TASK

- Do this task in a group of max 4 students (could be less than 4 students but cannot more than 4 students; you can choose your own team).
- Do the following on a piece of paper with pen (not pencil), handwritten.
- Provide full steps to gain full marks
- Put your FULL names and ID numbers (of all the members)
- Scan it or screenshot it.
- Save it as “pdf” file
- Groupwork. One group, one submission.

1. Use Gauss-Legendre 4 d.p, 3 points for:

$$\int_{0.5}^{3.5} x\sqrt{(16-x^2)^3}\,dx$$

2. Use Gauss-Chebyshev 4 d.p, 2 points for:

$$\int_{-1}^{1} (1-x^2)^{1.5}.\cos x.\,dx$$

3. Use Gauss-Laguerre 4 dp, 3 point for:

$$\int_{0}^{\infty} e^{-x}.x^2\,dx$$