

OUR EXAMPLE COLLEGE
First Test Paper, September 2021
A First Course in Abstract Algebra
Semester I

Course Title : Abstract Algebra 101
Course Code : AB 101

Time : 2 Hrs
Weightage : 20

*Answer all 8 questions. Four consecutive questions beginning with the
first form a bunch. Each bunch carries 1 weight*

- A) (1) Define a group
(2) The number of generators in \mathbb{Z}_6 is _____
(3) The order of the smallest non abelian group is _____
(4) What is the binary operation in the symmetric group of 3 letters S_3 ?
- B) (1) Define a subgroup of a group G , is \mathbb{Z}_3 subgroup of \mathbb{Z}_6