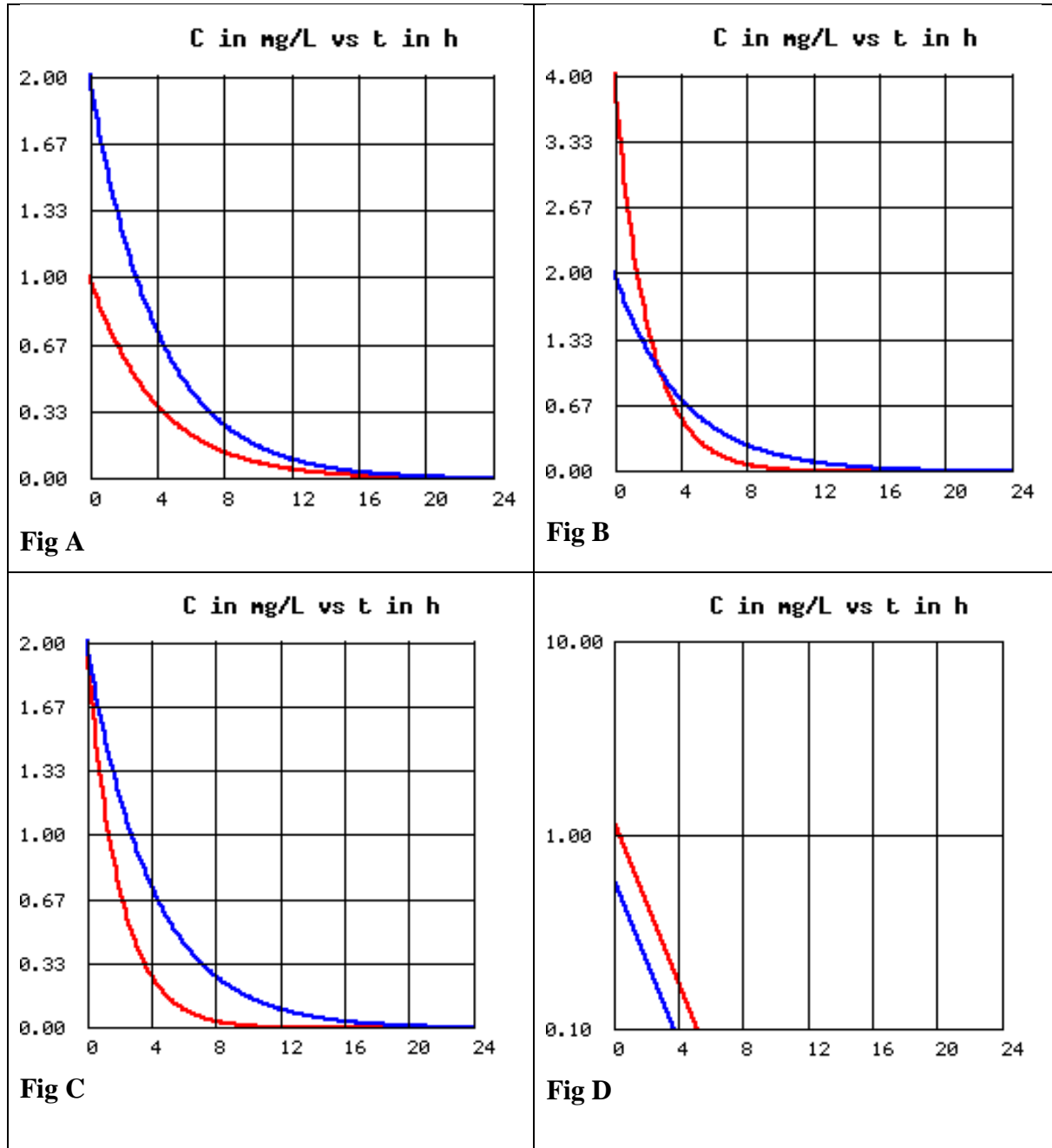


- 1) Identify the Pharmacokinetic metrics: **Dose, Volume of Distribution or the Clearance** (only pick one per scenario), whose changes would determine the differences observed in the following concentration time profiles. (eg: The structure of the answer would look like – The changes in the profiles of Fig A would be because of \_\_\_\_ parameter)



Ans) Fig A – Dose; Fig B – Vd; Fig C – Clearance; Fig D – Dose

2. List the assumptions that apply for a one compartment body model. (IV bolus administration).

- Immediate Distribution
- Elimination is first-order process
- Linear Pharmacokinetics

3. Indicate with an **arrow**, (-), or (?) for how a change in the given parameter would affect the other parameters

CL	VD	Dose	AUC	$k_e$
↑	-	-	↓	↑
-	↓	-	-	↑
-	-	↑	↑	-
?	-	?	↑	?
?	?	?	?	↑