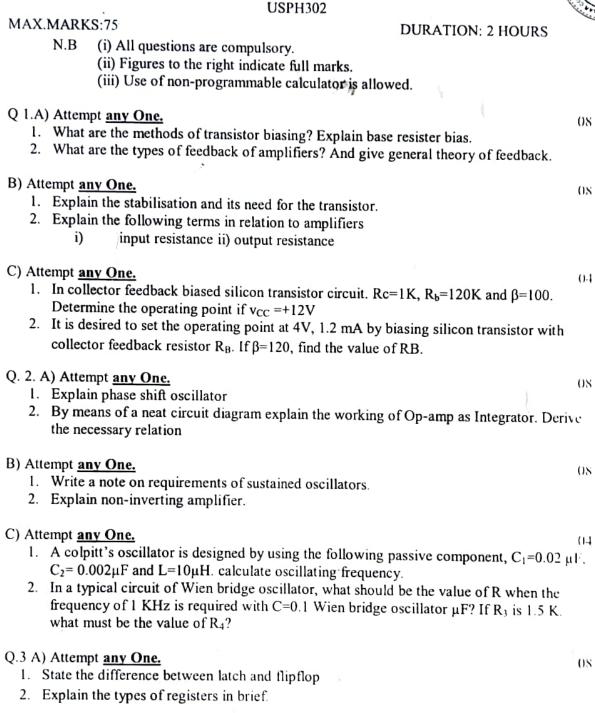
## SHRI S.H.KELKAR COLLEGE OF ARTS, COMMERCE & SCIENCE, DEVGAD FIRST TERM END EXAMINATION



B) Attempt any One.

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1. With circuit diagram explain edge triggered JK flipflop

2. Explain the types of the counters.



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## C) Attempt any One.

- 1. Explain parallel in parallel out (PIPO) shift register.
- 2. Explain clocked pulses in flipflop.

## Q.4.Attempt any Three

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- 1. Write a note on conditions of faithful amplification.
- 2. Determine the open circuit voltage of the source, v<sub>s</sub> to provide an amplifier input voltage v<sub>i</sub> of 0.25 volt when the internal resistance of the source is 50ohms.
- 3. Determine the maximum frequency that may be used for an opamp with slew rate 0.5 V/ $\mu$ s. the circuit has  $R_f$ =240Kohm,  $R_i$ = 10Kohm and input voltage  $v_i$ =0.02V having angular frequency  $\omega$ =300x10<sup>3</sup> rad/s.
- 4. What are the effects of positive feedback in oscillators?
- 5. Write a note on flipflop.
- 6. Explain parallel in serial out shift register. (PISO)