

Q1. Draw an environmental risk map using the following data

Step 1

Calculation of Composite Score

Name of the place	% of area flooded	No of population affected ('000)
A	23	65
B	45	45
C	12	32
D	24	31
E	67	89
F	11	21
G	9	12
H	41	34
Mean	29	41.13
SD	20.42	24.98

$$Z\text{-Score} = \frac{x - \mu}{\sigma}$$

x= Observed value

μ = Mean

σ = Standard deviation

Step 2 **Draw an Isopleth Map on the basis of Composite Score**

Loss of property (Lakh Rs)	Z_Area	Z_Pop	Z_Property	Composite Score
46	-0.29	0.96	0.43	1.10
34	0.78	0.15	-0.04	0.90
23	-0.83	-0.37	-0.47	-1.67
37	-0.24	-0.41	0.08	-0.57
90	1.86	1.92	2.17	5.95
12	-0.88	-0.81	-0.91	-2.59
10	-0.98	-1.17	-0.99	-3.13
28	0.59	-0.29	-0.28	0.03
35				
25.35				

Category

(Level of Risk)

less than 0 Low

0-1 Medium

More than 1 High