

**PG Degree Examinations in Microbiology (MD) - May 2013**

**Paper I- General Microbiology and Immunology**

**Time: 3 hrs**

**Max marks:100**

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

**Essays:**

**(20)**

1. Define autoimmunity . What are the various mechanisms of auto immunity.  
Mention briefly on systemic auto immune diseases.

**Short essays:**

**(10x8=80)**

2. Pathogenesis and diagnosis of Type III immune complex diseases.
3. Define cytokines. List them and describe its roles in immunological , inflammatory and reparative host responses.
4. Define major histocompatibility complex. Elaborate on its various chromosome coded proteins and HLA typing .
5. Define primary and secondary lymphoid organs. Discuss in detail the role played by each one of them.
6. What are the various genetic mechanisms by which drug resistance is transmitted in bacteria.
7. Define the role of biochemical reactions and fermentation reactions in identification of bacteria.
8. Classify various methods of moist heat sterilization and explain each.
9. Discuss in detail bacterial flagellar structure and its application in microbiology.

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