12. Discuss the effects of occupation particulate exposure on hematologic and ANS health of an individual.
13. Define the terms and give normal values for Systolic BP, Diastolic BP, Pulse Pressure and Mean Arterial BP. Add a note on indirect method of measurement of arterial B.P.

Nov. 2012

**BLDE UNIVERSITY**

**PRE – PH.D COURSE WORK EXAMINATION**

**Paper II : Background Paper (Physiology)**

**QP CODE - 6005**

**Duration : 1 ½ Hrs**

**Max Marks : 50**

**I. Answer the following**

**5 x 2 = 10 Marks**

1. What is syndrome X?
2. What is Wolff – Chaikoff effect?
3. What is vasopressin escape?
4. What is Bartter syndrome?
5. What is Aldosterone escape?

**II. Answer ANY FOUR of the following**

**4 x 5 = 20 Marks**

6. Calbindin D protein.
7. Venous return.
8. 'G' protein dysfunctions.
9. Cyclic AMP
10. Tubular functions of kidney.

**III. Answer ANY TWO of the following**

**2 x 10 = 20 Marks**

11. Discuss the regulation of Acid – base balance in our body.  
Add a note on metabolic acidosis. (7+3)
12. What are the theories of aging? Discuss how you can prevent aging? (5+5)
13. Discuss the homoeostasis of blood glucose. Add a note on hypoglycaemia. (7+3)

Nov. 2012

**BLDE UNIVERSITY**

**PRE – PH.D COURSE WORK EXAMINATION**

**Paper II : Background Paper (Physiology)**

**QP CODE - 6006**

**Duration : 1 ½ Hrs**

**Max Marks : 50**

**I. Answer the following**

**5 x 2 = 10 Marks**

1. Cardiac reserve.
2. End diastolic volume.
3. Critical closing pressure.
4. Bernoulli's principle.
5. Bowditch phenomenon.

**II. Answer ANY FOUR of the following**

**4 x 5 = 20 Marks**

6. Test tube baby.
7. Viagra (Sildenafil).
8. Foetoplacental unit.
9. Sex determination - methods.
10. Erythropoietin.

**III. Answer ANY TWO of the following**

**2 x 10 = 20 Marks**

11. Discuss the physiology of menstrual cycle. Add a note on LH surge. (7+3)
12. Discuss the pregnancy changes in women. Add a note on Immunological test for pregnancy. (7+3)
13. Discuss the integrated regulation of blood pressure. Add a note on atherosclerosis. (7+3)

Nov-2012

**BLDE UNIVERSITY**

**PRE – PH.D COURSE WORK EXAMINATION**

**Paper II : Background Paper (Physiology)**

**QP CODE – 6003**

**Duration : 1 ½ Hrs**

**Max Marks : 50**

**I. Answer the following**

**5x2= 10 Marks.**

1. Composition of Semen.
2. Functions of Testis.
3. Milk Ejection reflex.
4. Blood Testis barrier: Components and Significance.
5. Enumerate the hormones acting on breast tissue.

**II. Answer ANY FOUR of the following**

**4X5=20 Marks.**

6. Abnormal spermatogenesis.
7. Discuss the effects of Estrogen on development of primary and secondary sexual characteristics.
8. Abnormal conditions that cause female sterility.
9. Second Messenger system.
10. Hypothalamo-Hypophyseal-portal system.

**III. Answer ANY TWO of the following**

**2X10=20 Marks**

11. Explain the monthly ovarian cycle. Add a note on tests to detect ovulation.
12. Discuss the effects of extract of black seeds on reproductive system in male rats.
13. Define spermatogenesis . Enumerate the stages of spermatogenesis. Discuss the factors affecting it.

NOV. 2012

**BLDE UNIVERSITY**

**PRE – PH.D COURSE WORK EXAMINATION**

**Paper II : Background Paper (Physiology)**

**QP CODE - 6002**

**Duration : 1 ½ Hrs**

**Max Marks : 50**

**I Answer the following**

**5x2= 10 Marks.**

1. Purpura: Definition and Types.
2. List the hormones that maintain normal blood glucose level.
3. Enumerate thyroid function tests.
4. Latent Tetany : Definition and tests to detect it.
5. Ejection fraction.

**II. Answer ANY FOUR of the following**

**4x5=20 Marks.**

6. Non-enzymatic antioxidants.
7. Hyperlipidemia and Dyslipidemia.
8. Describe the functions of Renin-Angiotensin -Aldosterone axis.
9. Hormone Replacement therapy: Uses and Disadvantages.
10. Postpartum Anaemia.

**III. Answer ANY TWO of the following**

**2x10=20 Marks.**

11. Explain the mechanism that links cardiovascular disease to Insulin resistance in Diabetes Mellitus.
12. Discuss the uses of ECG in clinical Medicine .
13. What is Menopause. Discuss various physiological and metabolic changes that occur in a post menopausal woman.