| QP Code: 303020 |                            | Reg. No   | Reg. No |  |
|-----------------|----------------------------|---|---------|--|
|                 | Third Year B.Sc. Me        | dical Biochemistry Examinations October 2017                          |         |  |
|                 |                            | Metabolism III  |         |  |
| Tin             | ne: 3 Hours                | Total Marks: 80 Answer all questions Draw diagrams wherever necessary |         |  |
| Es              | say                        | (2x15=30)   |         |  |
| 1.              | Discuss the various DNA    | repair defects. Add a note on the different DNA repair                |         |  |
|                 | mechanisms.                | (8+7)   |         |  |
| 2.              | Describe in detail the ste | os of denovo synthesis of pyrimidines, enzymes, regulation &          |         |  |
|                 | the associated inborn err  | ors. (6+3+3+3   | 3)      |  |
| Short Essay     |                            | (2x10=20)   |         |  |
| 3.              | Structure of DNA.          |   |         |  |
| 4.              | Post transcriptional modi  | ications.   |         |  |
| Short Answers   |                            | (4x5=20)  |         |  |
| 5.              | Salvage pathway of purir   | es.   |         |  |
| 6.              | Gene switching             |   |         |  |
| 7.              | Southern blotting.         |   |         |  |
| 8.              | Mutations                  |   |         |  |
| Со              | mment on                   | (5x2=10)  |         |  |
| 9.              | Transgenics                |   |         |  |
| 10              | ). Nucleosome.             |   |         |  |
| 11              | .Okazaki fragment.         |   |         |  |
| 12              | . Sickle cell anaemia.     |   |         |  |
| 13              | B. Reverse transcriptase   |   |         |  |
|                 |                            | ******  |         |  |