



**KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN
UNIVERSITAS TIDAR
FAKULTAS TEKNIK**

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**FINAL EXAM OF ODD SEMESTER
ACADEMIC YEAR 2020/2021**

COURSE : Bahasa Inggris
LECTURER : Rolisda Yosintha, M.Pd.
CREDITS/SEMESTER : 2 credits/1
CLASS : 01
DAY/DATE :
TIME :
STUDY PROGRAM : Mechanical Engineering (D3)

Instructions:

- Students who do cheating will get a zero score.
- Copy-paste from the Internet is highly prohibited.
- Students are allowed to open their dictionary.

A. Describe the following safety signs using your own words. (20 points)

1.



2.



3.



4.



5.



B. Use the words in the box to complete the text about bolted joints. (20 points)

loosen	shear force	tighten	over-tighten
preload	tension	torque	work loose

In structural applications, it is essential to (1) bolts correctly - firstly to make sure that joints are held together with the right amount of (2), and secondly to help ensure that the bolts do not (3) over time. However, that does not mean to say, 'the tighter the better'.

If excessive force is used to (4) a bolt, the bolt will no longer be strong enough to transmit the extra load to the joint. At this point, various problems can occur.

The shank may begin to twist as it is subjected to additional (5) from the wrench, eventually causing the bolt to fail. Alternatively, as the bolt is stretched due to increasing (6) in the shank, this force will be transmitted to the threads in the form of a scissoring action, resulting in excessive (7) acting between the threads of the bolt and nut, potentially causing permanent damage to the threads. This will not only make it impossible to subsequently tighten and (8) the bolt normally, but also cause tension to be released from the shank as the nut slips, reducing preload and compromising the strength of the joint.

C. Write a letter of application based on the following job advertisement. (60 points)



Mechanical Engineer

PT Bukaka Teknik Utama, Tbk

 **JOB DESCRIPTION**

Requirements:

- Candidate must possess at least Bachelor's Degree in Engineering (Mechanical)
- Required language(s): Bahasa Indonesia, English
- Preferably 1 Year of working experience in the related field, Fresh Graduate are welcome to Apply
- Required Skill(s): AutoCAD, Solidwork
- Preferably Staff (non-management & non-supervisor) specialized in Engineering - Mechanical/Automotive or equivalent.

Job Responsibilities:

- Design Calculation
- Design Review
- Design Validation

 **WORK LOCATION** View larger map / directions 

 **Address**

Bukaka Industrial Estate, Jl Raya Narogong - Bekasi KM 19,5 Cileungsi Bogor