PART – III

QUANTITATIVE APTITUDE

101. If the sum of five consecutive integers is S, then the largest of those integers in terms of S is

(A) $\frac{S-10}{5}$ (B) $\frac{S+4}{4}$

(C) $\frac{S+5}{4}$ (D) $\frac{S+10}{5}$

102. The greatest among the numbers $3\sqrt{2}$, $3\sqrt{7}$, $6\sqrt{5}$, $2\sqrt{20}$ is

(A) $3\sqrt{2}$ (B) $3\sqrt{7}$

(C) $6\sqrt{5}$ (D) $2\sqrt{20}$

103. The denominator of a fraction is 3 more than its numerator. If the numerator is increased by 7 and the denominator is decreased by 2, we obtain 2. The sum of numerator and denominator of the fraction is

(A) 5 (B) 13

(C) 17 (D) 19

104. 47 is added to the product of 71 and an unknown number. The new number is divisible by 7 giving the quotient 98. The unknown number is a multiple of

(A) 2 (B) 5

(C) 7 (D) 3

105. The least number which when divided by 16, 18, 20 and 25 leaves 4 as remainder in each case but when divided by 7 leaves no remainder is

(A) 17004 (B) 18000

(C) 18002 (D) 18004

106. If the measure of each interior angle of a regular polygon be 144°, the number of sides of the polygon is

(A) 10 (B) 20

(C) 24 (D) 36

107. The base of a right prism is an equilateral triangle of area 173 cm^2 and the volume of the prism is 10380 cm^3. The area of the lateral surface of the prism is (use $\sqrt{3} = 1.73$)

(A) 1200 cm^2 (B) 2400 cm^2

(C) 3600 cm^2 (D) 4380 cm^2

108. If a right circular cone is separated into solids of volumes V_1, V_2, V_3 by two planes parallel to the base, which also trisect the altitude, then $V_1 : V_2 : V_3$ is

(A) 1 : 2 : 3 (B) 1 : 4 : 6

(C) 1 : 6 : 9 (D) 1 : 7 : 19

109. The ratio of the volume of a cube and of a solid sphere is 363 : 49. The ratio of an edge of the cube and the radius of the sphere is (taking $\pi = \frac{22}{7}$)

(A) 7 : 11 (B) 22 : 7

(C) 11 : 7 (D) 7 : 22

110. The ratio of the areas of a regular hexagon and an equilateral triangle having same perimeter is

(A) 2 : 3 (B) 6 : 1

(C) 3 : 2 (D) 1 : 6

SPACE FOR ROUGH WORK