

Yanbu Industrial College

Department of Mechanical Engineering Technology



Assignment Cover Sheet

Student Name	ID	Section

Course code	Assignment Number	Assignment Due Date		
MCET 105	1	7-2-2021		
Course Name				
Applied Statics				

Question #	CLOs	Marks Assigned	Marks Attained
1	4.1	6	
2	4.1	4	
Total out of 10			

Instructors: Dr. Akram Faqeeh (CC) and Dr. Zuhair Abdulghani

Guidelines and Rules:

- 1. You are required to <u>follow the guidelines and rules strictly</u>, otherwise, your work might not be accepted.
- 2. You are required to include the assignment cover sheet and included questions pages and make sure to write <u>your name</u>, <u>ID</u>, <u>and section</u>.
- 3. Make sure that <u>your work is neat and readable</u>, otherwise, your marks may be negatively impacted.
- 4. Scan your solution professionally and as one PDF file and then upload it.
- 5. <u>Late submission</u> will not be accepted.

Question 1:

A rocket has a mass of $3.65(10^6)$ kg on earth. Specify its weight in SI units. If the rocket is on the moon, where the acceleration due to gravity is $g_m = 1.62 \, m/s^2$.

Determine to three significant figures the following:

- (a) its weight in SI units. (2 marks)
- (b) its mass in SI units. (2 marks)

You are required to explain your solution using your own words. (2 marks)

Question 2:

For this question express the result to three significant figures with using an appropriate prefix. What is the weight in newtons of an object that has a mass of:

- (a) 10 kg (1 mark)
- (b) 0.5 g (1 mark)
- (c) 4.5 Mg (1mark)

You are required to explain your solution using your own words. (1 marks)