

MANSOURA UNIVERSITY
FACULTY OF ENGINEERING
Department of Design and Production Engineering

Post graduate Exam.

Time allowed 3 Hs.

September 20¹³

Metals and Materials technology

Answer the following Questions:

1- Write a complete report to explain group of knowledge such as:

- basic feature,
- properties,
- advantages and disadvantages,
- fabrication method and
- field of applications for the following materials and alloys:

a) conventional materials and

b) Super alloys.

2- Give full details about the super alloys and discuss its industrial applications.

3- List different type of materials being use in the aerospace industries, shuttles manufacturing components, and explain the reasons for their use.

Prof. A.A.Fattah

Reminder:

- Carefully read the given questions and take your time in thinking then write proper answers according to the engineering formatting system.
- Give an individual answer for each Question in an individual page.
- Don't leave the examination hall before answering all the above questions.