

B. On The Basis Of Fate Of Germ Layers-

1. Indeterminate cleavage –

In indeterminate cleavage, the fate of blastomeres is not so rigidly sealed, but the blastomeres exhibit plasticity. For examples, each of the 2 blastomeres of a zygote, if separated after the first cleavage, can produce one complete embryo.

This type of cleavage, in which future of blastomeres is not predetermined, is known as Indeterminate cleavage.

Examples – vertebrates.

2. Determinate Cleavage-

In some animals (Ascaris), the blastomeres have a predetermined future, i.e. definite blastomeres are determined to give rise to specific parts of the embryo. This type of cleavage is known as

Determinate cleavage.

As a result of determinate cleavage, a mosaic type of blastula is formed. This type of development is called mosaic development.

Example- Ascaris egg.