LIST OF TABLES

Table 1.1. : Comparative features of C. neoformans and C. gattii..........5
Table 1.2. : Geographical distribution of Cryptococcus serotypes...........9
Table 3.1. : Specimens used for isolation of Cryptococcus from clinical sources.................................................................39
Table 3.2. : Assimilation and biochemical characteristics of medically significant Cryptococcus species.........................47
Table 3.3. : Reagents for 2xYT broth with E. coli OP 50....................51
Table 3.4. : Components of Littman Media........................................55
Table 4.1. : Age wise distribution of Cryptococcosis.........................70
Table 4.2. : Distribution of Cryptococcus spp. positive sampling...........77
Table 4.3. : Invitro antifungal susceptibility results for Amphotericin B..80
Table 4.4. : Invitro antifungal susceptibility results for Fluconazole.......81
Table 4.5. : Capsular volume µ³ of C. neoformans cells in different media............................85
Table 4.6. : Average Capsular Volume of Cryptococcal cells grown in various media..........................................................88
Table 4.7. : Area of capsule of cells in media measured by Image Processing Software ImageJ 1.25s...............................90
Table 4.8. : O.D values of Melanized cells at wavelength between 250 and 600nm using a UV Spectrophotometer.........................92
Table 4.9. : Physical Tests performed to confirm melanin pigment........94
Table 4.10. : *Absorbance of* C. neoformans *cells measured at 420 nm at 24 hours intervals*...95

Table 4.11. : *Concentration of drug (µg/ml) to be added in each well of the plate*...99

Table 4.12. : *The scoring system for MIC of drugs for non melanized non encapsulated C. neoformans*...99

Table 4.13. : *The MIC of various drugs on C. neoformans obtained by the microdilution assay*...100

Table 4.14. : *Distribution of genotype and mating types of clinical and environmental isolates*...111