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BTECH
(SEM II) THEORY EXAMINATION 2021-22
REMEDIAL BIOLOGY-II

Time: 3 Hours**Total Marks: 100****Notes:**

- Attempt all Sections and Assume any missing data.
- Appropriate marks are allotted to each question, answer accordingly.

| SECTION-A | Attempt ALL of the following Questions in brief | Marks(10X2=20) | CO | BL |
|-----------|---|----------------|-----|----|
| Q1(a) | Give four differences between Gram=+Ve and Gram –ve bacteria? | | CO1 | K1 |
| Q1(b) | Differentiate between prokaryotes and Eukaryotes on the basis of their cell wall? | | CO2 | K1 |
| Q1(c) | Define catabolic reaction? | | CO3 | K1 |
| Q1(d) | What is the role of ATP Synthase in oxidative phosphorylation? | | CO4 | K1 |
| Q1(e) | Give two names of sexually transmitted diseases ? | | CO5 | K1 |
| Q1(f) | What is the significance algae in industries ? | | CO1 | K1 |
| Q1(g) | What is the role of peptidoglycan layer in cell? | | CO2 | K1 |
| Q1(h) | Define Lipid and protein metabolism in short? | | CO3 | K1 |
| Q1(i) | Define Aerobic respiration? | | CO4 | K1 |
| Q1(j) | What is infertility? | | CO5 | K1 |

| SECTION-B | Attempt ANY THREE of the following Questions | Marks(3X10=30) | CO | BL |
|-----------|---|----------------|-----|----|
| Q2(a) | Describe the history of microbiology in detail? | | CO1 | K1 |
| Q2(b) | Explain the functional anatomy of Prokaryotes in detail with diagram? | | CO2 | K1 |
| Q2(c) | Explain Lipid metabolism in detail? | | CO3 | K1 |
| Q2(d) | Briefly describe the mechanism of oxidative phosphorylation? | | CO4 | K1 |
| Q2(e) | What is the Significance Immunology in the field of biology? | | CO5 | K1 |

| SECTION-C | Attempt ANY ONE following Question | Marks (1X10=10) | CO | BL |
|-----------|--|-----------------|-----|----|
| Q3(a) | Discuss the role of Microorganism in the production of industrial chemicals and pharmaceuticals? | | CO1 | K1 |
| Q3(b) | Write a short note on Algae and Protozoa? | | CO1 | |

| SECTION-C | Attempt ANY ONE following Question | Marks (1X10=10) | CO | BL |
|-----------|--|-----------------|-----|----|
| Q4(a) | Explain the functional anatomy of eukaryotic cells in detail with diagram? | | CO2 | K1 |
| Q4(b) | Briefly differentiate between Eukaryotic cells Prokaryotic cell? | | CO2 | K1 |

| SECTION-C | Attempt ANY ONE following Question | Marks (1X10=10) | CO | BL |
|-----------|--|-----------------|-----|----|
| Q5(a) | What are Anabolic and catabolic reactions? Explain protein catabolism in detail. | | CO3 | K1 |
| Q5(b) | Explain carbohydrate metabolism in detail? | | CO3 | K1 |

| SECTION-C | Attempt ANY ONE following Question | Marks (1X10=10) | CO | BL |
|-----------|---|-----------------|-----|----|
| Q6(a) | Explain glycolysis in detail with suitable Flowchart? | | CO4 | K1 |
| Q6(b) | Describe briefly the Electron Transport System in detail with suitable diagram? | | CO4 | K1 |

| SECTION-C | Attempt ANY ONE following Question | Marks (1X10=10) | CO | BL |
|-----------|---|-----------------|-----|----|
| Q7(a) | What do you mean by population and birth control? Why reproductive health is important for human welfare? | | CO5 | K1 |
| Q7(b) | Describe Cancer and AIDS in detail? | | CO5 | K1 |