

**DIPLOMA - VIEP - ELECTRONICS AND  
COMMUNICATION ENGINEERING,  
ELECTRICAL ENGINEERING, CSE**

**Term-End Examination**

**December, 2010**

**BIEL-027 : APPLIED ELECTRONICS**

*Time : 3 hours*

*Maximum Marks : 70*

*Note : Attempt any seven questions.*

1. Draw circuit diagram of class-B push pull amplifier and explain its working principle with help of input and output wave forms. Also list advantages of push pull amplifier. 10
  
2. (a) What is a tuned amplifier ? Explain its necessity. 5  
(b) Explain difference between the enhancement mode and depletion mode MOSFET. 5
  
3. (a) A feedback amplifier has a Voltage gain of 1000 without feedback. Determine the Voltage gain with feedback if feedback fraction is 10%. 5  
(b) What are advantages of negative feedback in amplifiers ? Explain them. 5

4. (a) What is meant by linear and non linear wave shaping ? Explain with the help of some examples. 5
- (b) Draw circuit diagram of combinational clipper circuit and explain its working. 5
5. Draw circuit diagram of Schmitt trigger and explain its working principle with the help of Hysterisis loop. 10
6. With the help of circuit diagram and wave forms explain working of Bistable multivibrator circuit. 10
7. (a) Explain working of transistor as a switch. 5
- (b) Explain concept of cross over distortion. 5
8. List important steps for Trouble Shooting and Testing of electronic circuit for 10
- (a) Visual testing
- (b) Active testing
9. (a) Draw circuit diagram of UJT Relaxation Oscillator and explain its operation. 7
- (b) Give the applications of time - base Generators. 3
10. Write short notes on (*Any two*) : 5x2=10
- (a) Active testing of phase shift Oscillator
- (b) Hartley Oscillator
- (c) Clamper circuit