**Lecture 7: Plain Weave**

**(Warp & Weft Rib)**

**Features of Warp Rib:**

* It produces *ribs* or *cords* in the warp direction.
* Normally finer yarn is used as warp and coarser one as weft.
* If the number ends are more than the number of picks in a unit space, then yarn of same count may be used.
* Two or more weft yarns pass over or under a warp.
* Low twisted yarn is used in weft.
* Mercerized yarns are used and normally two heald shafts are used
* Uses: Normally used in warp faced constructions, such as poplin fabric.

Regular warp Rib:

* + In bundle, the no of weft yarn is equal.
  + Found regular appearance in fabric.
  + Formula number =  [Repeat size = 2 x A]

Irregular warp Rib:

* In bundle the no of weft yarn is different /unequal.
* Irregular appearance is shown in the fabric.
* Formula number =  [x and y both weft yarn and R.S = 2 x A]

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Regular Warp Rib Irregular Warp Rib

**Features of Weft Rib:**

* It produces ribs or cords in the weft direction.
* Normally finer yarn is used as weft and coarser one as warp.
* If the numbers of picks are more than the number of ends in a unit space, then yarn of same count may be used.
* Two or more warp yarns pass over or under a weft yarn.
* Two heald shafts are used.
* Uses: Blankets, Hair cords etc.

Regular weft rib:

* + In bundle equal no of warp yarn.
  + Regular appearance.
  + Formula number =  weft rib.[x = No of warp yarn in rib. R. S – Ax 2]

Irregular weft rib:

* In bundle, unequal no of warp yarn .
* Irregular appearance.
* Formula no = [x and y individually indicates the no of warp yarn. RS- Ax2]

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|  |  |  |  | X | X | X |  |  |  | X | X | X |  |  |  |  |  |  | X | X | X |  |  |  |  | X | X | X |
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Regular Weft Rib Irregular Weft Rib