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**B.Sc. IN MEDICAL LABORATORY  
TECHNOLOGY (BMLT)**

**Term-End Examination**

**December, 2017**

**BAHI-010 : APPLIED HAEMATOLOGY**

*Time : 3 hours*

*Maximum Marks : 70*

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*Note : Attempt any six questions. Q.No. 9 is compulsory.*

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Answer any five (5) questions of the following :

5x8=40

1. Explain extrinsic and intrinsic mechanism of Coagulation ? Describe recent trends and advances of automation in estimation of Coagulation profile. 5+3
2. Discuss Sickling phenomenon. How do you demonstrate in vitro the presence of Sickle cells in Sickle cell anemia ? 3+5
3. Define Hb - electrophoresis. Describe the role of Hb - electrophoresis in haemoglobinopathies. 3+5
4. Explain Pearl's reaction. Describe the principle, procedure and clinical importance of over loading of haemosidrin in bone marrow. 3+5

5. Define Leukemia and Leukemoid reaction. 3+5  
Describe the principle, procedure and technique of 'Giemsa' staining of bone marrow smears.
6. Enumerate haemorrhagic disorders. How will you investigate in the laboratory? Mention the tests to be performed to rule out the diseases. 3+2<sup>1</sup>/<sub>2</sub>+2<sup>1</sup>/<sub>2</sub>
7. Enumerate the tests done for HDN (Haemorrhagic Diseases of Newborn). Describe the principle, procedure of alkali denaturation test for HbF. 3+5
8. Define Osmotic Fragility test. Describe principle, procedure and clinical importance of fragility test of RBC's. 3+5
9. Write short notes on **any five (5)** of the following : 5x6=30
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|------------------------------|---|
| (a) Thalassemia major        | 6 |
| (b) Allergic purpura         | 6 |
| (c) Haemostasis              | 6 |
| (d) Reticulocyte Count       | 6 |
| (e) Platelet Count           | 6 |
| (f) Tart Cell and L.E. Cell  | 6 |
| (g) HLA - typing             | 6 |
| (h) Prothrombin time and INR | 6 |
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