

**M. SC. (MICROBIOLOGY) SEM-II (C.B.C.S.) (2012 COURSE) :
SUMMER - 2018**

SUBJECT: ELECTIVE I : PHYSIOLOGY & METABOLISM

Day: **Thursday**
Date: **19/04/2018**

S-2018-0910

Time: **03.00 PM TO 06.00 PM**
Max Marks. 60

N.B.

- 1) All questions are **COMPULSORY**
 - 2) Figures to the **RIGHT** indicate full marks.
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Q.1 Justify: "Nuclear Magnetic Resonance (NMR) as an important tool in Biochemistry Research". (15)

OR

Q.1 Describe briefly the biosynthesis of phospholipids in bacteria. (15)

Q.2 Answer the following

- a) Describe briefly structure of hemoglobin and its role in oxygen transport in body. (10)
- b) Describe regulation of enzyme activity with reference to feed back control. (05)

Q.3 Attempt any **THREE** of the following (15)

- a) Give brief account of Haemoglobin variants.
- b) Describe briefly the thyroid hormones & their action.
- c) Give brief account of amino acids related to citric acid cycle.
- d) Give an account of Endocrine glands and their secretion.

Q.4 Write short notes on any **THREE** of the following (15)

- a) Bile salts
- b) Signal transduction
- c) Fat soluble vitamins
- d) Mechanism of muscle contraction

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