Tag   : Calc1B.21-22.SampleTest1_Answers

Course   : **Calculus 1B**

Duration : 2 hours

Answers to the questions of Sample Test 1

1.   The correct answer is H)

2. $\dfrac{3x^2}{1 + |2 - x^3|}$

3. $\frac{2}{5}(9\sqrt{3} - 4\sqrt{2})$ or $\frac{18}{5}\sqrt{3} - \frac{8}{5}\sqrt{2}$

4. $\frac{1}{4}$

5.   The correct answer is G)

6. $P_3(x) = 1 + \frac{1}{2}x - \frac{15}{8}x^2 - \frac{47}{48}x^3$

7.   a. -
      (Show that the left-hand side and right-hand side of the given differential equation are equal when you substitute $e^{2\sqrt{x}} - e^{\sqrt{x}}$ for y.)

      b. $y = 2e^{2\sqrt{x}} - e^{\sqrt{x}}$

8.   a. $\sqrt{3}\, e^{\frac{5\pi}{6}i}$

      b. -27

9.   The correct answer is C)

10. $y = 26\, e^{-2x} - 17\, e^{-3x} + \sin x + \cos x$