

# Webinar on 'Groups of Small Order'



**DAV UNIVERSITY  
JALANDHAR**

**DEPARTMENT OF MATHEMATICS**

Organizes  
**a Webinar on**

# **Groups of Small Order**



Speaker

**Dr. Shalini Gupta**

Associate Professor and Head  
Department of Mathematics  
Punjabi University, Patiala

Live through Zoom Meeting

**Date- 16<sup>th</sup> April 2021**

**Time- 11:00 am**

Contact Person: Dr. Shelly Garg, Assistant Professor (Mob: 9815785974)

URL

<https://zoom.us/j/92336437789>

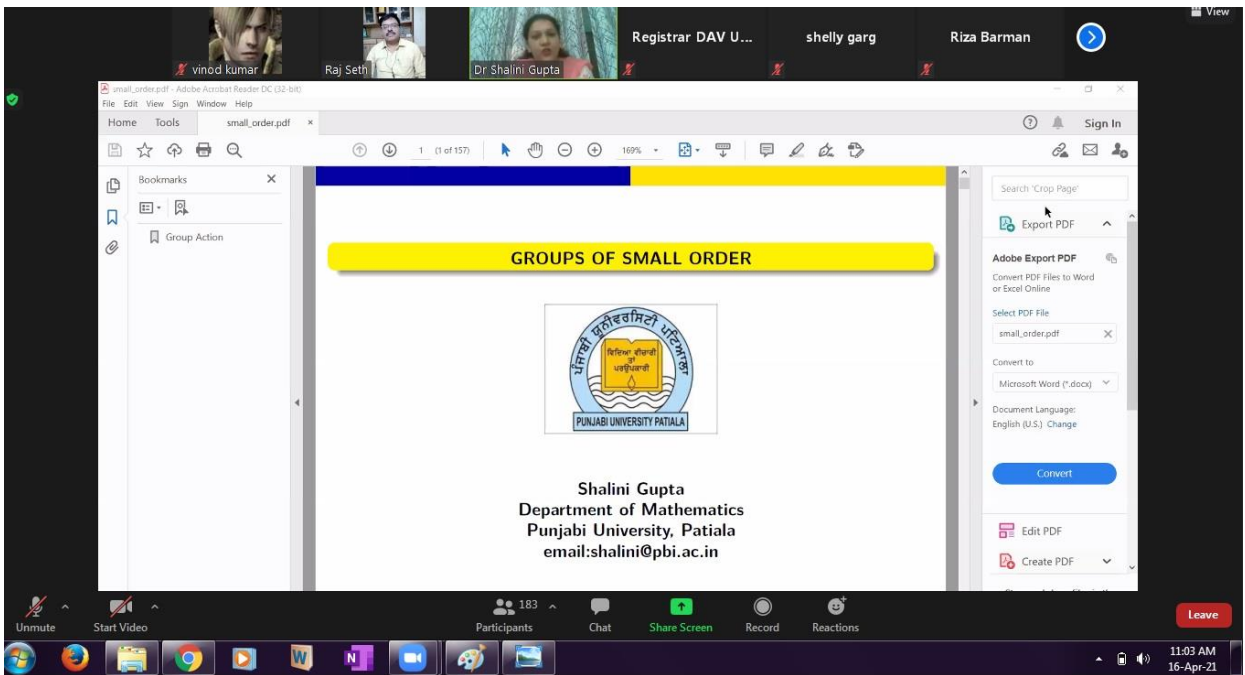
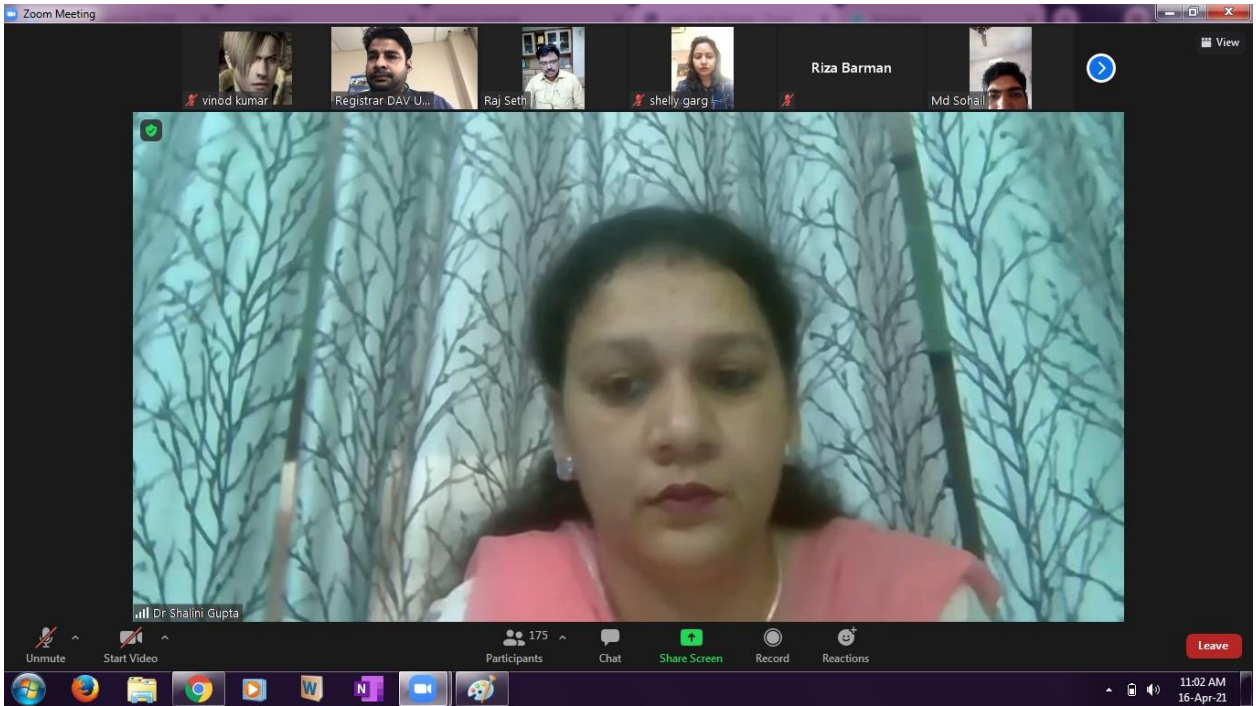


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Recording You are viewing Dr Shalini Gupta's screen View Options View

Group Action

## Groups of Order $2p$

**Theorem**  
Let  $G$  be a group of order  $2p$ , where  $p$  is a prime greater than 2. Then,  $G$  is isomorphic to  $Z_{2p}$  or  $D_p$ , where  $D_p$  is dihedral group of order  $2p$ .

**proof:-**

- Let  $H$  be Sylow  $p$ -subgroup then  $n_p = 1 + kp$  divides 2. It implies that  $n_p = 1$ .
- $H$  is normal in  $G$  and  $H = \langle x \rangle$ .

Shalini Gupta Punjabi University, Patiala 16 April, 2021 21 / 39

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## News Report

A webinar on “groups of Small order’ was organized by Department of Mathematics, DAV University, Jalandhar. The webinar started with the welcome speech by Dean Academics Dr. R.K.Seth. He introduced and welcomed resource person Dr. Shalini Gupta, Head and Associate Professor, Department of Mathematics, Punjabi University, Patiala.

Dr. Shalini Gupta discussed the groups of order upto 15. She explained the tools to find the number of non-isomorphic abelian and non-abelian groups of some particular order. More than 200 participants joined the webinar. Dr. Shelly Garg, Assistant Professor, Department of mathematics thanked the resource person for enlightening the students with her knowledge. Vice-chancellor Dr. Jasbir Rishi and Registrar Dr. K N Kaul congratulated the organizing team for the success of the webinar.