Barem de evaluare și de notare
Proba teoretică
Clasa a XI-a

- **Se punctează orice modalitate de rezolvare corectă a cerințelor.**
- **Se acordă 10 puncte din oficiu.**

Subiectul I **(20 de puncte)**

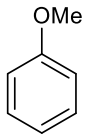
La fiecare din următorii 10 itemi, este corect un singur răspuns.

1. B; **2.** A; **3.** D; **4.** B; **5.** D; **6.** C; **7.** C; **8.** D; **9.** D; **10.** E

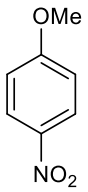
Subiectul al II-lea **(20 de puncte)**

Subiectul II.A. Deducție structurală în chimia organică **(9 puncte)**

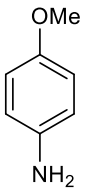
scrierea formulelor de structură ale compușilor **(A)**, **(B)**, **(C)**, **(D)**, **(E)**, **(F)**, **(G)**, **(H)**, și **(I)** **(9 x 1p = 9p)**



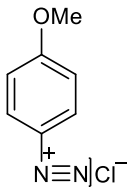
(A)



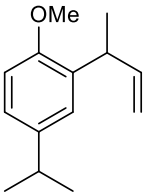
(B)



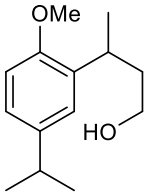
(C)



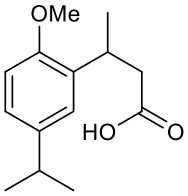
(D)



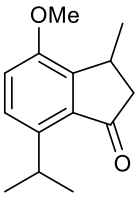
(E)



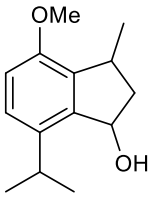
(F)



(G)



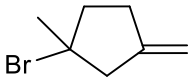
(H)



(I)

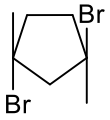
Subiectul II.B. Deducție structurală și izomerie optică **(5 puncte)**

scrierea formulelor de structură ale compușilor **(A)**, **(B)**, **(C)**, **(D)** și ale celor doi diastereoizomeri ai compusului **(E)**



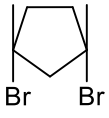
(A)

(1p)



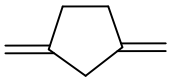
(B)

(1p)



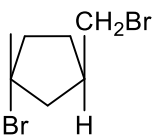
(C)

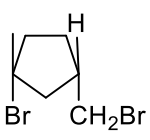
(1p)



(D)

(1p)



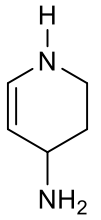


(diastereoizomerii compusului E)

(2 x 0,5p = 1p)

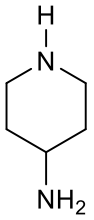
Subiectul II.C. Elucidare structurală în seria aminelor_____(6 puncte)

scrierea formulelor de structură ale compușilor **(A)**, **(B)**, **(C)** și **(D)**



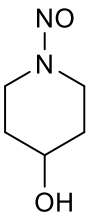
(A)

(1p)



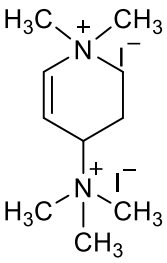
(B)

(1p)



(C)

(2p)



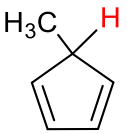
(D)

(2p)

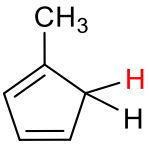
Subiectul al III-lea_____(25 de puncte)

Subiectul III.A. Echilibru sigmatropic și transformări pericliclice _____(6 puncte)

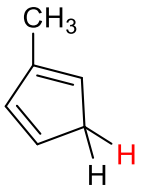
scrierea formulelor de structură ale compușilor **(A_1)**, **(A_2)** și **(A_3) (3 x 1p = 3p)**



(A_1)

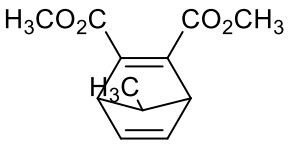


(A_2 sau A_3)

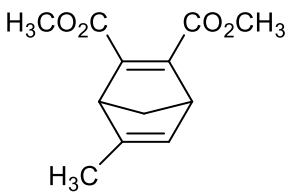


(A_3 sau A_2)

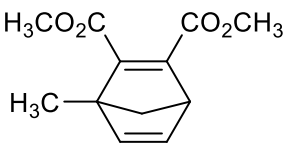
scrierea formulelor de structură ale compușilor **(B_1)**, **(B_2)** și **(B_3) (3 x 1p = 3p)**



(B_1)



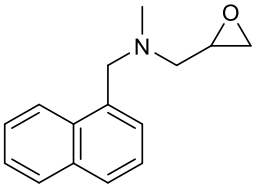
(B_2 sau B_3)



(B_3 sau B_2)

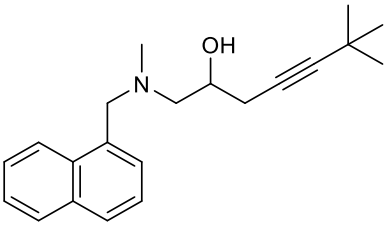
Subiectul III.B. Epiclorhidrina ca intermediar în sinteza organică_____(9 puncte)

1. scrierea formulelor de structură ale compușilor **(D)**, **(E)** și **(F)**.



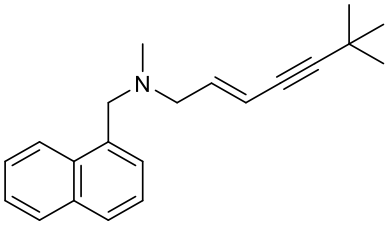
(D)

(1p)



(E)

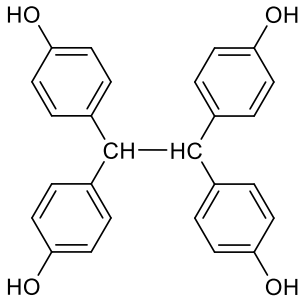
(2p)



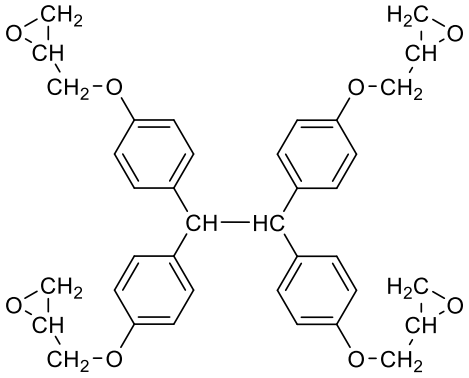
(F)

(2p)

2. scrierea formulelor de structură ale compușilor **(M_1)** și **(M) (2 x 2p = 4p)**



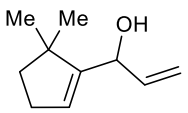
(M_1)



(M)

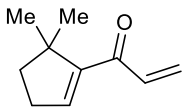
Subiectul III.C. Construcția unui sistem triciclic_____(10 puncte)

scrierea formulelor de structură ale substanțelor **(A)**, **(B)**, **(C)**, **(D)**, **(E)**, **(F)**, **(G)** și **(H)**



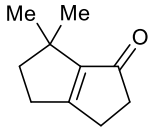
(A)

(1p)



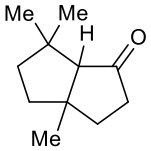
(B)

(1p)



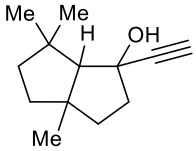
(C)

(2p)



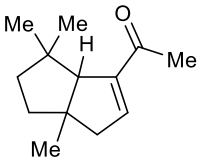
(D)

(1p)



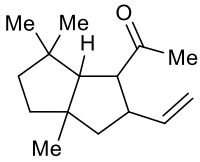
(E)

(1p)



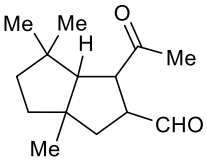
(F)

(2p)



(G)

(1p)



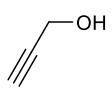
(H)

(1p)

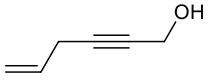
Subiectul al IV-lea_____(25 de puncte)

Subiectul IV.A. Ciclizare multiplă de tip „zipper”_____(14 puncte)

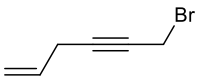
scrierea formulelor de structură ale substanțelor **(A)**, **(B)**, **(C)**, **(D)**, **(E)**, **(F)**, **(G)**, **(H)**, **(K)**, **(L)**, **(M)**, **(N)**, **(O)** și **(Y)** **(14 x 1p = 14p)**



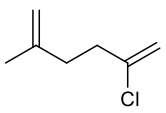
(A)



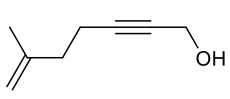
(B)



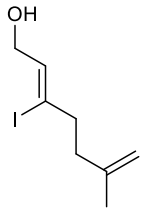
(C)



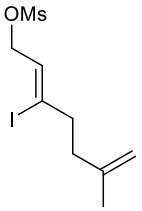
(D)



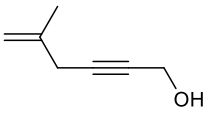
(E)



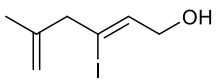
(F)



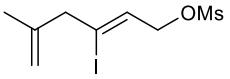
(G)



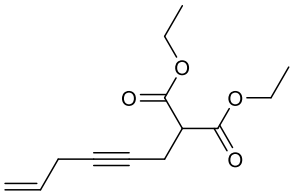
(H)



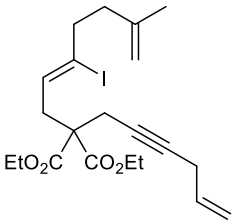
(K)



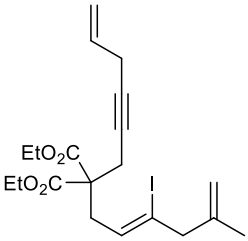
(L)



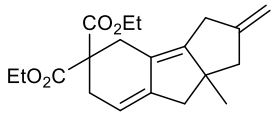
(M)



(N)



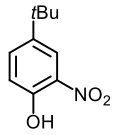
(O)



(Y)

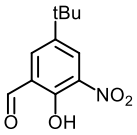
Subiectul IV.B. Arhitecturi moleculare cu rol de receptori anionici_____(11 puncte)

scrierea formulelor de structură ale compușilor **(A)**, **(B)**, **[C]**, **(D)**, **(E)**, **(M)**, **(N)** și **(O)**.



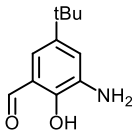
(A)

(1p)



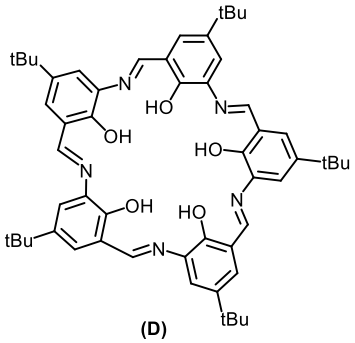
(B)

(1p)



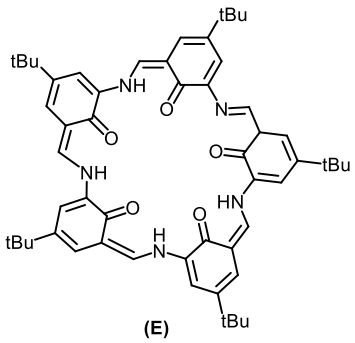
[C]

(1p)



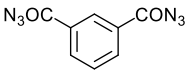
(D)

(2p)



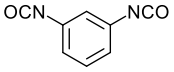
(E)

(2p)



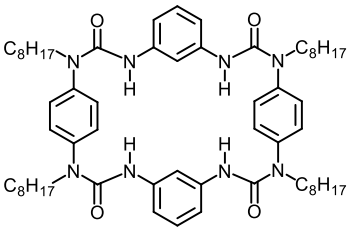
(M)

(1p)



(N)

(1p)



(O)

(2p)

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