



Enrolment No. _____

HASMUKH GOSWAMI COLLEGE OF ENGINEERING, VAHELAL

MID SEMESTER EXAMINATION SEPTEMBER-2016

Subject Code: 2730502

Date: 24/09/2016

Subject Name: ADCOM

Sem: 3RD PG

Time: 10:00 TO 11:15

Total Marks: 30

Instructions:

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

- QUE.1 (A)** Explain orthogonal and orthonormal signals. How does Gram-Schmidt procedure help to construct orthogonal set? **5**
- (B)** Explain Elements of a Digital Communication System. **5**

- QUE.2 (A)** Explain model of a multichannel digital communication system with necessary block diagram. **5**
- (B)** Explain Matched Filter with necessary Equation. **5**

OR

- (B)** Explain MC-CDMA system with necessary diagram. **5**

- QUE.3 (A)** Explain OFDM in details. **5**
- (B)** Explain different types of Fading Channel in details. **5**

OR

- (A)** Explain representation of band-pass signals and systems in terms of equivalent low pass waveforms. Also explain response of a band pass system to a band pass signal. **5**
- (B)** Explain Performance Characteristics of ML Estimators. **5**

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