

**Centre for Management Studies
Dibrugarh University**

Final 20XX
Paper Code (Name): 20600 (QT)
Max Marks: 15

Date: May 24, 20XX
Course Instructor: HB
Time: 40 minutes

For your Information!

- Save the Excel Sheet as **C:\<Your Class Roll Number>\test.xlsx**
- Solve each question in a separate sheet. The sheet should be named as the Question Number
- Employ proper formatting in the sheets
- 1 Mark for proper saving and formatting

1.

- (a) Plot the function $f(x) = |x|$ in the interval $(-25, 25)$ using a line graph. **2**
- (b) The consumption of printing paper reams (in units) for the first 11 months of a computer operator is given as: 10, 11, 12, 15, 18, 22, 8, 10, 12, 15, 25. Calculate the average, standard deviation, median and the range using suitable MS Excel functions. **Do not use the Descriptive Statistics option of Data Analysis.** **2**
- (c) Plot a bar diagram for the Binomial distribution where $n = 7$, $p = 0.5$ and $x = (0, 7)$. **2**
- (d) Construct a line graph for the following Poisson distribution with mean (λ) and values of x . Value of $\lambda = 7$; $x = (0, 25)$. **2**
- (e) Determine the probability for the normal distribution: $P(-2.02 < z \leq -0.85)$ **2**
- (f) A company earns before-tax profits of Rs. 100000. It is committed to making a donation to the Red Cross of 10% of its after-tax profits. The Central Government levies corporate taxes of 50% of profits after deducing charitable donations and any local taxes. The company must also pay local taxes of 10% of its profits less the donation to the Red Cross. Formulate a set of equations and compute how much the company pays in corporate taxes, local taxes and as a donation to the Red Cross. **2**
- (g) Solve the LPP using solver tool of MS Excel. **2**
- Max $Z = 3X + 2Y$
s.t. $4X + 3Y \leq 12$
 $4X + Y \leq 8$
 $4X - Y \leq 8$
 $X, Y \geq 0$

ALL THE BEST
