

ACTIVITY CODE: 1903027031

B.Sc. 6th Semester (Honours) Practical Examination, October 2020

Subject: Chemistry

Course ID: 61422

Course Code: UG/CHEM/602/C-14

Course Title: Physical Chemistry-IV(C-14)(PR)

Full Marks: 10

Time: 45 Minutes

*The figures in the margin indicate full marks.
Candidates are required to give their answers in their own words
as far as possible.*

1. Answer any one of the following questions: 10×1 = 10
- i) Write down the working formula for determination of surface tension of an unknown liquid by drop volume method. Discuss the procedure for such determination by varying concentration. Present the calculation and the result with proper unit. 2+4+3+1=10
- ii) Write down the working formula for determination of molar extinction coefficient of a given sample. Discuss the procedure for such determination. Present the calculation and result with proper unit. 2+4+3+1=10
- iii) Write down the working formula for determination of critical micellar concentration (CMC) of a given surfactant spectrophotometrically. Discuss the procedure for such determination using crystal violet as colour solution. Show how you obtain the CMC value. 3+5+2=10