

JUBILEE COLLEGE, BHURKUNDA

SEM-IV आगारि ५री / Assignment mode EXAM-2.

2019-2022

SUB: MATHS (Core/Hon)

15x3 = 60 marks

Answer any three questions (only one question from each paper)

Core paper-08

Q. (1) solve the following system of equation by using gaussian elimination method

$$x + y + z = 9$$

$$2x - 3y + 4z = 13$$

$$3x + 4y + 5z = 40$$

Derive or Lagrange's interpolation formula.

Core paper-09

Q. (2) state and prove nsc for R-integrability

or state and prove Cauchy-Hadamard theorem.

Core paper-10

Q. (3) Prove that every field is an integral domain but the converse is not necessarily true.

Let  $W_1$  and  $W_2$  be or subspaces of a vector space

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SEM-IV

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2019-2020

SUB: MATHS (4.E/4m)

Marks - 15

Answer any one question

Q ① Define Ring. Prove that the set  $S$  of numbers of the form  $a+b\sqrt{2}$ , where  $a$  and  $b$  are integers, is a commutative ring with unity element with respect to ordinary addition and multiplication.

② Show that a finite integral domain is a field.

————— x ————— x —————