BLDE (DEEMED TO BE UNIVERSITY)

Duration: 1 ½ Hrs.   **Max Marks: 50**

Pre – Ph.D. Course Work Examination

Paper II: BACKGROUND PAPER (Biochemistry)

QP CODE - 6016

I. Answer ANY TWO of the following   **2 x 10 = 20 Marks**

1. Write in brief about growth factor receptor pathways

2. Write in brief about Quantitative RT-PCR technique

3. What is the role of angiogenesis in breast cancer development and metastasis?

II. Answer ANY FOUR of the following   **4 x 5 = 20 Marks**

4. Open biopsy

5. Epigenetic alterations in Breast Cancer

6. ERR Pathway

7. Describe in brief about mechanism altering miRNA expression in Breast Cancer

8. Write in brief about IHC technique

III. Answer the following   **5 x 2 = 10 Marks**

9. Ionizing radiation

10. Mammography

11. BRCA1 and BRCA2

12. TNM staging system for breast cancer

13. HER-2

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Pre – Ph.D. Course Work Examination

Paper II: BACKGROUND PAPER (Biochemistry)

QP CODE - 6016

I. **Answer ANY TWO of the following**   **2 x 10 = 20 Marks**

1. Write in detail about recent advances in molecular diagnostics.

2. Explain in detail about the role of hepcidin in iron metabolism

3. What is ELISA? Explain Different types of ELISA with principle, and applications.

II. **Answer ANY FOUR of the following**   **4 x 5 = 20 Marks**

4. Cognitive impairment in iron overload

5. Intracellular iron trafficking and transportation.

6. Signs and symptoms of Beta Thalassemia

7. Heme catabolism

8. Reelin Gene

III. **Answer the following**   **5 x 2 = 10 Marks**

9. What is bilirubin?

10. What are antioxidants? Give two examples.

11. What is MDA? Name the method for its estimation.

12. What is importance of MAO?

13. What are hemoglobinopathies?