

Marking Scheme

U218-III (ESE)

DECEMBER 2018/ENDSEM

S. Y. B. TECH. (CIVIL ENGINEERING) (SEMESTER - I)

COURSE NAME: Engineering Mathematics III

COURSE CODE: CVUA21171

(PATTERN 2017)

Q1.

- A] Correct C.F. and Wronskian W 2 mark + Correct u, correct v 2 marks + correct answer 2 marks
- B] Correct C.F. 2 marks+ Correct P. 2 marks + correct answer in terms of x 2 marks

Q2.

- A] Correct method 3 marks + correct answers of x,y,z, 3 marks
- B] Correct F.T. 4 marks + Correct Fourier Integral representation 2 marks

Q3.

- A]Correct moments 3 marks +correct Coefficients of skewness and kurosis ,mean and S.D. 3 marks
- B]Correct Table 2 marks +correct answer of Mean S.D. Covariance and Correlation coefficient 4 marks

Q4.

- A] Curl zero 2 marks correct + correct Scalar potential 2 marks
- B] Correct use of vector identity 2 marks + correct proof 2 marks

Q5.

- A] Statement of div.thm 1 mark+ correct limit 1 mark +correct evaluation 4 marks.
- B] Integration in one parameter with correct limits 2 marks+ correct answer 2 marks
- C] Greens Thm Statement 1 mark+ correct values of integral with limit 1 mark+ correct answer 2 marks.

Q6]

- A] Statement of div.thm 1 mark+ correct evaluation 3 marks
- B] Greens Thm Statement 1 mark+ correct values of integral with limit 1 mark+ correct answer 2 marks. OR Full credit for alternative method.

C] Statement of Stokes Thm 1 mark+ correct answer 3

Q7.

- A] Correct Most G.S. 1 mark+ Elimination of arbitrary constant 3 marks+ Correct Fourier coefficient 2 marks
- B] Correct conditions 4 marks
- C] Correct Most G.S. 1 mark+ Elimination of arbitrary constant 2 marks+ Correct Fourier coefficient 1 marks

Q8.

- A] Correct Most G.S. 1 mark+ Elimination of arbitrary constant 3 marks+ Correct Fourier coefficient 2 marks
- B] Correct conditions 4 marks
- C] Correct Most G.S. 1 mark+ Elimination of arbitrary constant 2 marks+ Correct Fourier coefficient 1 marks

End