1)
$$\left[\overline{X} - z_{\frac{\alpha}{2}} \frac{\sigma}{\sqrt{n}}, \overline{X} + z_{\frac{\alpha}{2}} \frac{\sigma}{\sqrt{n}} \right]$$

2)
$$\left[\overline{X} - t_{\frac{\alpha}{2}} \frac{S}{\sqrt{n}}, \overline{X} + t_{\frac{\alpha}{2}} \frac{S}{\sqrt{n}}\right]$$

3)
$$\left[\overline{X} - z_{\frac{\alpha}{2}} \frac{S}{\sqrt{n}}, \overline{X} + z_{\frac{\alpha}{2}} \frac{S}{\sqrt{n}}\right]$$

4)
$$\left[\overline{X}_1 - \overline{X}_2 - z_{\frac{\alpha}{2}} \sqrt{\frac{\sigma_1^2}{n_1} + \frac{\sigma_2^2}{n_2}}, \overline{X}_1 - \overline{X}_2 + z_{\frac{\alpha}{2}} \sqrt{\frac{\sigma_1^2}{n_1} + \frac{\sigma_2^2}{n_2}} \right]$$

5)
$$\left[\overline{X}_{1} - \overline{X}_{2} - z_{-\frac{\alpha}{2}} \sqrt{\frac{S_{1}^{2}}{n_{1}} + \frac{S_{2}^{2}}{n_{2}}} , \quad \overline{X}_{1} - \overline{X}_{2} + z_{-\frac{\alpha}{2}} \sqrt{\frac{S_{1}^{2}}{n_{1}} + \frac{S_{2}^{2}}{n_{2}}} \right]$$

6)
$$\overline{X}_1 - \overline{X}_2 - t_{\alpha/2, n_1 + n_2 - 2} S_p \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}; \overline{X}_1 - \overline{X}_2 + t_{\alpha/2, n_1 + n_2 - 2} S_p \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}$$

7)
$$\left[\overline{X}_{1} - \overline{X}_{2} - t_{\frac{\alpha}{2}, \nu} \sqrt{\frac{S_{1}^{2}}{n_{1}} + \frac{S_{2}^{2}}{n_{2}}}, \quad \overline{X}_{1} - \overline{X}_{2} + t_{\frac{\alpha}{2}, \nu} \sqrt{\frac{S_{1}^{2}}{n_{1}} + \frac{S_{2}^{2}}{n_{2}}} \right] \qquad \nu = \frac{\left(S_{1}^{2}/n_{1} + S_{2}^{2}/n_{2}\right)^{2}}{\left(S_{1}^{2}/n_{1}\right)^{2} + \left(S_{2}^{2}/n_{2}\right)^{2}} = \frac{\left(S_{1}^{2}/n_{1} + S_{2}^{2}/n_{2}\right)^{2}}{n_{1} - 1} + \frac{\left(S_{2}^{2}/n_{2}\right)^{2}}{n_{2} - 1}$$

8)
$$\left[\overline{D} - t_{\frac{\alpha}{2}, n-1} \frac{S_D}{\sqrt{n}}; \ \overline{D} + t_{\frac{\alpha}{2}, n-1} \frac{S_D}{\sqrt{n}}\right]$$

9)
$$\left(\frac{(n-1)S^2}{\chi^2_{\frac{\alpha}{2},n-1}}; \frac{(n-1)S^2}{\chi^2_{1-\frac{\alpha}{2},n-1}}\right)$$

10)
$$\left[\frac{S_1^2}{S_2^2} f_{1-\frac{\alpha}{2},n_2-1,n_1-1}; \frac{S_1^2}{S_2^2} f_{\frac{\alpha}{2},n_2-1,n_1-1} \right]$$

11)
$$\left[\hat{P} - z_{\frac{\alpha}{2}} \sqrt{\frac{\hat{P}(1-\hat{P})}{n}}, \quad \hat{P} + z_{\frac{\alpha}{2}} \sqrt{\frac{\hat{P}(1-\hat{P})}{n}} \right]$$

12)
$$\hat{P}_1 - \hat{P}_2 - z_{\frac{\alpha}{2}} \sqrt{\frac{\hat{P}_1(1-\hat{P}_1)}{n_1} + \frac{\hat{P}_2(1-\hat{P}_2)}{n_2}}; \quad \hat{P}_1 - \hat{P}_2 + z_{\frac{\alpha}{2}} \sqrt{\frac{\hat{P}_1(1-\hat{P}_1)}{n_1} + \frac{\hat{P}_2(1-\hat{P}_2)}{n_2}}$$