

A II

| | | | | | |
|--|----------------------------------|--|--|--|--|
| A II | / | | | | |
| Advanced Mathematics A(II) | | | | | |
| / / 90/6/5.0 | 0 | | | | |
| A(I) | | | | | |
| 1 2 /1-15 1 2 /1-15 1 2 /1-15 | 5205 5208 | | | | |
| 2017 1 | | | | | |
| | / / | | | | |
| 719686 | Email jianrq@dgut.edu.cn | | | | |
| 1. 3. | 2. | | | | |
| Calculus (Seventh Edition) , James Stewart, | | | | | |
| 1. 2. | | | | | |
| A | | | | | |
| 1. 2. 3. 4. | 1 1 2 2 3 3 | | | | |
| | | | | | |
| | | | | | |

| | | | | | |
|---|--|---|----------------------|----------|--|
| | | | | | |
| 1 | Arc length, Area of a surface of revolution, notions of differential equations, and separable equation | 6 | 1. 2. 3. 3. | | |
| 2 | Linear equations, curves defined by parametric equations and their calculus, and polar coordinates | 6 | 1. 3. 4. | 2. | |
| 3 | Areas and lengths in polar coordinates, sequences and series | 6 | 1. 2. | 3. | |
| 4 | the integral, comparison, ratio, and root tests, absolute convergence | 6 | 1. 2. | | |
| 5 | power series, Taylor and Maclaurin series, 3-dimensional coordinate systems | 6 | 1. Taylor | 2. 3. | |
| 6 | The dot and cross products, equations of surfaces | 6 | 1. 2. | | |
| 7 | Derivatives and integrals of vector functions, limits of functions with several variables | 6 | 1. 2. 4. 1. | 3. | |
| 8 | partial derivatives and chain rules, directional derivatives | 6 | 1. 3. | 2. 4. | |
| 9 | extreme values, Lagrange multipliers, double and iterated integrals | 6 | 1. Lagrange | 2. 3. | |

| | | | | | |
|--------|---|----|---------------------|---|--|
| | | | | | |
| 10 | surface area, triple integrals, change of variables in multiple integrals | 6 | 1. 2. 3. | | |
| 11 | vector fields, line integrals and their fundamental theorem | 6 | 1. 2. | | |
| 12 | Green's theorem, curl and divergence, surface integrals | 6 | 1. Green 2. 3. | | |
| 13 | Stokes' theorem Second-order linear equations | 6 | 1. Stokes 2. Stokes | | |
| 14, 15 | | 12 | | + | |
| | | 90 | | | |

| | | | | |
|--|--------------------------|--|---|------|
| | | | | |
| | A(100), B 90, C 80, D 70 | | 0 | 0.20 |
| | | | | 0.10 |
| | | | | 0.70 |

2018-03-20

