# SSC CGL (Tier - 1) Online Exam Paper - 2016 "held on 2 September 2016" Morning Shift (Quantitative Aptitude)

**EXAM DATE :** 2-September-2016

**EXAM START TIME :** 10:00:00

**EXAM NAME :** SSC Examination 2016

**Question 51.If 20 men working 8 hours per day can complete a piece of work in 21 days. How many hours per day must 48 men work to complete the same job in 7 days?**

**Options:**

**1**) 12

**2**) 20

**3**) 10

**4**) 15

**Correct Answer:** 10

Question 52.

*ABCD is a cyclic quadrilateral. $\angle DBA = 50°$ and $\angle ADB = 33°$. Then the measure of $\angle BCD$ is*

**Options:**

**1**) 83°

**2**) 80°

**3**) 75°

**4**) 60°

**Correct Answer:** 83°

**Question 53.A shop keeper earns a profit of 12% on selling a book at 10% discount on the printed price. The ratio of cost price to the printed price of the book is**

**Options:**

**1**) 45:56

**2**) 50: 61

**3**) 99: 125

**4**) None of these

**Correct Answer:** 45:56

**Question 54.The number of pupils of a class is 55. The ratio of the number of male pupils to the number of female pupils is 5: 6. The number of female pupils is**

**Options:**

**1**) 11

**2**) 25

**3**) 30

**4**) 35

**Correct Answer:** 30

Question 55.5% more is gained by selling a watch for Rs. 350 than by selling it for Rs. 340. The cost price of the watch is

**Options:**

**1**) Rs. 110

**2**) Rs. 140

**3**) Rs. 200

**4**) Rs. 250

**Correct Answer:** Rs. 200

**Question 56.If 60% of the students in a school are boys and number of girls is 812, how many boys are there in the school?**

**Options:**

**1**) 1128

**2**) 1218

**3**) 1821

**4**) 1281

**Correct Answer:** 1218

**Question 57.It takes eight hours for a 600 km journey, if 120 km is done by train and the rest by car. It takes 20 minutes more, if 200 km is done by train and the rest by car. The ratio of the speed of the train to that of the car is:**

**Options:**

**1**) 3:5

**2**) 3:4

**3**) 4: 3

**4**) 4: 5

**Correct Answer:** 3:4

Question 58.

$If\ a + \dfrac{1}{a} = 1, then\ the\ value\ of\ \dfrac{a^2 - a + 1}{a^2 + a + 1}\ is\ (a \neq 0)$

**Options:**

**1**) 1

**2**) -1

**3)** 0

**4)** 2

**Correct Answer:** 0

**Question 59.** If m + n = 1, then the value of m3 + n3 + 3mn is equal to

**Options:**

**1)** 0

**2)** 1

**3)** 2

**4)** 3

**Correct Answer:** 1

**Question 60.** The maximum number of common tangents that can be drawn to two disjoint circles is
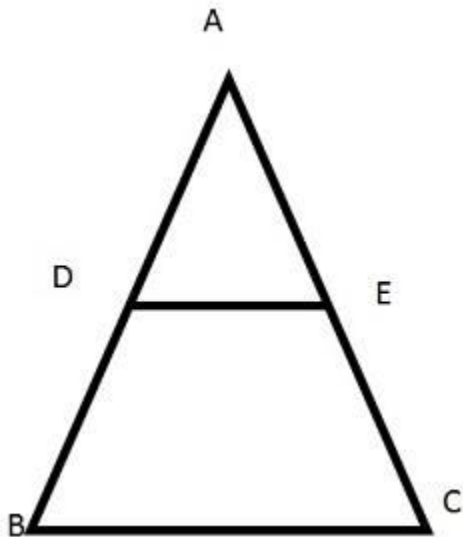
**Options:**

**1)** 1

**2)** 2

**3)** 4

**4)** Infinitely many

**Correct Answer:** 4

**Question 61.** In figure, DE || BC. If DE = 3 cm, BC = 6 cm and area of ΔADE = 15 sq cm, then the area of ΔABC is



**Options:**

**1)** 75 sq cm

**2)** 45 sq cm

**3**) 30 sq cm

**4**) 60 sq cm

**Correct Answer:** 60 sq cm

Question 62.If cos4θ - sin4θ = 1/3, then the value of tan2θ is

**Options:**

**1**) 1/2

**2**) 1/3

**3**) 1/4

**4**) 1/5

**Correct Answer:** 1/2

**Question 63.If a perfect square, not divisible by 6, be divided by 6, the remainder will be**

**Options:**

**1**) 1, 3 or 5

**2**) 1, 2 or 5

**3**) 1, 3 or 4

**4**) 1, 2 or 4

**Correct Answer:** 1, 3 or 4

**Question 64.A batsman in his 12th innings makes a score of 120, and thereby increase his average by**

**5. The average score after 12th innings is**

**Options:**

**1**) 60

**2**) 55

**3**) 65

**4**) 70

**Correct Answer:** 65

Question 65.

The value of $\sqrt{-\sqrt{3} + \sqrt{3 + 8\sqrt{7 + 4\sqrt{3}}}}$ is

**Options:**

**1**) 2

**2**) 4

**3**) ±2

**4**) -2

**Correct Answer:** 2

Question 66.

If $x^4 + \dfrac{1}{x^4} = 119,$ *then the value of $x - \dfrac{1}{x}$ is*

**Options:**

**1**) 6

**2**) 12

**3**) 11

**4**) 3

**Correct Answer:** 3

Question 67.The side BC of the ΔABC is extended to the point D. If ∠ ACD = 112° and ∠B = 3/4 ∠A, then the value of ∠B is

**Options:**

**1**) 64°

**2**) 48°

**3**) 46°

**4**) 50°

**Correct Answer:** 48°

**Question 68.ΔABC is a right angled triangle, the radius of its circumcircle is 3 cm and the length of its altitude drawn from the opposite vertex to the hypotenuse is 2 cm. Then the area of the triangle is**

**Options:**

**1**) 12 sq cm

**2**) 3 sq cm

**3**) 6 sq cm

**4**) 5 sq cm

**Correct Answer:** 6 sq cm

**Question 69.The height of a tower is 50√3 m. The angle of elevation of a tower from a distance 50 m from its feet is**

**Options:**

**1**) 30°

**2**) 45°

**3**) 60°

**4**) 90°

**Correct Answer:** 60°

**Question 70.** The amount of Rs. 10,000 after 2 years, compounded annually with the rate of interest being 10% per annum during the first year and 12% per annum during the second year, would be (in rupees)

**Options:**

**1)** 11,320

**2)** 12,000

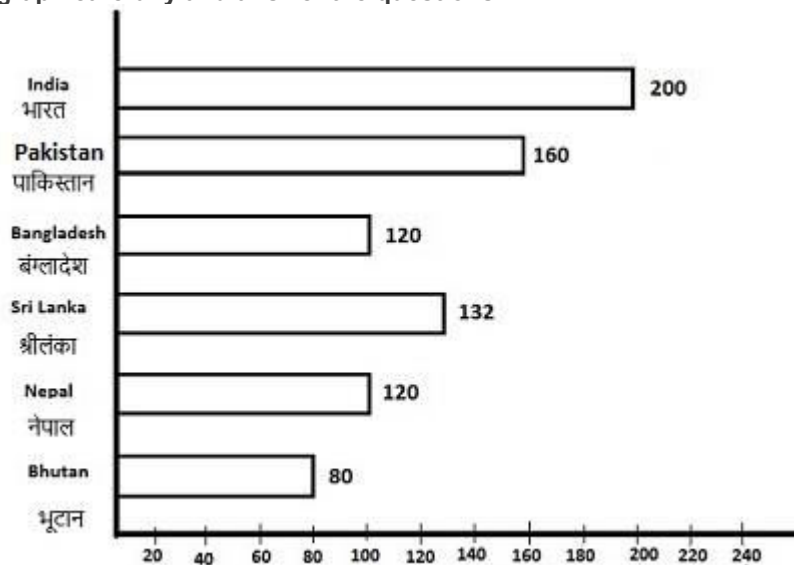**3)** 12,320

**4)** 12,500

**Correct Answer:** 12,320

**Question 71.** The value of tan80° tan10° + sin²70° + sin20° is  tan80° tan10° + sin270° + sin20°

**Options:**

**1)** 0

**2)** 1

**3)** 2

**4)**

$$\frac{\sqrt{3}}{2}$$

**Correct Answer:** 2

**Question 72.** The bar graph given below shows the per acre yield (in kg) of different countries. Study the graph carefully and answer the questions



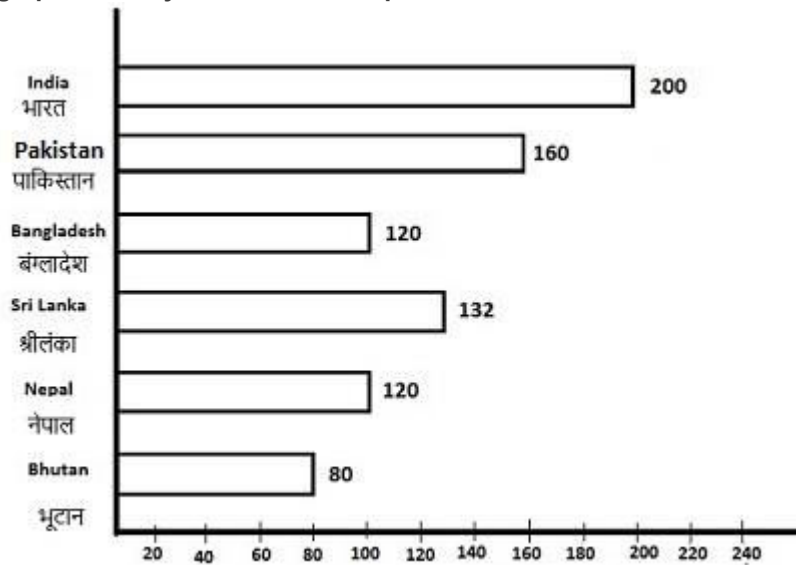The average yield of the given countries is

**Options:**

**1)** 1321/3

**2**) 1331/3

**3**) 1341/3

**4**) 1351/3

**Correct Answer:** 1351/3

**Question 73.**The bar graph given below shows the per acre yield (in kg) of different countries. Study the graph carefully and answer the questions



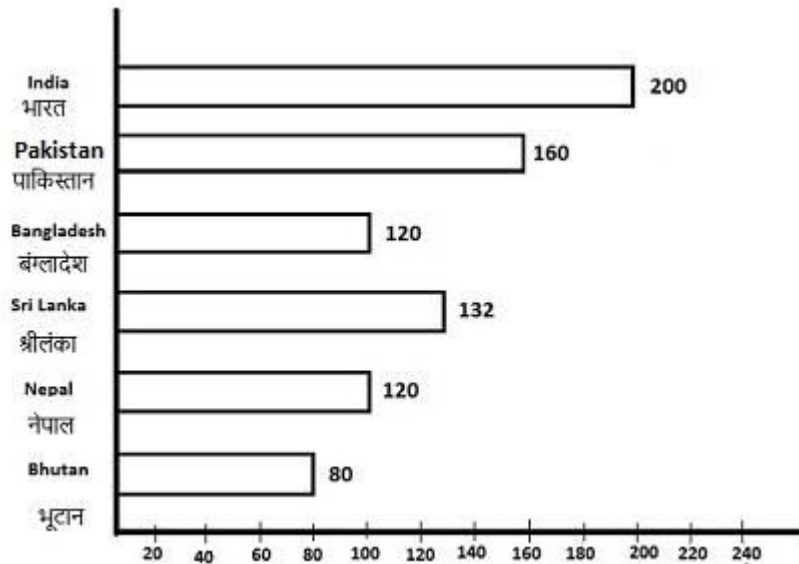By how much percentage is India's per acre yield more than that of Pakistan's?

**Options:**

**1**) 20%

**2**) 25%

**3**) 33 1/3%

**4**) 35%

**Correct Answer:** 25%

**Question 74.**The bar graph given below shows the per acre yield (in kg) of different countries. Study the graph carefully and answer the questions
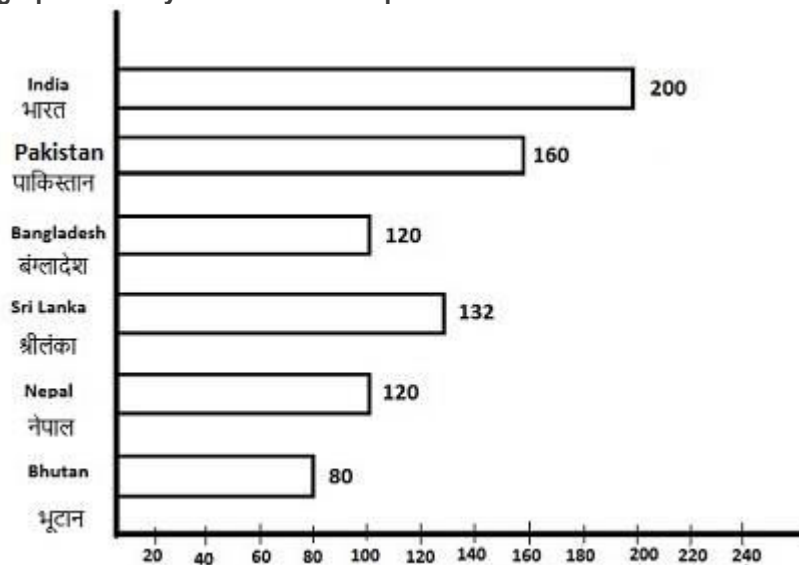
Srilanka's yield (approximately) is what percentof total yield of all the countries?

Options:

**1**) 17.8%

**2**) 16.2%

**3**) 18.2%

**4**) 15.4%

Correct Answer: 16.2%

**Question 75.The bar graph given below shows the per acre yield (in kg) of different countries. Study the graph carefully and answer the questions**

**Writing the yields of all countries in ascending order, the difference between the sum of yields of first three countries to that of last three countries is**

**Options:**

**1**) 200 kg

**2**) 212 kg

**3**) 172 kg

**4**) 162 kg

**Correct Answer:** 172 kg