# SSC CHSL (Tier - 1) Online Exam Paper - 2016 "held on 07 February 2017"

## **Morning Shift (Mathematics)**

QID : 51- What is the value of (91 + 92 + 93 + ...... +140)?

**Options:** 

**1**)5775

**2**)11550

**3**)17325

**4**)23100

Correct Answer:5775

QID : 52- The average revenues of 9 consecutive years of a company is Rs 80 lakhs. If the average of first 5 years is Rs 75 lakhs and that of last 5 years is Rs 87 lakhs, find the revenue for the 5thyear.

**Options:** 

1)Rs 90 lakhs

2)Rs 92 lakhs

3)Rs 88 lakhs

4)Rs 86 lakhs

Correct Answer: Rs 90 lakhs

QID : 53- If cosec  $-4\pi/3 = x$ , then the value of x is

**Options:** 

**1**)√2

**2**)2/√3

**3**)-√2

**4**)-1/√3

**Correct Answer:**2/√3

QID : 54- In an army selection process, the ratio of selected to unselected was 3:1. If 60 less had applied and 30 less selected, the ratio of selected to unselected would have been 5:1. How many candidates had applied for the process?

**Options:** 

1)240

**2**)480

**3**)120 )720 Correct Answer:240 QID : 55- If cot(A/2) = x, then the value of x is **Options: 1**) $\sqrt{(1 + \cos A)/(1 - \cos A)}$ 2)cosecA - cotA **3**) $\sqrt{[(1 - \cos A)/2]}$ **4**) $\sqrt{[(1 + \cos A)/2]}$ **Correct Answer:**  $\sqrt{(1 + \cos A)/(1 - \cos A)}$ QID : 56- If  $(1 - \cos A)/(1 + \cos A) = x$ , then the value of x is **Options:** 1)(cotA + cosecA)<sup>2</sup> **2**) $(cotA - cosecA)^2$ 3)cotA - cosecA 4)cotA + cosecA Correct Answer: (cotA - cosecA)<sup>2</sup> QID : 57- Manjeet can do a work in 18 hours. If he is joined by Jaya who is 100% more efficient, in what time will they together finish the work? **Options:** 1)6 hours **2**)3 hours 3)12 hours **4**)24 hours **Correct Answer:**6 hours QID : 58- Two cars travel from city A to city B at a speed of 30 and 36 km/hr respectively. If one car takes 3 hours lesser time than the other car for the journey, then the distance between City A and City B is **Options: 1**)648 km **2**)810 km. **3**)432 km 4)540 km Correct Answer:540 km

### Printed Study Kit for SSC CHSL (10+2) Exam

## Study Material for Junior Engineer (Civil / Electrical / Mechanical Engineering) Examination Study Kit for SSC CGL EXAM

QID : 59- A trader had 12 quintals of wheat. He sold a part of it at 13% profit and the rest at 23% profit, so that he made a total profit of 17 %. How much wheat did he sell at 23% profit? Options:

1)720 kg

**2**)240 kg

**3**)480 kg

4)960 kg

Correct Answer:480 kg

QID : 60- A student multiplied a number by 6/13 instead of 13/6. What is the percentage error in the calculation?

**Options:** 

1)369.44 percent

2)39.35 percent

3)184.72 percent

4)78.7 percent

Correct Answer:78.7 percent

QID : 61- Simple interest on a certain sum of money for 3 years at 14% per annum is half the compound interest on Rs. 10000 for 2 years at 10% per annum. The sum placed on simple interest is

**Options:** 

1)Rs 5000

**2**)Rs 1250

**3**)Rs 2000

**4**)Rs 2500

Correct Answer: Rs 2500

QID : 62- If the shopkeeper sells an item at Rs 1000 which is marked as Rs 1250, then what is the discount he is offering?

**Options:** 

1)25 percent

2)33.3 percent

3)250 percent

4)20 percent

Correct Answer:20 percent

QID : 63- If a cylinder of radius 7 cm and height 9 cm is melted and constructed into a cone of the same radius, what will be the height of this cone?

**Options:** 

**1**)54 cm

**2**)9 cm

**3**)27 cm.

**4**)13.5 cm

Correct Answer:27 cm

QID : 64- Points P and Q lie on side AB and AC of triangle ABC respectively such that segment PQ is parallel to side BC. If the ratio of AP:PB is 2:5, and area of  $\Delta$  APQ is 4 sq cm, what is the area of trapezium PQCB?

**Options:** 

1)49 sq cm

2)45 sq cm

3)25 sq cm

4)21 sq cm

Correct Answer:45 sq cm

QID : 65- Find equation of the perpendicular bisector of segment joining the points (2,-6) and (4,0)?

**Options:** 

1)x + 3y = 6

**2**)x + 3y = -6

**3**)x - 3y = -6

**4**)x - 3y = 6

**Correct Answer:**x + 3y = -6

QID : 66- What is the measure of an interior angle of a regular dodecagon?

**Options:** 

**1**)120°

**2**)140°

**3**)150°

**4**)144°

Correct Answer:150°

QID : 67- The diameter of a circle is 28 cm find its area?

**Options:** 

1)616 sq cm

2)308 sq cm 3)154 sq cm 4)77 sq cm Correct Answer:616 sq cm QID : 68- Coefficient of x in (x + 8)(6 - 3x) is **Options: 1**)18 **2**)30 **3**)-18 **4**)-30 **Correct Answer:**-18 QID : 69- If x + y = 10 and  $x^2 + y^2 = 68$ , then find xy **Options: 1**)21 **2**)24 **3**)25 **4**)16 Correct Answer:16 QID : 70- The sum of the digits of a 2-digit number is 17. If we add 9 to the number, the new number obtained is a number formed by interchange of the digits. Find the number. **Options:** 1)89 **2**)98 **3**)78 **4**)87 Correct Answer:89 QID: 71- If 5x + 4(1 - x) > 3x - 4 > 5x/3 - x/3; then x can take which of the following values? **Options:** 1)2 **2**)1 **3**)3 **4**)-2 **Correct Answer:**3 QID: 72Refer the below data table and answer the following Question.

नीचे दिये गए डेटा तालिका के आधार पर निम्नलिखित प्रश्न का उत्तर दें।

	Number of employees कर्मचारियों की संख्या	Annual salary (in lakhs) वार्षिक वेतन (लाखों में)	Bonus as percent of annual salary वार्षिक वेतन के प्रतिशत के रूप में बोनस	
Manager / <mark>प्रब</mark> ंधक	3	36	50%	
Executive / कार्यकारी	4	12	30%	
Trainee / प्रशिक्षु	3	4	10%	

What is the average bonus (in rupees)?

औसत बोनस (रुपये में) कितना है?

#### **Options:**

1)6960000

**2**)173333

**3**)220000

**4**)696000

Correct Answer:696000

QID : 73-

Refer the below data table and answer the following Question.

नीचे दिये गए डेटा तालिका के आधार पर निम्नलिखित प्रश्न का उत्तर दें।

	2011	2012	2013	2014	2015
CompanyA / कंपनी A	2000	2000	5000	2000	1000
Company B / कंपनी B	2000	3000	1000	5000	2000
Company C / कंपनी C	3000	2000	5000	3000	3000

For which of the following pairs of years the total exports from the three Companies together are equal?

(Note: Figures given are in lakh rupees)

निम्न में से वर्षों की कौन सी जोड़ी के लिए तीनों कंपनियों का कुल निर्यात बराबर है? (नोट: दिए गए आँकड़े लाख रुपए में है)

### **Options:**

**1**)2011 & 2013

2)2013 & 2015
3)2011 & 2012
4)2014 & 2015
Correct Answer:2011 & 2012

#### QID : 74-

Refer the below data table and answer the following Question. नीचे दिये गए डेटा तालिका के आधार पर निम्नलिखित प्रश्न का उत्तर दें।

Year वर्ष	Profit or (-Loss) in Rs Crore करोड़ रूपये में लाभ या (-नुकसान)
2011	10
2012	10
2013	25
2014	15
2015	5

What was the total Profit or loss of the company in last 5 years? पिछले पांच वर्षों में कंपनी का कुल लाभ या नुकसान कितना था?

#### **Options:**

1)Loss of Rs 65 crores

2)Profit of Rs 75 crores

3)Profit of Rs 65 crores

4)Loss of Rs 75 crores

Correct Answer: Profit of Rs 65 crores

QID : 75-

Refer the below data table and answer the following Question.

नीचे दिये गए डेटा तालिका के आधार पर निम्नलिखित प्रश्न का उत्तर दें।

India's exports in 2015 वर्ष <sub>2015</sub> में भारत का निर्यात	Value in million US\$ मिलियन डॉलर में मूल्य		
Jewellery / जेवर	825		
Software / सॉफ्टवेयर	750		
Cotton / कपास	875		
Steel / इस्पात	875		
Electronics / इलेक्ट्रानिक्स	975		

Jewellery was what percent of total exports?

जेवर का निर्यात भारत के कुल निर्यात का कितना प्रतिशत था?

#### **Options:**

1)21.69 percent

2)19.19 percent

3)24.19 percent

4)16.69 percent

Correct Answer: 19.19 percent