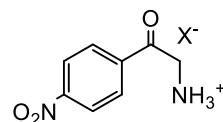
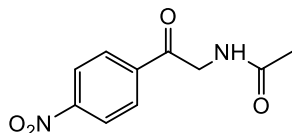


(F) (1p)

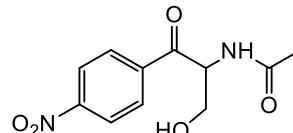


unde X^- este Cl^- sau Br^-

(G) (1p)



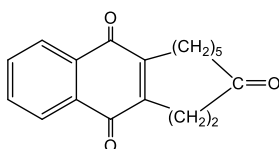
(H) (1p)



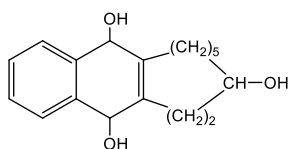
(I) (2p)

Subiectul C.....8 puncte

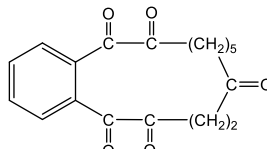
- determinarea formulei moleculare a compusului **(X)**: $C_{18}H_{18}O_3$ **2p**
- scrierea formulelor de structură ale compușilor **(X)**, **(Y)**, **(Z)** și **(T)**: **4 substanțe x 1p = 4p**



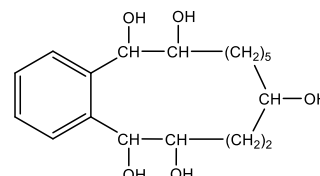
(X)



(Y)

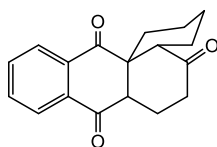


(Z)

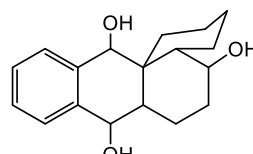


(T)

- scrierea formulelor de structură ale compușilor **(V)** și **(W)**:



(V) 1,5p

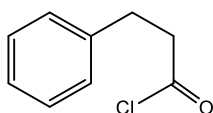


(W) 0,5p

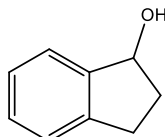
Subiectul al III-lea (30 de puncte)

Subiectul A.....23 de puncte

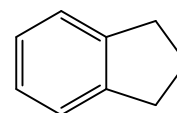
- scrierea formulelor de structură ale compușilor **(1)**, **(2)**, **(X)**, **(Y)**, **(Z)** și **(W)**: **6 substanțe x 1p = 6p**



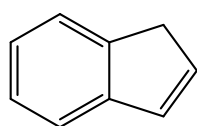
(1)



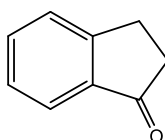
(2)



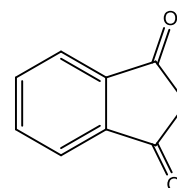
(X)



(Y)

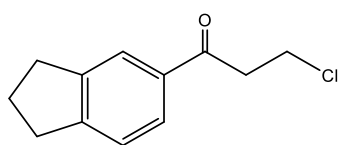


(Z)

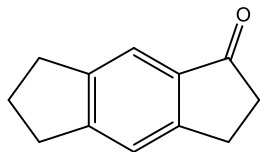


(W)

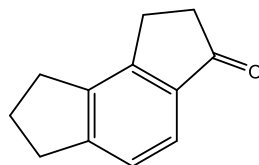
2. scrierea formulelor de structură ale substanțelor (A), (B₁), (B₂), (C₁), (C₂), (E), (F) și (G):
8 substanțe x 1p = 8p



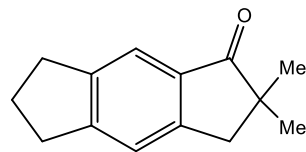
(A)



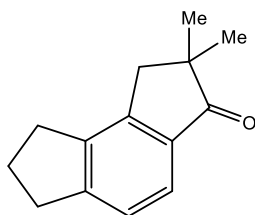
(B₁)



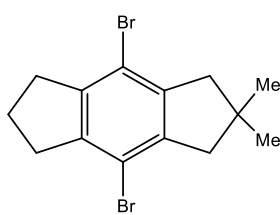
(B₂)



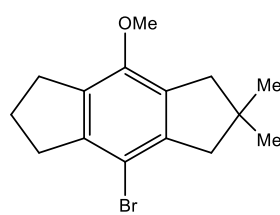
(C₁)



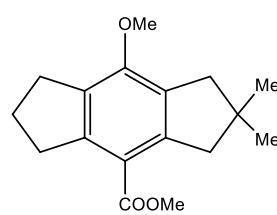
(C₂)



(E)

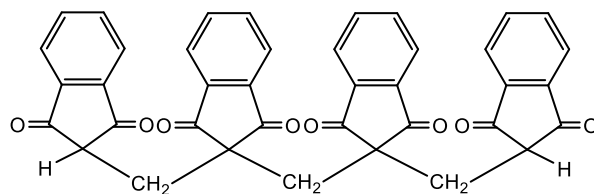


(F)



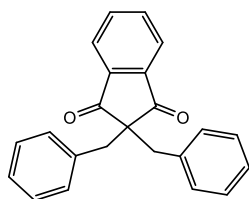
(G)

3. scrierea formulei de structură a compusului (Q) 2p

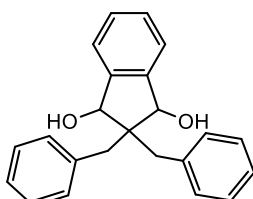


(Q)

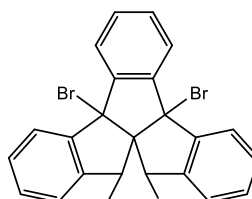
4. scrierea formulelor de structură ale substanțelor (L), (M), (N) și (O)



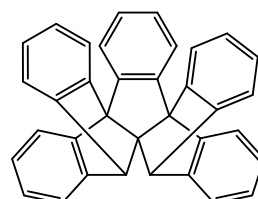
(L) (2p)



(M) (1p)



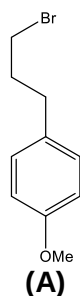
(N) (2p)



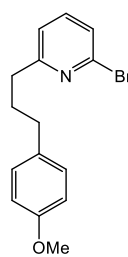
(O) (2p)

Subiectul B.....7 puncte

1. scrierea formulelor de structură ale compuşilor (A) și (B) din secvența de reacții I:
2 substanțe x 0,5p = 1p

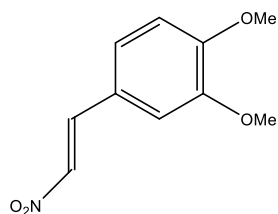


(A)

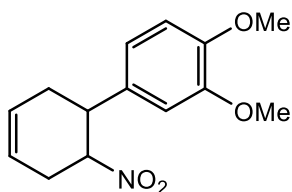


(B)

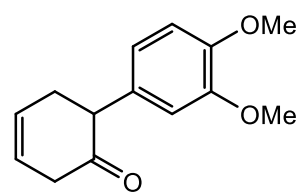
2. scrierea formulelor de structură ale compușilor (1), (2) și (3) din secvența de reacții II:
3 substanțe x 0,5p = 1,5p



(1)

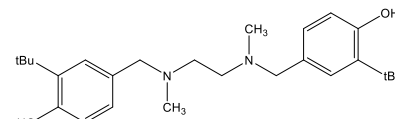
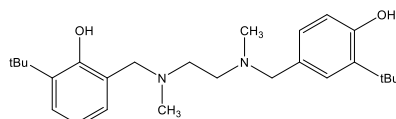
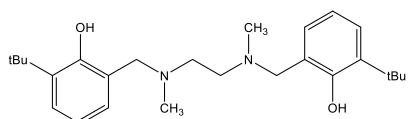


(2)

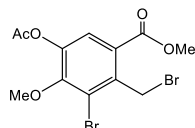


(3)

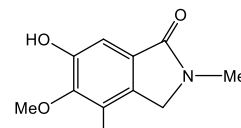
3. scrierea formulelor de structură ale celor trei compuși: 3 substanțe x 0,5p = 1,5p



4. scrierea formulelor structurale ale compușilor (X) și (Y) din secvența de reacții IV:
2 substanțe x 1,5p = 3p



(X)

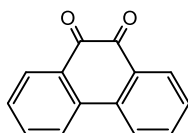


(Y)

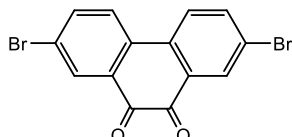
Subiectul al IV-lea

(25 de puncte)

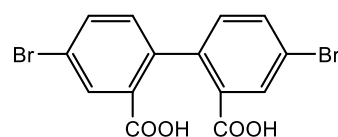
Subiectul A.....5 puncte
scrierea formulelor de structură ale substanțelor (A), (B), (C), (D), (E), (F) și (G)



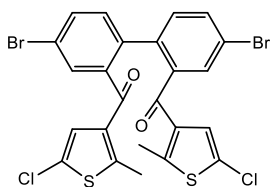
(A) (0,5p)



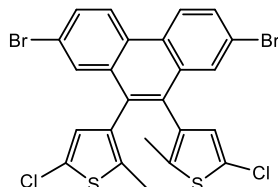
(B) (0,5p)



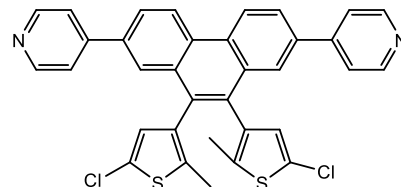
(C) (0,5p)



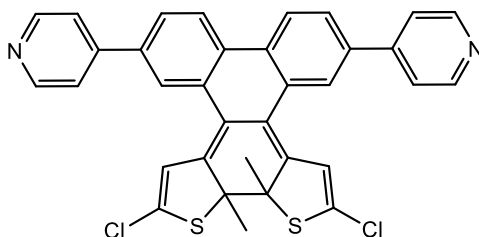
(D) (1p)



(E) (1p)



(F) (1p)

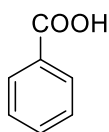


(G) (0,5p)

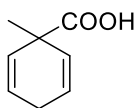
Subiectul B.....20 de puncte

1. a. scrierea formulelor de structură ale compușilor (A), (B), (C), (D), (E) și (F):

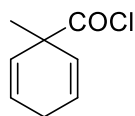
6 substanțe x 1p = 6p



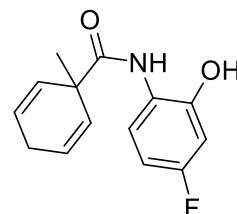
(A)



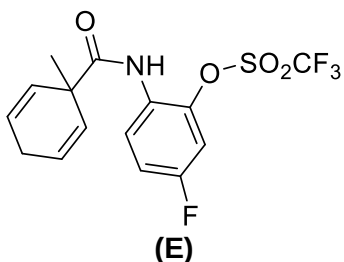
(B)



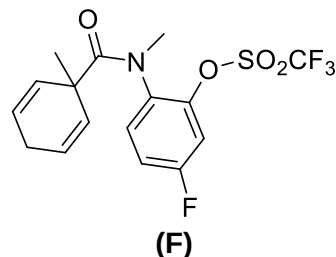
(C)



(D)



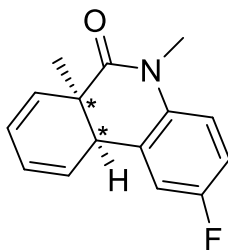
(E)



(F)

b. scrierea formulei de structură a compusului (G) 3,5p

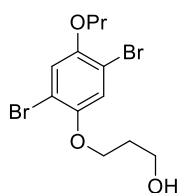
notarea cu * centrul chiral/centrele chirale din molecula compusului (G) 0,5p



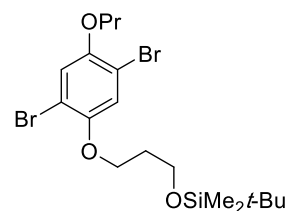
(G)

2. scrierea formulelor de structură ale compușilor (M), (N), (O), (P), (X), (Y) și (Z).

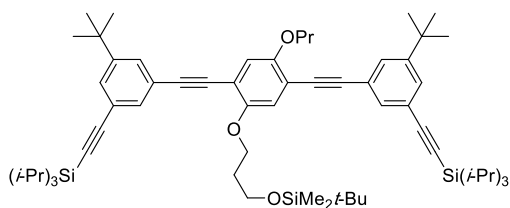
4 substanțe (M), (N), (O), (P) x 1p = 4p



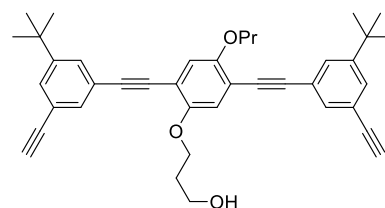
(M)



(N)

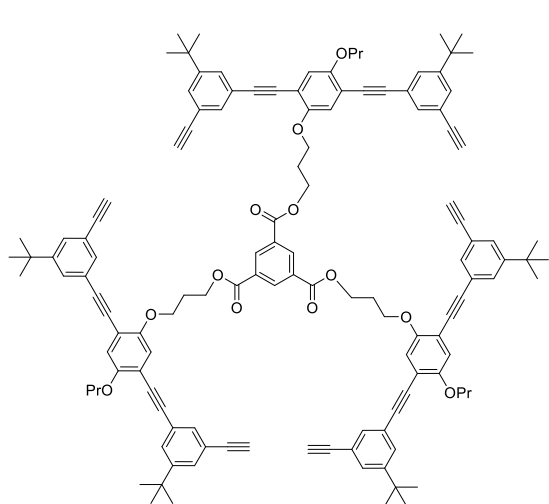


(O)

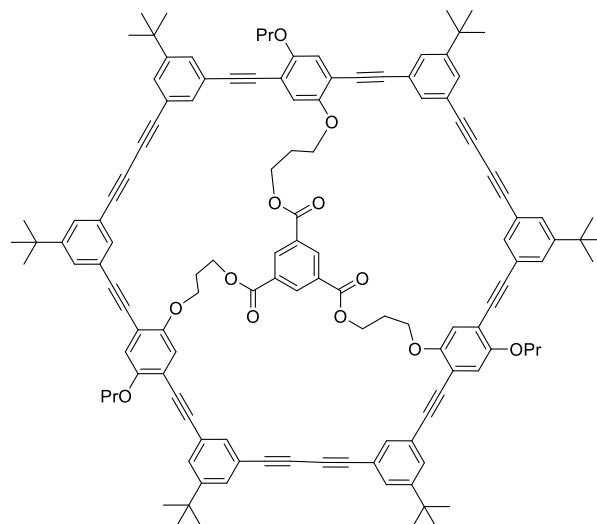


(P)

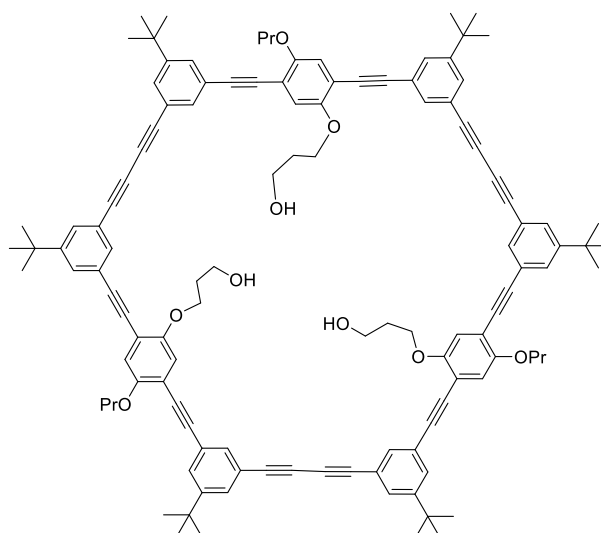
3 substanțe (X), (Y), (Z) x 2p = 6p



(X)



(Y)



(Z)

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