

CELL AND MOLECULAR BIOLOGY

I M.Sc ZOOLOGY

BY

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CELL MATRIX ADHESION

Cell Matrix Adhesion

- Tissue structure are determined by both cell-cell adhesion and cell-matrix adhesion, with the latter describing interactions between cells and the extracellular matrix (ECM)
- The ECM is the collection of collagen fibres, proteoglycans and multi-adhesive matrix proteins they are secreted by cells to form an essential support structure
- Other functions of the ECM include segregating tissues and controlling communication between cells
- Cell- matrix adhesion is formed through the utilization of cell adhesion molecules that bind to the cell surface of the ECM
- Anchor proteins are also used to mediate linkages, or are employed in roles related to regulation

- Three groups of macromolecules, which are often physically associate, constitute the extracellular matrix,
 1. Fibrous structural proteins such as collagens and elastins
 2. A diverse group of adhesive

