

2. (a) Draw *divided proportional circles* to show the land use pattern of the given Blocks of Jalpaiguri District on the basis of the following data :

<b>Name of Block</b>	<b>Irrigated Area in Sq. km.</b>	<b>Unirrigated Area in Sq. km.</b>	<b>Culturable Waste in Sq. km.</b>	<b>Area not Available for Cultivation in Sq. km.</b>
RAJGANJ	3,927	5,948	7,031	11,069
MAL	2,164	2,099	3,293	5,620
KALCHINI	5,833	9,367	8,154	7,796

2/a Calculation Table for Divided proportional circles

SL. No.	Name of the Blocks	Total Area (in Sq. Km)	$r = \sqrt{\frac{\text{Total Area}}{\pi}}$	r in Scale 1cm $\equiv$ 60 UNIT	Individual Degree Value			
					Irrigated Area	Unirrigated Area	Culturable Area	Area not available
1.	Rajganj	27975	94.3648	1.572	50° 32'	76° 32'	90° 29'	142° 27'
2.	Mal	13176	64.7614	1.079	59° 7'	57° 21'	89° 53'	153° 54'
3.	Kalchini	31150	99.5758	1.659	67° 25'	108° 15'	94° 14'	90° 6'

Calculation Table for graphical Scale Example

SL. No.	Total Area (in Sq. Km)	$r = \sqrt{\frac{\text{Total Area}}{\pi}}$	r in Scale 1cm $\equiv$ 60 UNIT
1.	32000	100.925	1.682
2.	22500	84.628	1.410
3.	13000	64.327	1.072

$$i) \pi r^2 = \text{Total Area}$$

$$r^2 = \frac{\text{Total Area}}{\pi}$$

$$r = \sqrt{\frac{27975}{\pi}}$$

$$= \underline{94.3648}$$

$$ii) \text{Total Land} = 360^\circ$$

individual land (in degree)

$$= \frac{360^\circ}{\text{total land}} \times \text{individual}$$

$$= \frac{360^\circ}{27975} \times 3927$$

$$= \underline{50^\circ 32'}$$

