Enrolment No._____

HASMUKH GOSWAMI COLLEGE OF ENGINEERING, VAHELAL
MID SEMESTER EXAMINATION, SEPTEMBER-2016

Subject Code: 151004   **Date: 26 /09/2016**
Subject Name: Electronic Communication   **Sem: 5TH**
Time: 10:00 to 10:55 AM   **Total Marks: 20**

Instructions:
1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

QUE.1	**(A)**	1. List the types modulation. 2. Need of modulation 3. Compare series and parallel tuned circuit.	**3**
	(B)	Write short note on Automatic Gain Control	**3**
QUE.2	**(A)**	What are the different methods to generate SSB signals? Explain Phase shift method in detail.	**3**
	(B)	Two resistors 20KΩ and 50KΩ are at room temperature (290 K). Calculate for the bandwidth of 100KHz, the thermal noise for the following conditions 1. For each resistor 2. For two resistors in series 3. For two resistors in parallel.	**4**

OR

	(B)	Define noise. Explain different types of noise in detail.	**4**
QUE.3	**(A)**	Envelope Detector	**3**
	(B)	Explain the resonant frequency and Q factor of Series Tuned circuit.	**4**

OR

	(A)	Explain block diagram of super heterodyne receiver	**3**
	(B)	Compare AM and FM receivers.	**4**

****************************** **ALL THE BEST** ******************************