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MISSION

- To emerge as a National center of learning, academic excellence and innovative research in the field of Mathematics.
- To produce post graduate students with strong foundation to do research or to serve in the Society.
- To make students competent in the use that they can move to do in the transforming scenario.
- To achieve the high standards of excellence in generating and propagating mathematical knowledge.
- To provide an environment where students can learn beyond structured levels of mathematics and understand the use of mathematics in other disciplines.
- To create an atmosphere conducive to high class research and to produce researchers who are learning and doing research, who can become experts in future in relevant areas of Mathematics.

Solve any 3 MSc-I (M) Unit - 02 (Test) Paper-5 Discrete MATHS is abelian.

Ques ① Define a semigroup with an example.

Ques ② Show that the homomorphism image of an abelian semigroup is abelian.

Ques ③ Define quotient semigroup by an example.

Ques ④ State and Prove fundamental theorem of semigroup homomorphism.

Ques ⑤ Let (\mathbb{Z}, \oplus) semigroup of integers and relation R defined on \mathbb{Z} by:-
 $aRb \iff a \equiv b \pmod{m}$
 then show that (\mathbb{Z}_m, \oplus) is a monoid with respect to \oplus .

Ques ⑥ Let R be the congruence relation on the semigroup (S, \cdot) then $*$: $S/R \rightarrow S/R$ defined by:-
 $[a] * [b] = (a \cdot b) \forall a, b \in S$ is a binary operation on S/R and $(S/R, *)$ is a semigroup.

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विभागाध्यक्ष
गणित विभाग
शा.स. चन्द्रलाल चन्द्राकर
कला एवं विज्ञान महाविद्यालय
पाटन, जि. - दुर्ग (छ.ग.)

- Test - No - (02)

Paper - 05 (Discrete Maths)

(M.Sc. Ist) 15-09-2023

Unit - 02

S.No.	Name	Sing :-
1.	Priyanka Verma	Priyanka
2.	Vidya	Vidya
3.	Jagsiti Sahu	J Sahu
4.	Ritu Dewangan	Ritu Dewangan
5.	Malluwi Son	Malluwi
6.	Namelta sahu	Namelta
7.	Amrita Sahu	Amrita
8.	Hema	Hema



15-9-2023

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कला एवं विज्ञान महाविद्यालय
(छ.ग.) दुर्ग - 751 021