**Examination Committee Certification**

We, the members of the Examining Committee, certify that we have examined this Dissertation under title “***USING IMAGE PROCESSING APPROACHES TO DETERMINE THE TRANSPARENCY AND VISCOSITY OF LIQUIDS***”, with Grade (**Excellent**) and approve it as satisfying this requirement for degree of Doctor of Philosophy in (physics) from the College of Science at Mustansiriyah University.

|  |  |  |
| --- | --- | --- |
| Chairman (Signature): |  | Member (Signature): |
| Name: **Dr. Radhi Sh. Hammodi**  Degree: **Professor**  Date: / /2019 |  | Name: **Dr. Faleh H. Mahmood**  Degree: **Assistant Professor**  Date: / /2019 |
| Member (Signature): |  | Member (Signature): |
| Name: **Dr. Kamal M. Abood**  Degree: **Professor**  Date: / /2019 |  | Name: **Dr. Firas Sabeeh Mohammed Alwahib**  Degree: **Assistant Professor**  Date: / /2019 |
| Member (Signature): |  |  |
| Name: **Dr. Hazim G. Dway**  Degree: **Assistant Professor**  Date: / /2019 |  |  |
| Supervisor(1) (Signature): |  |  |
| Name: **Dr. Ali Abid D. Al-Zuky**  Degree: **Professor**  Date: / /2019 |  |  |

**Final Approval by the Dean of College of Science**

Dr. Bashar M. Nema

/ / 2019