**RESULT**

**Table No. 1.** Showing that the characteristics of the Control, Sickle cell trait and Sickle cell disease group.

**Table No. 2 – 7.** Showing the overall status of hematological and biochemical parameters in group I, group II and group III.

**Table No. 8 & 12.** Showing that in sickle cell disease the hematological profile was change significantly along with the endogenous and exogenous antioxidants status, MDA, TAC and CRP when compared with control group in male subjects.

**Table NO. 9 & 13.** Showing almost same result as mention above but highly significant as compare to control group.

**Table No. 10 & 14.** Showing that there is no change in hematological parameters in sickle cell trait group as compare to control group. In biochemical parameters endogenous antioxidants except SOD level was decreased significantly while exogenous antioxidants are decreased with elevated level of MDA. The TAC in sickle cell trait group is also reduced as compare to control group. CRP was also found increase in sickle cell trait male subjects.

**Table No. 11 & 15.** Showing that in sickle cell trait female subjects hematological parameters found significant change because the level of different parameters were on the lower/higher side. In endogenous and
exogenous antioxidants except SOD all antioxidant found significant decrease, exogenous antioxidant also decrease significant in female group along with elevated MDA and reduced level TAC simultaneously showed the lesion of inflammation in group II as compare to group I which is CRP is also increased. In this group the result of the parameters whereas almost same as that of control group (Table no. 10-13).

**Table No. 16.** Showing that in male subjects of age group 10-20 years, all endogenous antioxidant except SOD increase while exogenous antioxidant were decrease highly significant as compare to male subjects age 10-20 years of control group along with elevated MDA level and decrease level of TAC. CRP level was also found significantly higher as compare to control group.

**Table No. 17.** Showing that in group III is highly significant decrease found in endogenous antioxidants except SOD similarly highly significant decrease exogenous antioxidant with significantly increase MDA and decrease TAC. The CRP level also found highly significant increased as compare to control group in female subjects of age 10-20 years.

**Table No. 18 & 19.** Almost same pattern as that in control group of age 10-20 years male subjects

**Table No. 20.** Showing that in group III is highly significant decrease found in endogenous antioxidants except SOD similarly highly significant decrease exogenous antioxidant with significantly increase MDA and
decrease TAC. The CRP level also found highly significant increased as compare to control group in male subjects of age 21-40 years.

**Table No. 21.** Showing that in group III is highly significant decrease found in endogenous antioxidants except SOD similarly highly significant decrease exogenous antioxidant with significantly increase MDA and decrease TAC. The CRP level also found highly significant increased as compare to control group in female subjects of age 21-40 years. Showing that female subjects of group III significant drastic change in endogenous and exogenous antioxidant as compare to age matched control subjects indicating that in female the status of both type of antioxidants is worst as compare to male subjects of same age group. (Table N0. 21 & 23)

**Table NO. 22 & 23.** Showing that change in male and female subjects age group 21-40 years of sickle cell trait group, the antioxidants status is less significant as compare to control group. TAC was also decrease slightly with slight elevation of CRP and MDA as compare to control male and female subjects of age group 21-40 years.

**Table NO. 24 & 25.** Showing that the correlation of exogenous and endogenous antioxidant with TAC and MDA.

**Table NO. 26 & 27.** Showing that the correlation of CRP with WBC, NUTR, HB, MDA and TAC.
Table NO. 28 & 29. Showing that the significant changes in Group II as compared to Group I & III (ANOVA).