

3DEXPERIENCE

CATIA V5 Associate - Assembly Design (ASM) Sample Exam

V2-2015/03/30

CATIA V5 Associate – Assembly Design (ASM)

Sample Exam

DISCLAIMER:

The purpose of this sample exam is to show you the format and approximate difficulty level of the real exam. It is not meant to give away the content of the real exam.

The questions are an example of what to expect in the real exam in the following sections:

- Drafting
- Assembly Creation

You will create an assembly using parts provided in a zip file (V5R19 or higher).

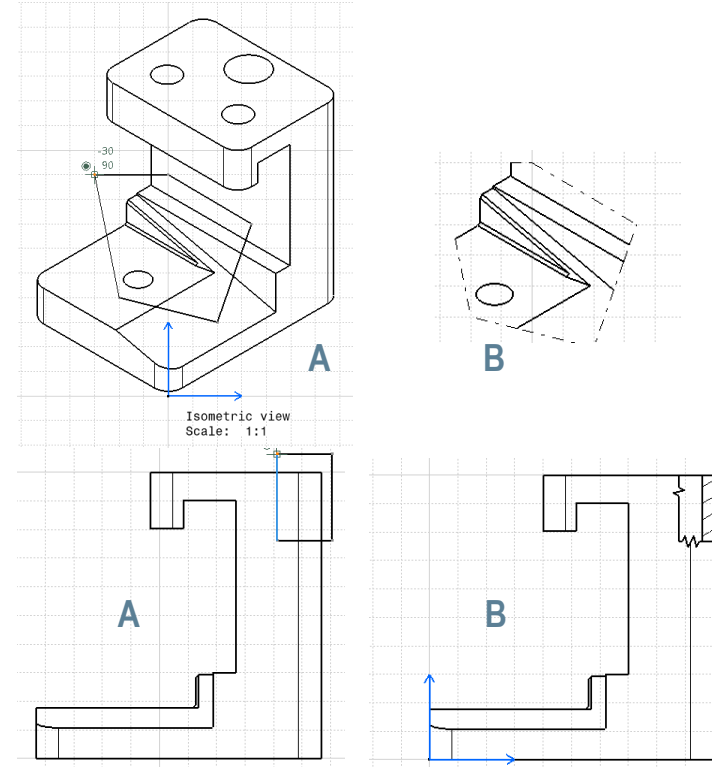
How to take this sample exam:

1. To best simulate the conditions of the real exam, it is best NOT to print this sample exam. Since the tester software window runs concurrently with CATIA, you must switch back and forth between the two applications. Keeping this document open and consulting it on your computer while running CATIA is the best method to simulate the real exam conditions.
2. The multiple choice answers should serve as a check for you to ensure that your model is on the right track while completing this sample exam. If you do not find your answer in the selections offered then, most likely, there is something wrong with your model at that point.
3. Answers to the questions are on the last page of this document. There are also hints that can help you save time during the exam

CATIA V5 Associate (ASM) – Sample Exam

Questions #1 and 2 - Drafting

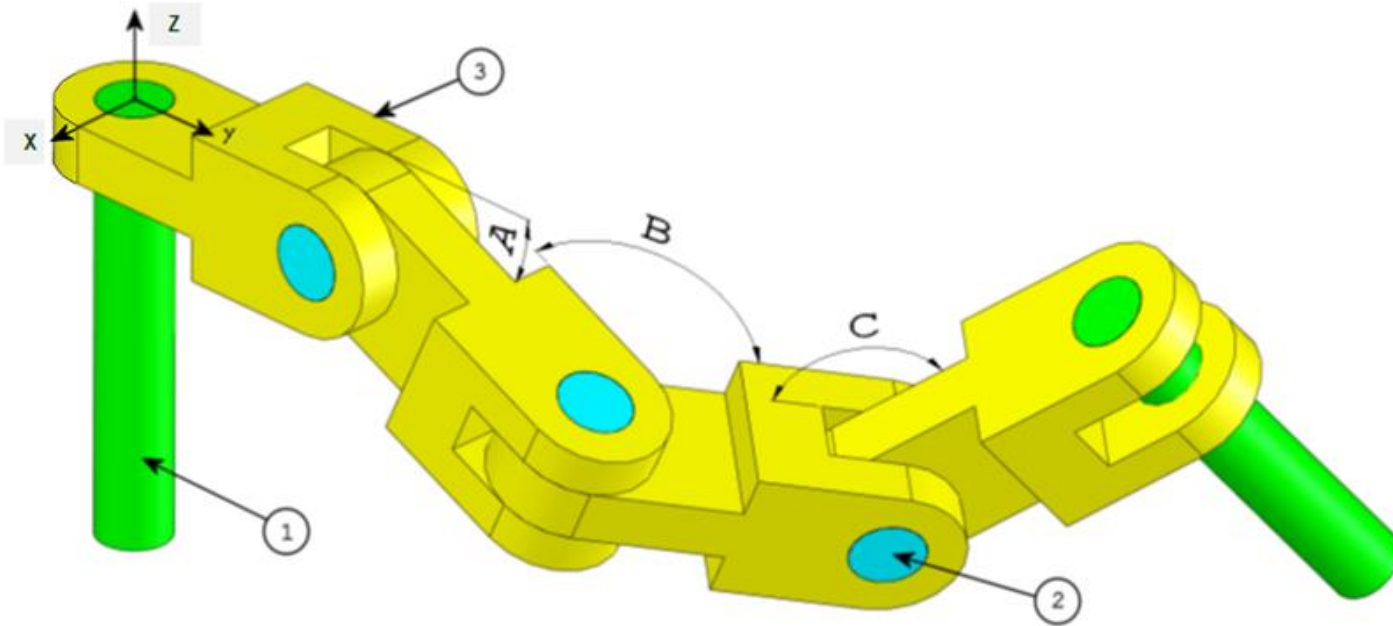
1. To create drawing view 'B' it is necessary to sketch a profile (as shown) on drawing view 'A' and insert which CATIA view type?
 - a) Offset Section View
 - b) Clipping View Profile
 - c) Projection View
 - d) Detail View
2. To create drawing view 'B' it is necessary to sketch a profile (as shown) on drawing view 'A' and insert which CATIA view type?
 - a) Auxiliary View
 - b) Detail View Profile
 - c) Breakout View
 - d) Offset Section View



CATIA V5 Associate (ASM) – Sample Exam

Questions #3 and 4 – Assembly Modeling

These images are to be used to answer questions #3 and 4



CATIA V5 Associate (ASM) – Sample Exam

Question #3 – Assembly Modeling

Build this assembly in CATIA (Chain Link Assembly)

It contains 2 long_pins (1), 3 short_pins (2), and 4 chain_links (3)

- Unit system: MMGS (millimeter, gram, second)
- Decimal places: 2
- Assembly origin: as shown on the image

- Download the zip file (Chain Link Assembly) and open it.

- Save the contained parts and open them in CATIA.

IMPORTANT: Create the assembly with respect to the origin as shown in the isometric view.

(This is important for calculating the proper Center of Gravity)

- Create the assembly using the following conditions:

1. Pins are mated concentric to chain link holes (no clearance)
 2. Pin end faces are coincident to chain link side faces
- A = 25 degrees
 - B = 125 degrees
 - C = 130 degrees

➤ What is the Center of Gravity of the assembly (millimeters)?

Hint: If you don't find an option within 1% of your answer please re-check your assembly

- a) X= -29.62, Y= 105.31, Z= -25.26
- b) X = -30.51, Y = -109.89, Z = -61.40
- c) X = 54.22, Y = -17.48, Z = 59.22
- d) X = -10.54, Y = -208.48, Z = -34.64

CATIA V5 Associate (ASM) – Sample Exam

Question #4 – Assembly Modeling

Modify the assembly in CATIA (Chain Link Assembly)

- Unit system: MMGS (millimeter, gram, second)
- Decimal places: 2
- Assembly origin: as shown on the image

Using the same assembly created in the previous question modify the following parameters:

- A = 30 degrees
 - B = 115 degrees
 - C = 135 degrees
- What is the Center of Gravity of the assembly (millimeters)?
-

CATIA V5 Associate (ASM) – Sample Exam

Answers

1. b) Clipping View Profile
2. c) Breakout View
3. a) $X = -29.62$, $Y = 105.31$, $Z = -25.26$
4. $X = -33.04$, $Y = 99$, $Z = -28.25$

