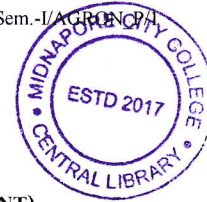


**M.SC. SEMESTER-I EXAMINATION, 2023
(AGRICULTURE) IN AGRONOMY**

PAPER: AGRON 503
(PRACTICAL)

(PRINCIPLES AND PRACTICES OF WATER MANAGEMENT)



Full Marks: 30

Time: 3 Hours

Answer the questions from the following:

1.
 - A. Calculate the amount of atrazine need in Maize (50% WP) in kg/ha, if rate of application is 2 kg a.i./ha.
 - B. Calculate the volume of Pendimethalin (30%) for 13000 m² wheat field if, if application rate is 1.2 kg ai/ha.
 - C. Calculate the amount of Round Up and volume of water for the application of Glyphosate 4 l SL @ 2.0 kg a.i./ha. The optimum volume of water for spray is 500 l/ha. Find out if Zoomer is used (Glyphosate+Oxyfluorfen) @ 2 g/l water, the amount is needed for 1 ha land. 1+1+3

2. Calculate weed control efficiency and weed index in rice crop from the following data:
 - A. Dry weight of grasses, sedges and broad leaf weeds at 70 DAS is 9, 4 and 1.5 g/m², respectively in butachlor treatment.
 - B. Dry weight of grasses, sedges and broad leaf weeds at 70 DAS is 28, 10 and 60 g/m², respectively in weedy condition.
 - C. Grain yield of rice in Butachlor treatment = 3.5 t/ha
 - D. Grain yield of rice in weed free condition = 4.2 t/ha 5

3. Identification of the following samples. 5
4. Laboratory note book. 5
5. Viva-voce. 10
