# B.A. / B.Sc. PART I EXAMINATION, 2020 FAKIR CHAND COLLEGE CENTRE (551)

# **INSTRUCTIONS FOR CANDIDATES**

# READ ALL THE INSTRUCTIONS CAREFULLY BEFORE WRITING ANSWERS

- 1. Total TIME OF EXAMINATION: 2 HOURS
- 2. <u>Candidates Have To Prepare A Single pdf File By Scanning Clearly And Serially</u>
  (According To Page Numbers).
- 3. ATTACH THE UNIVERSITY REGISTRATION CERTIFICATE As The Last Page Of The pdf File
- 4. Use Only WHITE PLAIN A4 PAPERS For Writing Answers
- 5. Use **ONLY BLACK INK** For Writing Your Answers
- 6. Give A TOP PAGE With Clear Mention Of University REGISTRATION NO.
- 7. GIVE PAGE NO. At The Top Right/Middle Of Each Page
- 8. Give AT LEAST 1CM MARGINS In All The Four Sides Of Each Page

#### 2020

# B.A. /B.Sc. Part I Examination University of Calcutta CHEMISTRY – HONOURS

Paper : IIB F.M. 50

## **FAKIR CHAND COLLEGE CENTRE(551)**

## Answer ANY TEN questions.

5x10

- 1. Write short notes on Borax bead test.
- 2. Write the confirmatory test for the detection of phosphate ion and the reactions involved therein.
- 3. Write the confirmatory test for the detection of borate ion and the reactions involved therein.
- 4. Write the confirmatory test for the detection of sulphate ion and the reactions involved therein.
- 5. Write the principle of oxidative fusion test for detection of Cr(III) ion.
- 6. Write the confirmatory test for the detection of Cobalt(II) ion in Group III B.
- 7. State the flame colour observed when the paste of conc. HCl with the following basic radicals are introduced in the Bunsen burner flame:
  - i) Sodium ion
  - ii) Potassium ion
  - iii) Barium ion
- 8. Write the confirmatory test for the detection of Copper (II) ion and write the reactions involved therein.
- 9. How can you differentiate between a nitrate and a nitrite ion by qualitative analysis?
- 10. Name the group reagents involved in the qualitative analysis of Group IIIA radicals. Write the confirmatory test for the detection of Fe(III) ion.
- 11. Write the principle of oxidative fusion test for detection of Mn(II) ion.
- 12. Write the confirmatory test for the detection of Nickel (II) ion and write the reactions involved therein.