

**DECEMBER 2017 / ENDSEM**  
**F. Y. B.TECH. (COMMON) (SEMESTER - I)**  
**Engineering Mathematics I ( ES11171 )**  
**(2017 PATTERN)**

**Max.Marks:50**

**Scheme of Marking- SET A**

- Q.1) a) Correct Answer-----02 Marks  
b) Correct Answer-----02 Marks  
c) Correct Answer-----02 Marks  
d) Correct Answer-----02 Marks  
e) Correct Answer-----02 Marks  
f) Correct Answer-----02 Marks  
g) Correct Answer-----02 Marks  
h) Correct Answer-----02 Marks  
i) Correct Answer-----02 Marks  
j) Correct Answer-----02 Marks
- Q 2) a) Correct approach-----02Marks  
Correct answer-----02 Marks  
b) Upto type and degree of function-----03 Marks.  
Euler's Theorem and Correct answer-----03 Marks  
c) Upto all 1<sup>st</sup> ordered derivatives-----03 Marks  
Final answer-----01 mark

**OR**

- Q 3) a) Upto  $\frac{\partial u}{\partial x} + \frac{\partial u}{\partial y} + \frac{\partial u}{\partial z}$ -----03 Marks  
b) Upto type and degree of function-----03 Marks.  
Euler's Theorem and Correct answer-----03 Marks  
c) Correct approach-----02Marks  
Correct answer-----02 Marks
- Q4) a) Numerator-----03 Marks  
Denominator-----03 Marks  
b) Correct approach-----02Marks  
Correct answer-----02 Marks  
c) Correct approach-----02Marks  
Correct answer-----02 Marks

**OR**

- Q5) a) Stationary Points-----03 Marks  
Correct Conclusions-----03 Marks  
b) Jacobian = 0-----03 Marks  
Relation-----01 Mark  
c) Correct approach-----02Marks  
Correct answer-----02 Marks