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FACULTY OF SCIENCE,

DEPARTMENT OF MICROBIOLOGY,

2016/2017 HARMATTAN SEMESTER EXAMINATION

MCB 311: PATHOGENIC BACTERIOLOGY

INSTRUCTIONS: ANSWER ANY THREE QUESTIONS.

TIME: 1HR. 30 MINS.

- 1a. State how you would distinguish between *Neisseria gonorrhoeae* and *Neisseria meningitidis* using sugar fermentation only.
- 1b. How would you transport specimen from a gonorrhea subject in Ijebu- Ode to Ago Iwoye.
- 1c. Mention one broth and Agar that can be used for isolating the organism in 1b.
- 1d. State five reasons why *Neisseria gonorrhoeae* can easily evade the immune system
2. A man attended the special clinic of the Olabisi Onabanjo University with a two month history of three painless sores on the right thigh. He gave a history of casual sexual encounter with a woman at night party organized by NAMS. On examination, three crusted sores on the right thigh and the scar of a freshly healed lesion at the base of his penis was observed. Laboratory investigation revealed the etiological agent as an intracellular parasite.
- a. State the possible causative agent of the infection
- b. Mention four possible ways of diagnosing the infection *4 ways mo*
- c. State three subspecies of the organism
- d. Why is the organism called an obligate intracellular parasite?
- 3a. With five examples, what do you understand by virulence factor of bacteria
- 3b. How would you determine if a bacterium is the etiological agent of a disease?
- 4a. Itemise the steps involved in the development of a disease. *1) Accumulation
(2) Aggregation
(3) Juxta Plan*
- 4b. Discuss the factors on which the susceptibility of host to bacterial infection depend? *1) Relocation
(2) manifestation
(3) manifestation*