



V.P. & R.P.T.P SCIENCE COLLEGE  
INTERANAL EXAM  
S.Y.B.Sc(SEM-III) ELECTRONICS

SUB: - Analog Communication

SUB CODE: US03CELC22

DATE:-03/10/2019

TIME: 3:00 pm to 4:15 pm

MARKS-25

- Q-1 Choose correct answer [05]
- The frequency of the carrier signal is normally kept \_\_\_\_\_.  
(A) zero (C) high  
(B) low (D) None of above
  - \_\_\_\_\_ Modulation process is used for high quality audio communication.  
(A) Phase (C) Frequency  
(B) Amplitude (D) None of above
  - \_\_\_\_\_ frequency is known as UHF.  
(A) 3-30 MHz (C) 300-3000 MHz  
(B) 30-300 MHz (D) None of above
  - Height of the transmitting antenna depends on \_\_\_\_\_.  
(A) transmitted power (C) modulation signal frequency  
(B) carrier signal frequency (D) None of above
  - Varactor diode operates in \_\_\_\_\_ bias condition.  
(A) forward (C) reverse  
(B) zero (D) None of above
- Q-2 Define amplitude modulation. Derive the expression for the amplitude modulated voltage with necessary diagram. [05]
- OR
- Q-2 Define frequency modulation. Derive the expression for the frequency modulated voltage with necessary diagram. [05]
- Q-3 Discuss square law diode modulation method with necessary diagram. [05]
- OR
- Q-3 Discuss linear diode detector circuit with necessary diagram. [05]
- Q-4 Draw a circuit diagram of reactance tube modulation method and discuss it. [05]
- OR
- Q-4 Describe frequency modulation method using varactor diode. [05]
- Q-5 Explain the concept of ground wave propagation. [05]
- OR
- Q-5 Discuss surface wave propagation system. [05]