

**QP Code:101501**

**Reg.No.:.....**

**D.M. (Cardiology) Degree Examinations - July 2014**

**Paper I – Basic Sciences**

**Time: 3 hrs**

**Max marks:100**

- ***Answer all questions***
- ***Draw diagrams wherever necessary***

**Essay:**

**(20)**

1. Discuss the molecular basis of cardiac action potential. Explain the etiopathogenesis of channelopathies.

**Short essays:**

**(8x10=80)**

2. Embryological development of inter atrial septum and its clinical significance
3. What is Ficks principle. How do you determine cardiac output by Fick method
4. Describe the neuro hormonal changes in chronic heart failure
5. Describe the coagulation pathway and indicate where the anticoagulants interfere
6. What is triangle of Koch's. Explain its importance
7. Apoptosis and autophagy
8. Classify TAPVC(total anomalous pulmonary venous connection)
9. Micro volt T wave alternans.

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