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BIEL - 027 (S)

DIPLOMA IN VIEP - ECE, EE, CSE,

Term-End Examination

December, 2010

02184

BIEL - 027 (S) : APPLIED ELECTRONICS

Time : 3 hours *Maximum Marks : 70*

Note : *Attempt **any seven** questions in all.*

1.	(a)	Distinguish between class - A, class - B, class - C amplifiers.	**5**
	(b)	Draw the circuit diagram of a common source FET amplifier and explain its working in brief.	**5**
2.	(a)	Draw circuit diagram of single tuned amplifier and explain its working.	**5**
	(b)	Explain principle of feedback in Amplifiers and list the advantages of negative feedback.	**5**
3.	(a)	Explain working principle of RC - phase shift oscillator with the help of neat sketch and write its output frequency expression.	**7**
	(b)	Explain concept of frequency stability in oscillators.	**3**

4. (a) Explain working principle of RC differentiator with the help of circuit diagram. 5

(b) For the circuit provided in FIGURE - (1), draw the output voltage waveform. Also name the circuit. 5

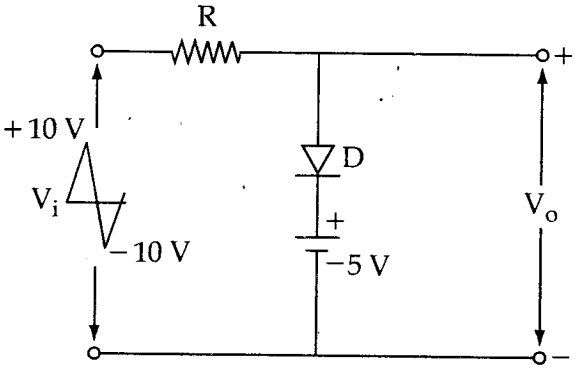

FIGURE - (1)

5. (a) What do you mean by negative clamping ? Explain in detail. 5

(b) What are different types of multivibrators ? Explain the stable state of multivibrator. 5

6. (a) What are important steps to be taken while trouble shooting and testing of transistorised sweep generator ? 6

(b) Draw the circuit diagram of a UJT relaxation oscillator and explain it briefly. 4

7. With the help of circuit diagram explain the working of monostable multivibrator circuit. Draw its wave forms. **10**

8. (a) What is a time base generator ? Give its classification. **5**

   (b) Explain principle of operation of a current time base generator. **5**

9. (a) Explain signal analysis active testing method of trouble shooting. **5**

   (b) Give applications of time base generator circuit. **5**

10. Write short notes on *(any two)* : **5x2=10**

    (a) Schmitt trigger

    (b) Crystal Oscillator

    (c) Class AB push pull amplifier.