



## AP CALCULUS BC COURSE- SESSION PLAN

LESSON NO	TOPICS
LESSON 1	Discussion of the structure of the test and test taking strategies. Discussion of Diagnostic test and scopes of improvement. Session 1: Limits and Continuity
LESSON 2	Limits and Continuity-Part 2 High level questions including graphs and charts. Homework Discussion
LESSON 3	Fundamental properties of Derivatives -Theory plus real time practice and discussion. Homework Discussion.
LESSON 4	Definition of a Derivative-Theory plus real time practice and discussion. Homework Discussion.
LESSON 5	Derivatives-Chain, Power, Quotient, and Product Rules, All types of questions + Homework discussion.
LESSON 6	Trigonometric Derivatives, composite functions and implicit differentiation. All types of questions + Homework discussion.
LESSON 7	Analytical Applications of differentiation-Part 1-All types of questions + Homework discussion.
LESSON 8	Applications of differentiation-Part 2-All types of questions + Homework discussion.
LESSON 9	Applications of differentiation-Part 3-All types of questions + Homework discussion.
LESSON 10	Integration-All rules and sample questions+ High level practice+ Discussion-Homework discussion.
LESSON 11	Integration Part 2-All rules and sample questions+ High level practice+ Homework discussion.
LESSON 12	Integration- Part 2 Advanced techniques-Sample questions+ High level practice+ Discussion Homework discussion.
LESSON 13	Applications of Integration-Part 1 Advanced techniques-Sample questions+ High level practice+ Discussion of Area-Method 1,2,3+Homework discussion.
LESSON 14	Applications of Integration-Part 2 Advanced techniques-Sample questions+ High level practice+ Discussion-Revisiting Method 1,2,3+Homework discussion.
LESSON 15	Applications of Integration-Part 3 Advanced techniques-Sample questions+ High level practice+ Discussion-Volume-Method 1,2+Homework discussion.
LESSON 16	Applications of Integration-Part 4 Advanced techniques-Sample questions+ High level practice+ Discussion-Volume-Method 3 +Homework discussion.
LESSON 17	Logarithmic and exponential Integration
LESSON 18	Parametric Equations and Polar Coordinates
LESSON 19	Integration by parts
LESSON 20	Partial fractions in integration
LESSON 21	Infinite sequences and series-Convergence and divergence-Theorems
LESSON 22	MOCK TEST 1
LESSON 23	MOCK TEST 1-REVIEW
LESSON 24	MOCK TEST 2
LESSON 25	MOCK TEST 2-REVIEW
LESSON 26	MOCK TEST 3
LESSON 27	MOCK TEST 3-REVIEW
LESSON 28	MOCK TEST 4
LESSON 29	MOCK TEST 4-REVIEW
PRACTICE SESSIONS	PRACTICE TESTS (10 MOCK TESTS EXTRA) 100 HOURS OF PRACTICE AFTER THE PREPARATION