

**Inter B. Sc. Examination, 2018**

**(2<sup>nd</sup> Semester)**

**CHEMISTRY (HONOURS)**

**Organic Chemistry Practical**

Time: Six hours on one day, three hours on the other day

Full marks: 30

1. Prepare the organic compound (to be marked as "P") according to the following procedure and submit the crude and crystallized products. 12
2. Estimate the total amount of aniline present in the supplied sample marked "E" using bromate-bromide method. 15
3. Laboratory Note Book. 03

**Procedure for Organic Preparation**

Take the supplied organic compound "A" with 8mL of "B" in a dry 100mL conical flask, stir for a while and cool it in ice-salt bath to 5°C. Prepare a mixture of 1mL of "B" and 2mL of "C" in a dry test tube and cool it to 5°C. Add the aforesaid ice-cold mixture of "B" and "C" slowly (in drops) to the mixture of "A" in "B" (prepared in the conical flask) with constant stirring and maintain the temperature of the reaction mixture around 10-15°C. After complete addition, keep the reaction mixture at about 15-20°C for further 5 minutes. Then add the cold reaction mixture slowly dropwise with vigorous stirring to the crushed ice taken in a 250/500mL beaker. Allow the entire ice to melt and filter the solid product using water suction pump. Wash it thoroughly twice with little amount of cold water followed by cold 5% sodium bicarbonate solution (2 X 20 mL). Wash the solid again thoroughly with little amount of cold water, dry on a steam bath using a little amount of rectified spirit and record the yield of the product "P". Crystallize a small amount of "P" from rectified spirit and check its melting point. Submit both the crude and the crystallised products in duly labelled containers.