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**4415****BOARD DIPLOMA EXAMINATION, (C-14)****MARCH/APRIL-2019****DAEIE - FOURTH SEMESTER EXAMINATION****ELECTRONIC CIRCUITS**

Time: 3Hrs

Max. Marks: 80

**PART-A****10x3=30M**

**Instructions:** 1) Answer **all** questions. Each question carries **Three** marks  
2) Answer should be brief & straight to the point and shall not exceed five simple sentences.

- 1) List the type of biasing circuits.
- 2) State the necessity of stabilization in amplifier circuits.
- 3) List the types of couplings in small signal amplifiers.
- 4) Draw the frequency response of RC coupled amplifier.
- 5) Distinguish between voltage amplifiers and power amplifiers.
- 6) List any three applications of power amplifier.
- 7) Classify oscillator circuits.
- 8) List any three advantages of crystal oscillator.
- 9) Define sweep voltage.
- 10) Classify multivibrators.

## PART-B

10x5=50M

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**Instructions** : 1) Answer any **five** questions. Each question carries **ten** Marks  
2) Answer should be comprehensive and the criteria for valuation is the content but not the length of answer.

- 11) Explain self-biasing method with a circuit diagram.
- 12) Explain the principle of operation of two-stage transformer coupled amplifier.
- 13) Explain voltage-shunt and current-series negative feedback amplifiers. (5+5M)
- 14) Draw and Explain the circuit of push-pull power amplifier.
- 15) Draw and Explain the working of wein bridge oscillator.
- 16) a) State the need of multistage amplifier. (5M)  
b) Explain the working of Colpitt oscillator with the expression of frequency of oscillation. (5M)
- 17) a) Explain how transistor works as switch in CE mode. (5M)  
b) Draw and explain simple current sweep circuit with waveform. (5M)
- 18) Explain the working of bistable multivibrator with waveforms.

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