

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VI (OLD) EXAMINATION – WINTER 2018****Subject Code:161704****Date: 27/11/2018****Subject Name: Analog And Digital Communication****Time: 02:30 PM TO 05:00 PM****Total Marks: 70****Instructions:**

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

- Q.1** (a) Explain Amplitude Modulation in detail. **07**
(b) Explain Frequency Modulation in detail. **07**
- Q.2** (a) Explain OSI Model. **07**
(b) Explain data topologies in detail. **07**
- OR**
- (b) Explain block diagram of communication system. **07**
- Q.3** (a) Explain Pulse modulation and its types in detail. **07**
(b) Explain token passing method used in IEEE 802.5 **07**
- OR**
- Q.3** (a) Explain principle and construction of fibre optic cable. **07**
(b) Explain SONET. **07**
- Q.4** (a) Explain CSMA/CA protocol used for wireless LAN. **07**
(b) Explain PSK and FSK. **07**
- OR**
- Q.4** (a) Explain R232C communication standard. **07**
(b) Explain error detection codes in detail with example. **07**
- Q.5** (a) Explain Hamming Code. **07**
(b) Explain different type of noise. **07**
- OR**
- Q.5** (a) Derive the modulation index for AM. **07**
(b) Explain Satellite communications. **07**
