|          | <b>RAMAKRISHNA MISSION VIDYAMANDIRA</b><br>(Residential Autonomous College affiliated to University of Calcutta)  |                |
|----------|---|----------------|
|          | FIRST YEAR [2017-20]<br>B.A. /B.Sc. SECOND SEMESTER (January – June) 2018<br>Mid-Semester Examination, March 2018 |                |
| Date : 1 | 6/03/2018 MICROBIOLOGY (General)  |                |
| Time : 1 | 1am – 12noonPaper: II   | Full Marks: 25 |
| Answer   | the following questions:  |                |
| 1. a)    | How does the building block of DNA differ from that of RNA? Mention with structure                                | (3)            |
| b)       | Schematically represent the control point of glycolysis.  | (3)            |
| c)       | Write down the importance of ED pathway and pentose phosphate pathway.  | (1.5 + 1.5)    |
| 2. a)    | What is the difference between soil horizon and soil profile?   | (4)            |
| b)       | Write a short note on soil organic matter (SOM)   | (4)            |
| 3. a)    | Why is moist heat more effective than dry heat for the destruction of microorganisms?                             | (2)            |
| b)       | Define thermal death time and decimal reduction time.   | (1 + 1)        |
| c)       | Why methyl alcohol is not generally employed during removal of microorganisms?                                    | (2)            |
| d)       | What is biofilm? Name one biofilm producing microorganism.  | (1+1)          |
|          | ×   |                |

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