**Sessional Examination2020**

**Class: 6th Semester (M)**

**Paper: ECM 601**

**Time: 1Hour Full marks:15**

1. Answer the following questions: 1×3=3
2. What is a control system?

(b)Define step function.

(c) What do you mean by Transfer function of a system?

 2. Answer the following questions: 2×3=6

 (a)What are poles and zeros of a system?

 (b) Draw the block diagram of a closed loop control system.

 (c) Determine the characteristic equation of the system

 G(s)= H(s)=

 3. Determine the stability of s3+5s2+10s+3 =0 using Routh’s method. 3

 4. Determine the ratio C(s)/R(s) of the block diagram given below: 3

G3(s)

R(s) C(s)

H(s)

G2(s)

G1(s)

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