Ph.D. Mathematics Admission Test

Max. Time: 90 Minutes

50 MCQs from the following subjects and all to attempt:

Q.No.1. Advanced Mathematical Analysis
Q.No.2. Advanced Partial Differential Equation
Q.No.3. Advanced Integral Equations
Q.No.4. Advanced Linear Algebra
Q.No.5. Real Analysis-I
Q.No.7. Ordinary Differential Equations
Q.No.8. Differential Geometry-I
Q.No.9. Complex Analysis
Q.No.10. Linear Algebra
Q.No.11. Set Topology
Q.No.12. Real Analysis-II
Q.No.13. Partial Differential Equations
Q.No.15. Analytical Mechanics
Q.No.16. Numerical Methods

Some questions as example:

Q.No. 1. If \( b^2 - 4ac < 0 \), then the second order linear partial differential equation is

a) elliptic    b) hyperbolic    c) parabolic    d) all of these    e) none of these

Q.No. 2. Every cyclic group is

a) of prime order    b) is of composite order    c) is abelian    d) is non abelian

e) is decomposable

Q.No.3. Every bounded below and increasing sequence is

a) convergent    b) divergent    c) neither convergent nor divergent

d) May be convergent and may be divergent    e) none of these