 **Chemistry department Date: th Sept, 2015**

**Course name: How to write a scientific paper for postgraduate students (final) time allowed (120 min) course No: 614 K**

***Answer the following Questions:***

1. **a**-What are the essential parts of a scientific paper? With referring to two of them in detail. **(20 points)**

**b**- What is plagiarism and how to avoid it?

**c**- **Read and Answer carefully**: Anisotropic titanate nanostructures can be synthesized by an environmentally benign, cost efficient and scalable process, the alkaline hydrothermal recrystallization of TiO2 with yields approaching 100%. Their chemistry offers more variety than that of TiO2 nanoparticles and promising preliminary results were already achieved on them in the fields of adsorption, catalysis and energy storage. In this review we first discuss the structure, synthesis and functionalization options of titanate nanotubes and nanowires, then the issues related to their industrial scale production, and finally present selected examples of their currently available applications. **Try to put a title expressing this work tightly as well as adding highlights to this research in not more than 4 points**?

1. **a**- Elucidate what is meant by a patent with mentioning the required steps for writing a patent before declaration. **(20 points)**

 **b**- Visible light assisted reduction of 4-nitrophenol to 4-aminophenol on Ag/TiO2-carbon nanotubes photocatalysts synthesized by hybrid templates: **in view of this title write down an abstract pointing to the most important information should be included while u are writing it.**

3-**a**- What is the difference between short (communication) and long paper.

 **(10 points)**

*With my best wishes and great success*

*Prof. Dr. Mohamed Mokhtar*