

**Q.P. Code: 205001**

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

**Second Professional MBBS Degree Regular/Supplementary  
Examinations February 2020**

**Microbiology - Paper I**

**Time: 2 Hours**

**Total Marks: 40**

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

**Essay:**

**(10)**

1. A 4 years child presented with history of fever, neck rigidity and altered sensorium for the last 48 hours. He was admitted in the hospital for evaluation. CSF was collected and examined for cell morphology, protein and sugar. Answer the following:

- What is the probable diagnosis.
- Name the bacterial etiologic agents causing this condition.
- How will you proceed with the lab. diagnosis.
- What are the virulence factors associated with this and describe the pathogenesis
- What measures can you take to prevent this condition. (1+2+3+3+1)

**Short essay:**

**(2x5=10)**

2. Type I hypersensitivity.
3. Compare and contrast active and passive immunity.

**Short notes:**

**(10x2=20)**

4. Koch's postulates.
5. Clinical applications of autoclave.
6. Enrichment media.
7. Plasmid and its importance in drug resistance.
8. Immunofluorescence.
9. Phagocytosis.
10. Weil's disease.
11. Widal test.
12. Enumerate at least four differences between streptococcus pneumoniae and streptococcus viridians.
13. Give two examples of live attenuated vaccines.

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