# **BBCS-183**

# **ASSIGNMENT BOOKLET**

# Bachelor (Honours) Degree in BIOCHEMISTRY (BSCBCH)

# **TOOLS AND TECHNIQUES IN BIOCHEMISTRY**

Valid from 1<sup>st</sup> January, 2025 to 31<sup>st</sup> December, 2025

Last date for the assignment submission is on or before 31<sup>st</sup> December, 2025.



School of Sciences Indira Gandhi National Open University Maidan Garhi, New Delhi-110068 Dear learners,

Please read the section on assignments in the Programme Guide of B.Sc. (Hons.) Biochemistry (BSCBCH) that we sent you after your enrolment. A weightage of 30 percent, as you are aware, has been earmarked for continuous evaluation, **which would consist of one tutor-marked assignment** for this course. The total marks of assignment is 50, of which 35% are needed to pass it.

#### SPECIFIC INSTRUCTIONS FOR TUTOR MARKED ASSIGNMENTS (TMA)

- 1) Write your Enrolment Number, Name, Full Address, Signature and Date on the top right-hand corner of the first page of your response sheet.
- 2) Write the Programme Title, Course Code, Course Title, Assignment Code and Name of your Study Centre on the left-hand corner of the first page of your response sheet.

### Course Code and Assignment Code may be reproduced from the assignment.

The top of the first page of your response sheet should look like this:

#### ENROLMENT NO.:

PROGRAMME TITLE	:	NAME:
COURSE CODE	:	ADDRESS:
COURSE TITLE	:	
ASSIGNMENT CODE	:	SIGNATURE:
STUDY CENTRE	:	DATE:

## PLEASE FOLLOW THE ABOVE FORMAT STRICTLY TO FACILITATE EVALUATION AND TO AVOID DELAY.

- 3) Use only foolscap size writing paper (but not of very thin variety) for writing your answers.
- 4) Leave 4 cm margin on the left, top and bottom of your answer sheet.
- 5) Your answers should be precise.

- 6) Solve questions of the assignment, and submit the complete assignment answersheets within the due date.
- 7) The assignment answer sheets are to be submitted to your Study Centre within the due date.
- 8) Answer sheets received after the due date shall not be accepted.
- 9) We strongly suggest that you retain a copy of your answer sheets.
- 10) **This assignment is valid from 1<sup>st</sup> January, 2025 to 31<sup>st</sup> December, 2025**. If you have failed in this assignment or fail to submit it by 31<sup>st</sup> December, 2026, then you need to get the assignment for the year 2024, and submit it as per the instructions given in the Programme Guide.
- 11) You cannot fill the exam form for this course till you have submitted this assignment.

We wish you good luck!

# **Assignment** Tools and Techniques in Biochemistry

#### Course Code: BBCS-183 Assignment code: BBCS-183/TMA/2025 Maximum marks: 50

Note: Attempt all questions. The marks for each question are indicated against it. Write all answers in your own words.

1.	a)	Discuss the principle and basic points of Good Laboratory Practice (GLP)	5
	b)	Explain why glassware cleaning is important in biochemistry laboratory.	5
2.	De	escribe the different types of pipettes and their use.	
3.	a)	Write the principle and basic components of pH meter.	5
	b)	Define the molarity. How would you prepare 100 mL solution of 0.5 M NaOH	5
4.	a)	Draw a schematic diagram of spectrophotometer and enlist the basic components of it.	5
	b)	What is Lowry method? Write its reaction with suitable example.	5
5.	Des	scribe the objectives and applications of virtual lab.	10