1. Suggest a sequence of transformations to obtain the substituted aniline (2) and the benzazepine derivative (3). Provide the required reagents and conditions.

- 2. Propose a plausible mechanism involved in the following cascade reactions:
- a) Periodinane-mediated cascade annulations.
  - ✓ Could you explain the high chemoselectivity observed?

- a) One-pot synthesis of Quinazolinotriazolobenzodiazepines
  - ✓ How would you synthetize the azide (8) starting from aniline?

- b) Silver-catalysed synthesis of functionalized chromenones.
  - ✓ How would you prepare (11) from a mono-substituted benzene ring?

2.

a.

b.

c.