Com - IV

Sem-IV Math (G.E.)

10 Friday July

191-174 • WK 28

JUNE JULY 2015

M	T	W	T	F	S	S
1	2	3	4	5	6	
8	9	10	11	12	13	
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

Answer any three question:-

Q1. Write Birkhoff theorem.

Q2. What is coding theory.

Q3. Define polya's theorems and their immediate applications.

Q4. Write Hadamard matrices.

Q5. State Cauchy root-test.

~~Sem-IV Physics~~

2015

Sem - IV Math

8 Wednesday July

Core - 9. Riemann Integration and Series of function

Answer any three question:-

Q1. What do you mean by Riemann integration?

Q2. Define comparison-test?

Q3. Define Dirichlet's-test?

Q4. Write the statement of cauchy - Hadamard theorem.

Q5. Define the Refinement of partition P of function f defined on $[a,b]$

2015

Semester-IV Math

Core-8 (Numerical Methods)

Answer any three question:-

Q1. Define:- Absolute, Relative and percentage errors.

Q2. Write the Newton-Gregory formul for forward and backward interpolation.

Q3. Write the Gauss forward and backward formula.

Q4. Apply Gauss-Jordon's method to solve:

$$x + 2y + z = 8$$
$$2x + 3y + 4z = 20$$
and $$4x + 3y + 2z = 16$$

Q5. Write the formula of Simson's $\frac{1}{3}$ rule.

ctor-IV Physics core-8.

Sem-IV Math (Physics)

core-10. Ring theory and Linear algebra-I

AUGUST 2015

S	M	T	W	T	F	S
30	31					1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

WK 28 • 190-175

9 Thursday July

Answer any three question:-

Q1. Define rings and properties of rings?

Q2 Define Integral domain of set R?

Q3. Write the definition of Subring of R.

Q4 Prove that $ax = bx \Rightarrow a = b$;
$a, b, x \neq 0$ then $ab = 0 \Rightarrow a = 0$ or $b = 0$

Q5. Write the definition of 'Direct sum of spaces' of its two subspaces.

2015

Semester-II Math core-III

Real analysis

AUGUST 2015
S M T W T F S
30 31 1
2 3 4 5 6 7 8
9 10 11 12 13 14 15
16 17 18 19 20 21 22
23 24 25 26 27 28 29
WK 27 • 185-180

4 Saturday July

Answer Any three question:-

Q1. State monotone subsequence theorem.

Q2. Prove that every convergent sequence is bounded.

Q3. Solve: $x = y - p^2$

Q4. Solve: $p^2 + 2xp - 3x^2 = 0$

Q5. State DeMorgan's test.

Sem-II Math core-IV (Differential Equation)

Answer any three question.

Q1 Define bounded sets and cauchy sequence

5 Sunday

Q2. State and prove D'Alembert's ratio test.

Q3. State and prove Blozano-Weierstrass theorem for sets.

2015