COCOMO Model and Effort Estimation:

Here,

SLOC =10000

P= 1.05

T= 0.38

Coefficient effort factor = 2.4%

Effort = PM = Coefficient<Effort Factor>*(SLOC/1000)^P [100,000
SLOC/1000 = 100k SLOC]
=2.4*(10000/1000)^1.05
=26.93

¡ Development time = DM = 2.50*(PM)^T
=2.5*(26.93)^0.38

=8.738

=9

¡ Required number of people = ST = PM/DM

 =26.93/9

=2.99

=3

Effort Estimation:

Total development time = 9 months

Working days per month = 22 days

Working hours per Day = 8 hours

Total hours = 22*8*9

   = 1584 hours

Salary in every hour = 1000 Tk

Total salary in 9 months = 1584000 Tk

Per developer (9 months) = 528000 Tk

Per developer (1 month) = 58666.67 Tk

Requirement Analysis = 15 days

Per hour salary = 700 Tk

Total cost = 15*8*700

   = 84000

Maintenance = 6 months

Working hour per month = 10 hours

Maintenance cost per hour = 2000 Tk

Total maintenance cost = 6*10*2000

   = 120000 Tk

Travel Expense = 30000 Tk

Rent per month = 15000 Tk

Total Rent = 15000*9

= 135000 Tk

Utility per month = 5000 Tk

Total utility = 45000 Tk

Special hardware/ Training = 150000 Tk

Total Expense = (Total Coding cost + Requirement analysis cost + Maintenance cost + Travel expense + Rent + Utility + Special hardware)

= (1584000 + 84000 +120000 + 30000 + 135000 + 45000 + 150000)

= 2148000 Tk

Total revenue = 20%

=2148000*20%

=429600 Tk

Total estimated cost = 2148000 + 429600

= 2577600 Tk