

Burdwan Raj College
Department of Electronics
Internal Assessment: Home Assignment

**(To be submitted to designated email id mentioned below positively by
November 17, 2020)**

Semester: IV

Subject: *Honours*

Paper: CC9 (Signals and Systems)

Send your assignments to (email id): brcelechg@gmail.com

Answer the following question:

10x2=20

1. What do you mean by linear and time invariant in LTI system? Write down its properties. 3+7

2. A periodic function $f(x)$ of period 2π is defined in the interval $(-\pi < x < \pi)$ as

$$f(x) = -1 \text{ for } -\pi < x < 0$$

$$= 1 \text{ for } 0 < x < \pi$$

Find out the Fourier series expansion of $f(x)$.

Procedure of Appearing in the Internal Examination:

- 1. Download the question paper from the “online examination” section of the College portal: www.burdwanrajcollege.ac.in**
- 2. Write your assignment on blank white A4 size papers.**
- 3. The assignment must carry the following details of the student:**
 - a. Name of the Student
 - b. University Roll Number
 - c. University Registration Number
 - d. Name of the Paper
 - e. Mobile Number of the Student
- 4. Examinees will have to submit their own hand-written answer scripts electronically to the mail id specified by the College in a single pdf file.**
- 5. On the subject-line of the mail write your Name and University Roll No.**