**Difference Between Multiplexer and De-multiplexer**:

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| No | Multiplexer | De-multiplexer |
| 1. | Multiplexer means many into one. | De-multiplexer means one to many. |
| 2. | A multiplexer is a circuit that accepts many input but give only one output. | A De-multiplexer is a circuit that accepts only one input but gives many outputs. |
| 3. | It is called data selector. | It is called data distributor. |
| 4. | When designing multiplexer, don’t need to use additional gates. | Additional gates are included when designing De-multiplexer. |
| 5. | It is a parallel to series conversion process. | It is a series to parallel conversion process. |
| 6. | It is generally an active low terminal that means it will perform the required operation when it is low. | If the De-multiplexer’s input is always true, the De-multiplexer acts as a decoder. |
| 7. | Telephone network maintained with the help of multiplexer. Because multiple audio signals can be isolated in one wire. | De-multiplexer like as Radio, Television that has one sender and many receiver. |
| 8 | Example : 4-to-1, 8-to-1, 16-to-1 Multiplexer | Example : 1-to-4, 1-to-8, 1-to-16 De-multiplexer. |