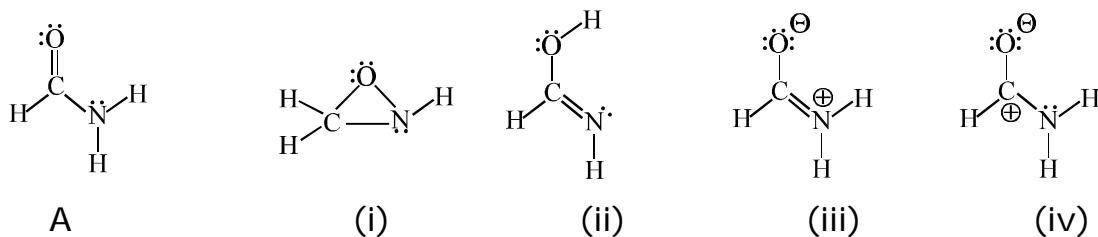


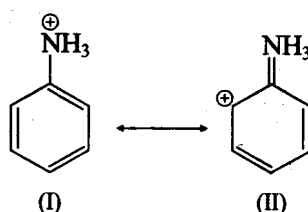
RESONANCE

Q.1 Select from the answers those that are resonance structures of the molecule (A) shown below on the left.



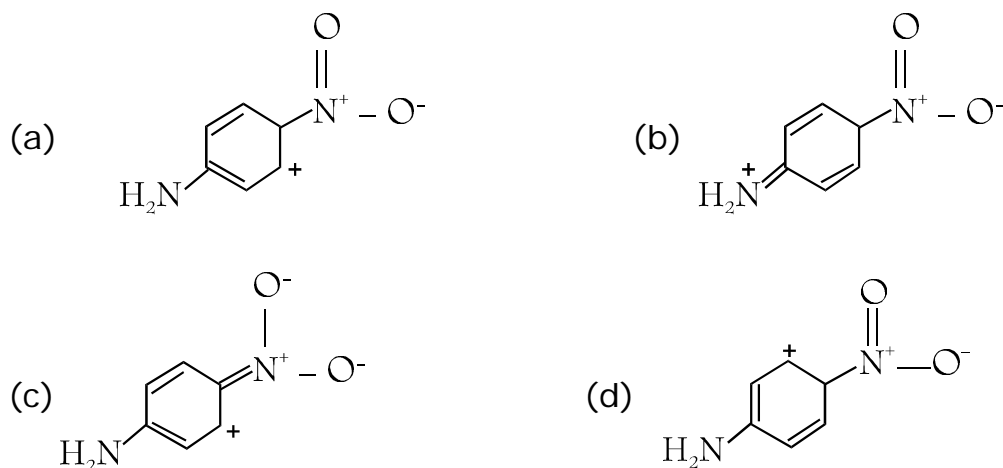
- (A) only i + ii (B) only i + iii (C) only iii
 (D) only iii + iv (E) only i + ii + iv

Q.2 Examine the following two structure for the anilinium ion and choose the best correct statement from the ones given below :

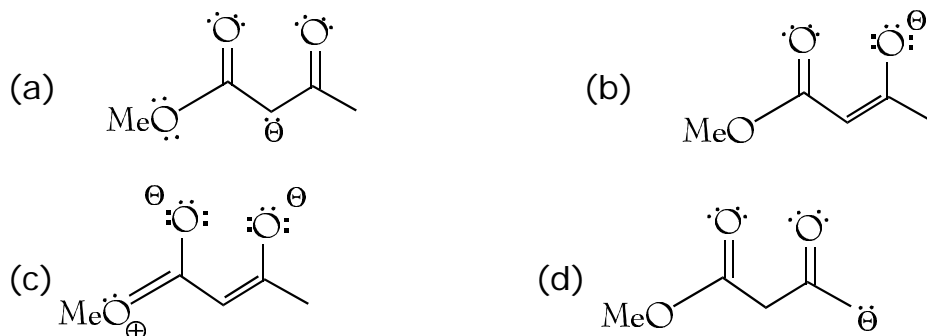


- (A) II is not an acceptable canonical structure because carbocation are less stable than ammonium ions.
 (B) II is not an acceptable canonical structure because it is non-aromatic.
 (C) II is not an acceptable canonical structure because the nitrogen has 10 valence electrons.
 (D) II is an acceptable canonical structure.

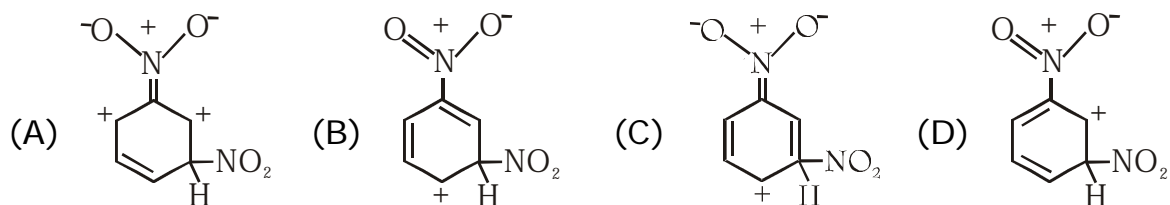
Q.3 Which of the following is not a resonance structure of the others ?



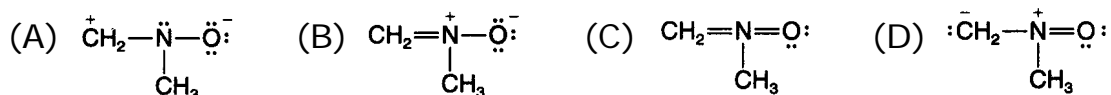
Q.4 Which of the following is not a valid resonance structure of the other three ?



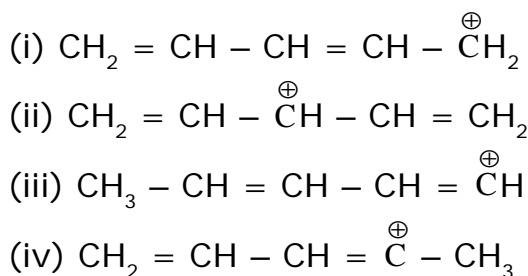
Q.5 Which of the following is not a resonance structure of the rest ?



Q.6 Among the following four structures, one is not a permissible resonance form. Identify the wrong structure ?

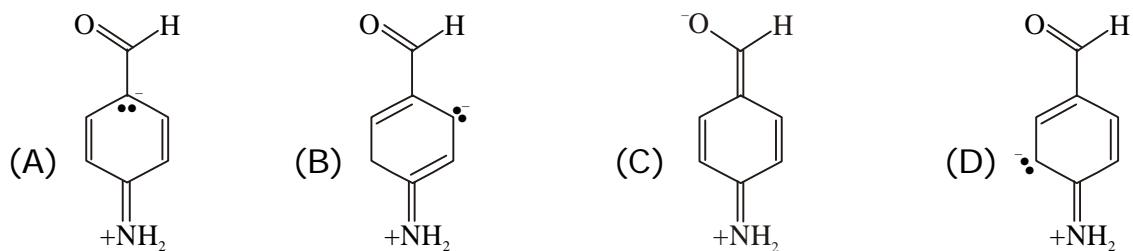


Q.7 Which of the following is(are) valid as resonance structures of the pentadienyl cation ?

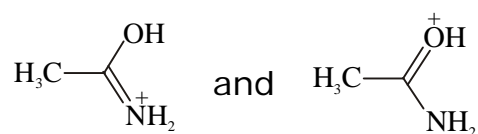


- (A) i only
 (B) i and ii only
 (C) ii and iii only
 (D) iii and iv only
 (E) i, ii, iii and iv

Q.8 Which one of the following is not a resonance form of para-aminobenzaldehyde ?

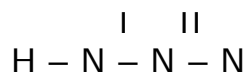


Q.9 What is the relationship between the following two structures ?



- (A) resonance forms
- (B) stereoisomers
- (C) constitutional isomers
- (D) tautomers

Q.10



In skeleton hydrogen azide (above) the bond orders of bonds I and II are :

- | | | |
|-----|-----|-----|
| | I | II |
| (A) | 2 | 2 |
| (B) | < 2 | > 2 |
| (C) | > 2 | < 2 |
| (D) | > 2 | > 2 |
| (E) | < 2 | < 2 |

