# PROJECT FLOW :

- This section defines the overall method for natural disaster intensity analysis and classification based on multispectral images using a multilayered deep convolutional neural network.

- Moreover, this method consists of two blocks of a convolutional neural network.

- The first block detects a natural disaster occurring and the second one defines the intensity type of the natural disaster.

- Additionally, the first block consists of three miniconvolutional blocks with four layers each, including an image input and fully connected layers.

- On the other hand, the second block also consists of three miniconvolutional blocks with two layers each and includes an image input layer and fully connected layer.
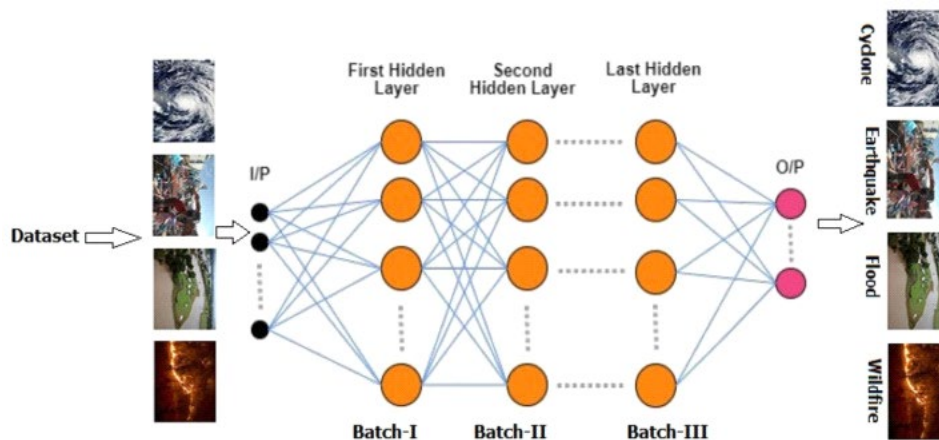
Block-I Convolutional Neural Network (B-I CNN) :

- According to block-I of the convolutional neural network, only a detection process occurred in this phase.

- However, this block also consists of three small batches having four layers each.

- Moreover, an image input layer and fully connected layers are present. Additionally, some parameters are also defined with learning rate 0.001 and epoch size 40.

- On the other hand, the convolutional layers use a filter size of 3 × 3, stride 1 and eight filters that increase in number from 16 to 32 for the second and third minibatches of convolutional neural networks.

Block-I Convolutional Neural Network (B-I CNN)

Block-II Convolutional Neural Network (B-II CNN)
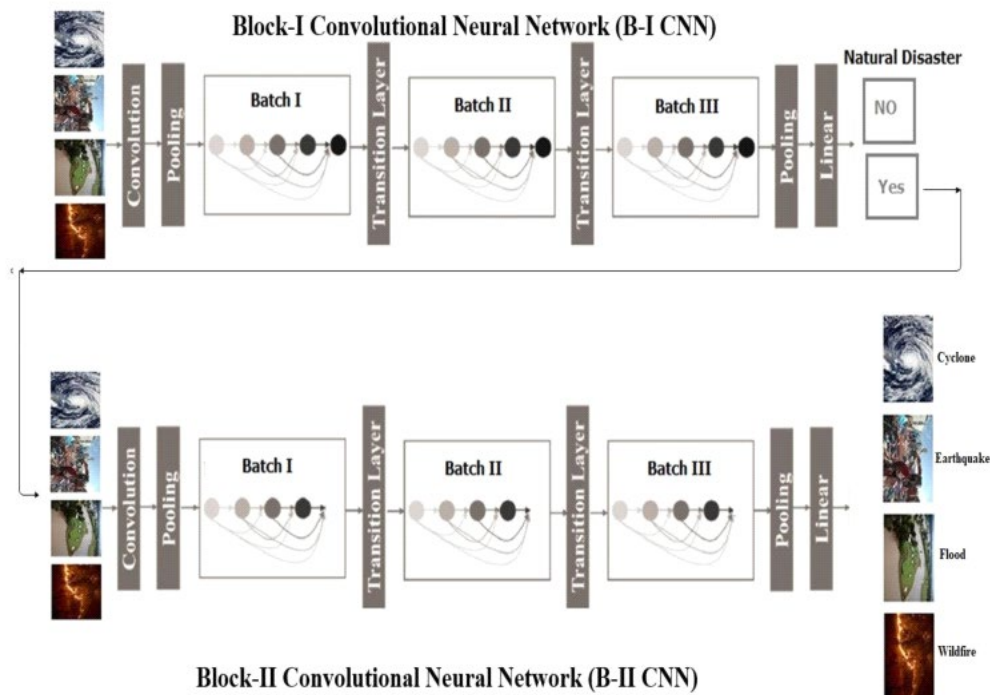
Block-II Convolutional Neural Network (B-II CNN) :

- The block-II convolutional neural network takes the output from the first block and finds the types of natural disaster with

intensity.

- Moreover, this block also consists of three minibatches having three layers each with two extra layers such as image input and fully connected layers.

- Additionally, the same parameters as block-I have been defined for this block also.