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GIET UNIVERSITY, GUNUPUR – 765022
M. Sc (Third Semester) Examinations, December' 2020
CHPC301– Organic Chemistry-III
(CHEMISTRY)

Time: 2hrs

Maximum: 50 Marks

(The figures in the right hand margin indicate marks.)

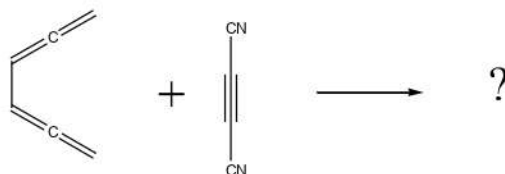
Q.1. Answer **ALL** the questions (2 x 10 = 20)

- What do you understand by 'endo' rule? Give example.
- What kind of migration is observed in Stevens rearrangement?
- Give an example of organocadmium reagent.
- Write Barton reaction.
- What do you understand by inverse electron demand in Diels-Alder reaction?
- Why aliphatic aldehydes are not suitable for Perkin reaction?
- Give an example of [2,3]-sigmatropic shift.
- Give an example of Claisen condensation.
- What is ylide? Give an example.
- Why aromatic amines are less reactive compare to aliphatic amines during Mannich reaction?

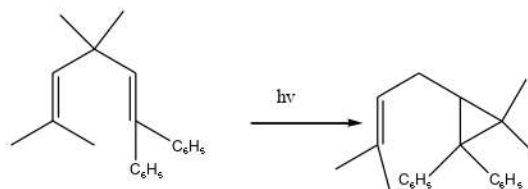
PART – B (6 x 5=30 Marks)Answer ANY FIVE questions

Marks

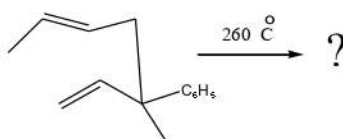
- Why organocopper reagents are used for conjugate additions to enones? (6)
- Predict the product for the following with mechanism. (6)



- Write a short note on Beckmann Rearrangement and explain the stereochemical outcome of this rearrangement. (6)
- What is Stobbe condensation? Give an example and explain the details mechanism. (6)
- Why the Wittig reaction is *E* selective with stabilized ylides? (6)
- Predict the product for the following with mechanism. (6)



- Predict the product for the following with mechanism. (6)



- Explain the photochemistry of vision. (6)

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