

2021
B.A./B.Sc. Semester IV Honours Examination
University of Calcutta
CHEMISTRY
Paper CC8
PRACTICAL
F.M. 30

FAKIR CHAND COLLEGE CENTRE (551)

[Use A4 pages and black ink only for writing answers. Write Roll number and Registration number at the top and page number at the bottom of each page. Scan the current admit card and upload in a single pdf file along with the answer script]

1. 4-Amino benzaldehyde has been supplied you as a known sample. Write the method of preparation of Lassaigne's solution and identification test of nitrogen. Discuss identification test of two functional groups present in the molecule. 3+1+3+3

2. Answer all the questions: 2x10=20
 - a) Distinguish β -naphthol and benzoic acid by solubility test.
 - b) Write the chemical formula of sodium nitroprusside. Which special element is detected by this reagent?
 - c) Write Mulliken-Barker test for the detection of nitro group.
 - d) What is Brady's reagent? Write its use to detect functional group.
 - e) What happens when benzamide is heated with sodalime? Write chemical equation.
 - f) Write chemical equation when neutral FeCl_3 solution is added to phenol.
 - g) Write diazo coupling reaction of aniline.
 - h) During Lassaigne's test of an organic compound on addition of FeSO_4 gives black precipitate. What conclusion can be drawn?
 - i) What happens when alcoholic solution of benzoic acid is added to saturated sodium bicarbonate solution? Write the complete chemical equation of the reaction.
 - j) How aromatic nitro group can be identified in presence of $-\text{CHO}$ group?