Assignment 2

The due date for submitting this assignment has passed. **Due on 2018-02-21, 23:59 IST.**

Submitted assignment

1) Calculate the DOF of the following landing gear mechanism as shown in figure.

![Landing Gear Mechanism](image)

No, the answer is incorrect.

Score: 0

Accepted Answers: 1

2) Calculate the degrees of freedom (DOF) of the mechanism shown in figure.
3) The number of independent inversions of a RRPP chain is ____.  
   - 0
   - 1
   - 2
   - 3
   - 4
   
   No, the answer is incorrect.  
   Score: 0  
   Accepted Answers:  
   - 2

4) The number of independent inversions of a RRRP chain is ____.  
   - 0
   - 1
   - 2
   - 3
   - 4
   
   No, the answer is incorrect.  
   Score: 0  
   Accepted Answers:  
   - 3

5) How many DOFs does the following mechanism have?  
   0
   - 1
6) In the following figure, the dead-center (extreme) positions of links AB and DC are shown by dashed-lines. Which of the following link length set indicating (AB, BC, CD, DA) is possible?

- (3,5,5,2) cm
- (5,3,4,5) cm
- (6,5,3,5) cm
- (5,2,2,4) cm

No, the answer is incorrect.
Score: 0
Accepted Answers:
(5,3,4,5) cm

7) A slider-crank mechanism has an offset of 3 cm. If the dead-center positions of the slider are 5 cm apart and the smallest distance of the slider from the ground hinge of the crank over the entire range of motion is 5 cm, the length of the crank is

- 8.1356 cm
- 2.3047 cm
- 7.2434 cm
- 2.2434 cm

No, the answer is incorrect.
Score: 0
Accepted Answers:
2.2434 cm

8) A 4-bar linkage possesses following link lengths with link $L_1$ fixed to the ground. $L_1=2$ cm, $L_2=6$ cm, $L_3=8$ cm and $L_4=10$ cm. What conclusion can be drawn about the 4-bar linkage?

- A double crank
- A double rocker
- A crank-rocker
- A non-Grashofian chain

No, the answer is incorrect.
Score: 0
Accepted Answers:
A double crank
9) A 4-bar linkage possesses following link lengths with link $L_1$ fixed to the ground. $L_1 = 2$ cm, $L_2 = 3$ cm, $L_3 = 4$ cm and $L_4 = 6$ cm. What conclusion can be drawn about the 4-bar linkage?

- Double crank
- Double rocker
- Crank-rocker
- Cannot be determined

**No, the answer is incorrect.**
**Score: 0**
**Accepted Answers:**
*Double rocker*

10) For the mechanism shown in Fig. 4, link 1 is the shortest link with $l_1 = 2$ cm. For which of the following values of $l_2$, the link 2 is going to have a complete rotation with respect to the ground link?

- 3 cm
- 5 cm
- For any value of link $l_2$
- Cannot be determined

**No, the answer is incorrect.**
**Score: 0**
**Accepted Answers:**
*For any value of link $l_2*