

Advanced Organic Synthesis

Item Text	Option Text 1	Option Text 2	Option Text 3	Option Text 4
Which one is not correct for Suzuki cross coupling reaction?	involves coupling partner in presence of Pd catalyst	aryl halide and boronic acid are reactant	gives C- C bond formation product	alkyl halide and carboxylic acids are reactant
In Sonogashira coupling reaction, the co-catalyst used with Pd catalyst is-	Cobalt	Nickel	Copper	Zinc
In Kumada cross coupling reaction, mechanism involves sequence as	Oxidative Addition, Transmetalation, Cis- trans isomerism, reductive elimination	Oxidative Addition, Cis- trans isomerism, Transmetalation, reductive elimination	Oxidative Addition, Cis- trans isomerism, reductive elimination, Transmetalation	Oxidative Addition, reductive elimination, Transmetalation, Cis- trans isomerism
In Negishi cross coupling the reactant used are -	organic halides or triflates, organozinc compounds	organic halides or triflates, organotin compounds	alkene, organotin compounds	alkyne, organotin compounds
In Buchwald-Hartwig reaction the name of the product formed is -	alkyl amine	amide	nitroamines	ary amines
The product formed in hydroformylation reaction (Oxo process) is -	amide	acid	alcohol	aldehyde
Which of the following are not the reactants in Negishi reactions?	Aromatic aldehyde; urea; 1,3 diketone	Benzaldehyde, thiourea and 1,3 diketoester	Benzaldehyde, urea and 1,3 diketoester	Aliphatic aldehyde, urea and 1,3 diketone

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Which of the following do not give umpolung of activity?	1,3 dithiane	enol ether	aldehyde	benzene
In Pauson Khand reaction thereactant are used	Alkene and alkyne	Alkyne, carbon dioxide	Alkyne & carbon monoxide	Alkene, alkyne and carbon monoxide
Ugi reaction is component reaction	two	three	four	five
The set of reactant required for Ugi reaction is -	aldehyde, amine, carboxylic acid & isocyanide	aldehyde, amine, phenol & isocyanide	ketone, amine, phenol & cyanide	ketone, amine, carboxylic acid & cyanide
The product of Biginelli reaction is -	Pyrazoles	Dihydropyrimidinone	Purines	Pyrimidines
The name of reaction in which reaction between Carboxylic acid + aldehyde (or ketone) + isocyanides takes place is -	Beginelli reaction	Ugi reaction	Passerini reaction	Mannich reaction
The product of the Mannich reaction is -	Pyrazoles	alpha-amino carbonyl compound	imidazole	beta-amino carbonyl compound
The reactant used in a Huisgen 1,3 dipolar cycloaddition are -	alkyne & azide	alkene & azide	alkane & azide	alkyne & amide
Which of the following do not involve umpolung of reactivity?	Preparation of Grignard reagent	Preparation of β -hydroxy aldehyde by Aldol condensation	Preparation of benzoin from benzaldehyde	Preparation of 1,2 dicarbonyl compound using 1,3 dithiane

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..... reacts with to form enamine	Secondary amine, cyclohexanone	Primary amine, cyclohexanone	Secondary amine, 2,2-dimethyl propanaldehyde	Primary amine, 2,2-dimethyl propanaldehyde
Enamines shows which type of behaviour?	Basic	Electrophilic and acidic	Nucleophilic and basic	Nucleophilic
What is the name of the compound formed when alkylation of enamine is followed by hydrolysis?	Carboxylic acid	Ketone	Amide	Ester
In oxidative addition process, the oxidation state of metal centre	increases	decreases	remains same	cannot be predicted