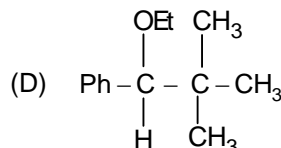
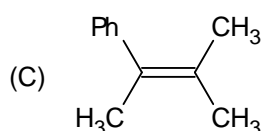
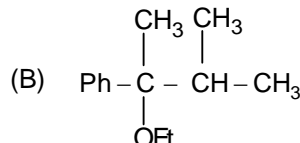
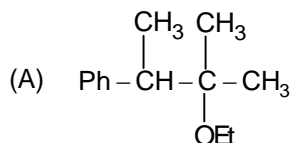
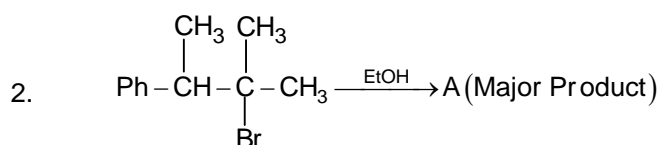
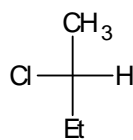
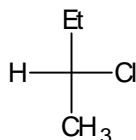
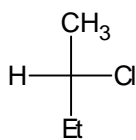
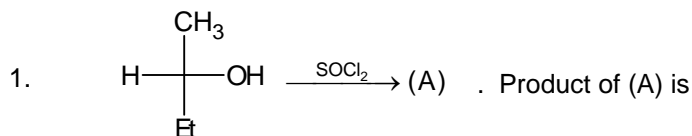
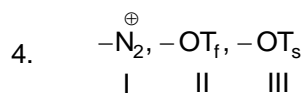
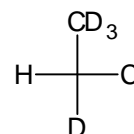
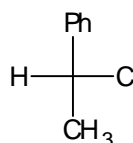
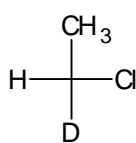
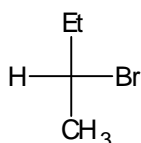


Single Correct Answer Type:



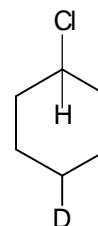
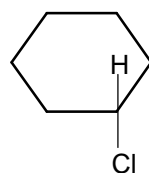
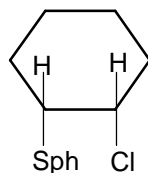
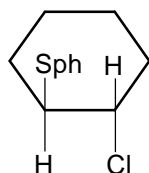
3. Under identical conditions, solvolysis of which of the following substrates would lead to maximum racemisation.



Which of the following order is correct about leaving ability of these groups in nucleophilic substitutions?

(A) I > II > III (B) III > II > I (C) III > I > II (D) II > III > I

5. Which of the following will show more reactivity in nucleophilic substitution reaction?



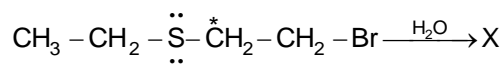
(A)

(B)

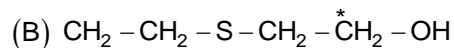
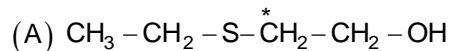
(C)

(D)

6. In the given reaction



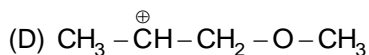
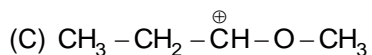
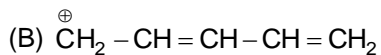
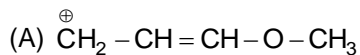
X will be



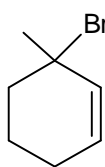
(C) 1 : 1 mixture of (A) and (B)

(D) 2 : 1 mixture of (A) and (B)

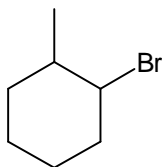
7. Which of the following carbocation is most stable?



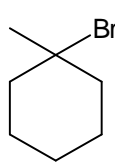
8. Which of the following halides gives fastest elimination reaction when it is treated with alcoholic KOH



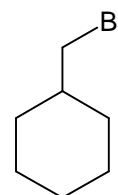
(A)



(B)

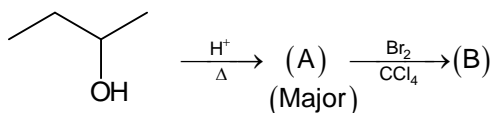


(C)



(D)

9.



Product (B) is _____

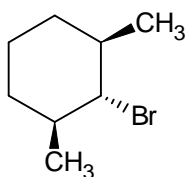
(A) MeSO

(B) Racemic

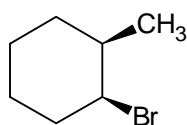
(C) Diastereomer

(D) Optically active single product

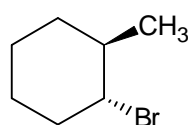
10.



(I)



(II)



(III)

Ease of β - dehydrobromination among these substrates under the treatment of strong base will be in the order as

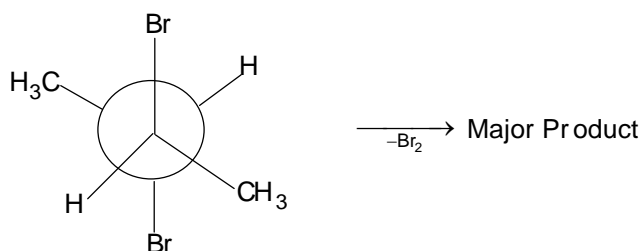
(A) I > II > III

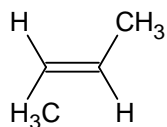
(B) III > II > I

(C) II > I > III

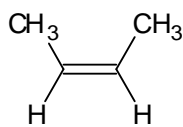
(D) II > III > I

11.





(A)



(B)

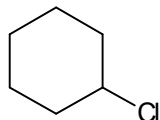
Both A and B

(C)

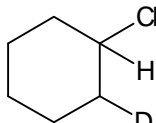
None

(D)

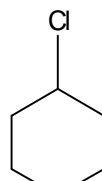
12. SN^1 and SN^2 products are same in (excluding stereoisomer)



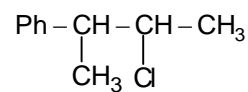
(A)



(B)

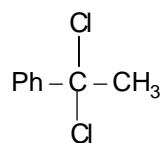


(C)

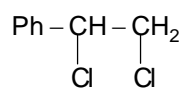


(D)

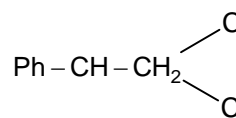
13. $\text{Ph}-\overset{\text{O}}{\parallel}{\text{C}}-\text{CH}_3 \xrightarrow{\text{PCl}_5}$ Products



(A)



(B)

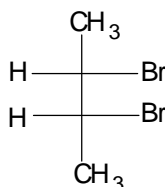


(C)

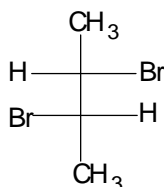


(D)

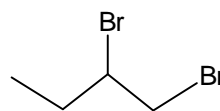
14. $\text{A} \xrightarrow{\text{Zn-dust}}$ Compound (A) is



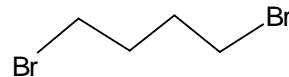
(A)



(B)

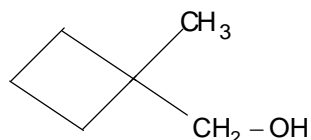
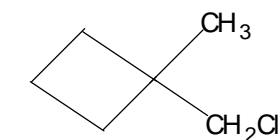


(C)

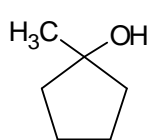


(D)

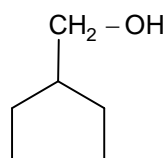
15. $\xrightarrow{\text{Moist Ag}_2\text{O}}$ Major Product



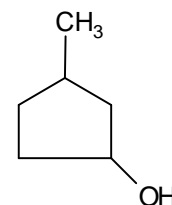
(A)



(B)



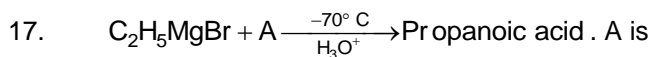
(C)



(D)

16. HBr reacts fastest with
 (A) 2-methyl-propan-2-ol
 (C) Propan-2-ol

- (B) Propan-1-ol
 (D) 2-methylpropan-1-ol

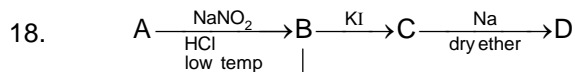


(A) CO_2

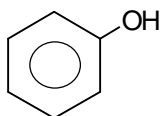
(B) $HCOOH$

(C) $HCHO$

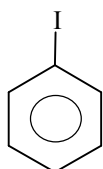
(D) H_2O



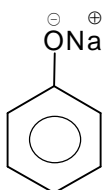
Warm water



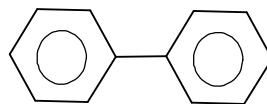
Compound D is _____



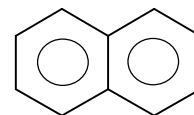
(A)



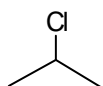
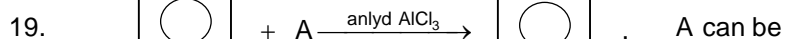
(B)



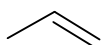
(C)



(D)



(A)



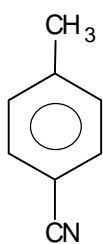
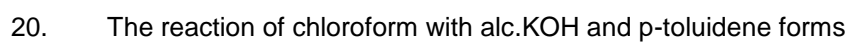
(B)

Both A & B

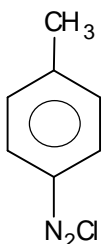
(C)

None

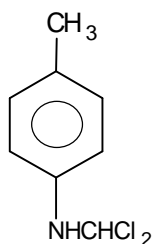
(D)



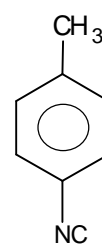
(A)



(B)

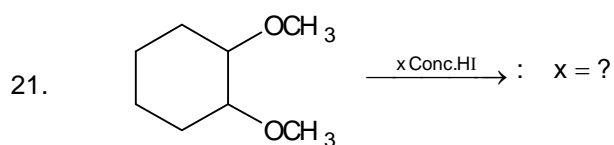


(C)

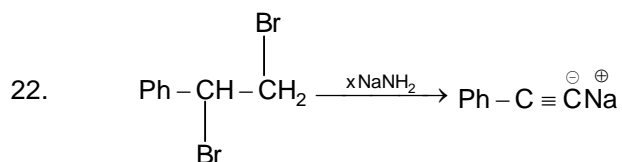


(D)

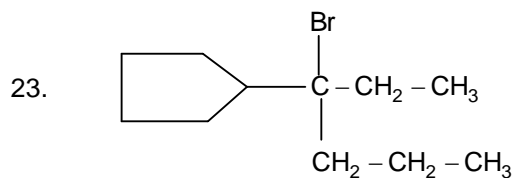
Numerical Based:



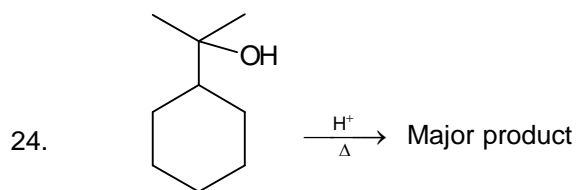
x = moles of HI consumed



Then x = ?



Total number of products obtained when this substrate is subjected to E_2 reaction will be (including stereoisomers)



Total number of α - hydrogens in product

25. Total number of isomers for the molecule, C_3H_6DCl is

KEY

| | | | | | | | | | |
|-----|---|-----|---|-----|---|-----|----|-----|---|
| 1. | A | 2. | B | 3. | C | 4. | A | 5. | A |
| 6. | C | 7. | C | 8. | A | 9. | A | 10. | A |
| 11. | A | 12. | C | 13. | A | 14. | A | 15. | B |
| 16. | A | 17. | A | 18. | C | 19. | C | 20. | D |
| 21. | 5 | 22. | 3 | 23. | 5 | 24. | 10 | 25. | 8 |