



# ORGOREVIEW

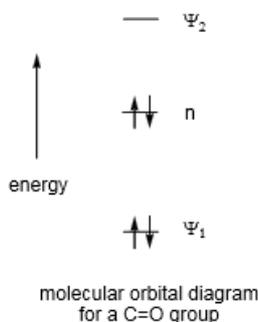
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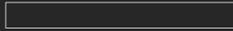
A carbonyl compound is known to absorb light at two different wavelengths. A molecular orbital diagram for this compound is given below. Choose the correct electronic transitions that would be responsible for the long and short wavelength absorptions.



- (A) The long wavelength absorption =  $n \rightarrow \Psi_2$  and the short wave absorption =  $\Psi_1 \rightarrow \Psi_2$ .
- (B) The long wavelength absorption =  $\hat{1}^1 \rightarrow \hat{1}^2$  and the short wave absorption =  $n \rightarrow \hat{1}^2$ .
- (C) The long wavelength absorption =  $n \rightarrow \hat{1}^1$  And the short wave absorption =  $\hat{1}^1 \rightarrow \hat{1}^2$ .
- (D) The long wavelength absorption =  $\hat{1}^1 \rightarrow \hat{1}^2$ . and the short wave absorption =  $n \rightarrow \hat{1}^2$ .

VIDEO SOLUTION





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