

國立高雄大學應用數學系博士班資格考試各科參考書目

※每科考試時間皆為 3 小時

2012.12.21

考試科目	參考書目	考試範圍
實變函數論	1. Halsey Royden and Patrick Fitzpatrick: Real Analysis, 4th ed., Peason, ISBN: 978-0-13-511355-4.	Chapter 1 ~ 10 (以 Ch1~Ch8 為重點)
	2. W. Rudin: Real and Complex Analysis, 3rd ed., McGraw-Hill Education, 1986, ISBN: 978-0070941892.	Chapter 1 ~3, Chapter 6~9
數值分析	1. R. L. Burden and J. D. Faires: Numerical Analysis, 8th ed., Thomson Brooks, 2005, ISBN:978-0534404994.	全部
組合數學	1. M. Aigner: A Course in Enumeration. Springer, 2007, ISBN:978-3540390329.	Chapter 1~3, Chapter 5~6
泛函分析	1. W. Rudin: Real and Complex Analysis, 3rd ed., McGraw-Hill Education, 1986, ISBN: 978-0070941892.	Chapter 1~6
	2. Casper Goffman and George Pedrick: First Course in Functional Analysis, Prentice Hall, 1965, ISBN:978-0133183863.	Chapter 1~4
機率論	1. Davar Khoshnevisan: Probability, AMS, 2007, ISBN: 082-1842153.	全部
	2. Kai Lai Chung: A Course in Probability Theory, 3rd ed., Academic Press, 2000, ISBN: 978-0121741518.	Chapter 1~6
偏微分方程	1. Fritz John: Partial differential equations 4th ed., Springer, 1981, ISBN:0-387-90609-6	全部
	2. Walter A. Strauss: Partial Differential Equations: An Introduction 2nd ed., Wiley, 2007, ISBN: 0470054565	全部
漸進理論與擾動	1. E. J. Hinch: Perturbation Methods,	全部

考試科目	參考書目	考試範圍
方法	Cambridge, 1991, ISBN:978-0521378970.	
	2. Norman Bleistein and Richard Handelsman: Asymptotic Expansions of Integrals, Dover, 2010, ISBN:978-0486650821	Chapter 1~4, Chapter 7
常微分方程	1. Sze-Bi Hsu: Ordinary Differential Equations with Applications, World Scientific, 2006, ISBN:9812563199.	全部
	2. Jack K. Hale: Ordinary Differential Equations, Wiley, 1969, ISBN:0471340901.	全部
代數	1. Dummit and Foote: Abstract Algebra 3rd ed., Wiley, 2003, ISBN:978-0471433347.	Chapter 1~14
高等線性代數	1. S. H. Friedberg, A. J. Insel and L. E. Spence: Linear Algebra, 4th edition, 2003, ISBN: 0-13-120266-9.	全部
	2. R. A. Horn and C. R. Johnson: Matrix Analysis, Cambridge, 1986, ISBN:0-521-30586-1.	Chapter 1~5
財務數學	1. Steven E. Shreve: Stochastic calculus for finance I: The Binomial Asset Pricing Model, Springer, 2004, ISBN:0387401008.	全部
	2. Steven E. Shreve: Stochastic calculus for finance II: Continuous-Time Models, Springer, 2004, ISBN:0387401016.	Chapter 3~5