APPENDIX - V

A) Formula of Growth Rate:
\[
\text{Growth Rate} = \frac{T_1 - T_0}{T_0} \times 100
\]
Where,
\[
T_1 = \text{Observation of Current Year}
\]
\[
T_0 = \text{Observation of Preceding Year}
\]

E.g. Growth Rate of Self-Raised Sources of Sangli Zilla Parishad in 1997-98

\[
\text{Growth Rate} = \frac{452.77 - 193.92}{193.92} \times 100 = 133.48
\]

B) Formula of Compound Growth Rate
\[
A = P(1+X)^N
\]
Where,
\[
A = \text{Value of Upper Limit (1997-98)}
\]
\[
P = \text{Value of Lower Limit (1988-89)}
\]
\[
N = \text{No. of Observations (Years)}
\]
\[
X = \text{Compound Growth Rate}
\]

E.g. Compound Growth Rate of Self-Raised Sources in Aurangabad Zilla Parishad.

\[
= 231.42 = 47.31(1+X)^{10}
\]
\[
= \log 231.42 = \log 47.31(1+X)^{10}
\]
\[
= 2.3643 = 1.6750(1+X)^{10}
\]
\[
= 2.3643 - 1.6750 = (1+X)^{10}
\]
\[
= 0.6893 = (1+X)^{10}
\]
\[
\frac{0.6893}{10} = 1 + X
\]

Anti-log of 0.06893 = 1 + X

1.1171 - 1 = X

0.1171 = X

Compound Growth Rate = 0.1171 \times 100 = 11.71\%