

DO NOT OPEN THE SEAL OF THE BOOKLET UNTIL YOU ARE TOLD TO DO SO

SSC CGL

TEST SERIES

DATE- __/__/__

DAY- _____

INSTRUCTION FOR CANDIDATE

TEST SERIES NO.

SG Set 06

QUESTION- 100

MARKS- 200

NEGATIVE MARK- 0.50

DURATION- 60 MIN.

1. Use only ball pens with black or blue ink
2. As soon as the examination starts, you must check this question booklet and if there is any unprinted, mutilated or partially printed page or question in it, then replace it with the correct question booklet through the examiner.
3. There are a total of 100 questions in this question booklet.
4. This is an objective test, in which four options are given for the answer to each question, you have to choose only one option with the correct answer out of these four options.
5. Answers to all questions are to be written on separate answer sheets.

6. Instructions for filling the answer sheet are written on the back side of the answer sheet, read them carefully before filling the answer sheet.
7. Blank pages are available in this question booklet for rough work.
8. Candidates cannot leave the room before the end of the examination.
9. After the examination is over, you can go out only with his permission after submitting the ORIGINAL COPY of the answer sheet to the invigilator.
10. After the completion of the examination, the candidate is allowed to take the question booklet and answer sheet with him/her.
11. 2 marks will be given for each correct answer and 0.50 marks will be deducted for each wrong answer.



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Total: 100 Que.

SSC CGL | Tier I | Mock Test 06

Time: 60 Min.

General Intelligence & Reasoning

- 1). Select the option that is related to the third number in the same way as the second number is related to the first number.

12 : 60 :: 16 : ?

- (a) 210 (b) 112 (c) 121 (d) 201

- 2). Select the option that is related to the third in the same way as the second word is related to the first word.

Depression : Mood :: Insomnia : ?

- (a) Sleep (b) Night (c) Thinking (d) Dreams

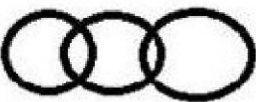
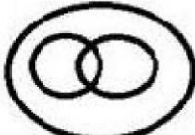
- 3). Study the given pattern carefully and select the number that can replace the question mark(?) in it.

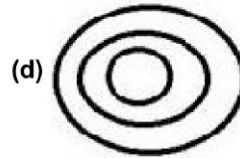
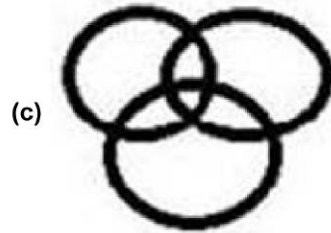
| | | |
|----|----|----|
| 4 | 7 | 6 |
| 15 | ? | 21 |
| 44 | 68 | 60 |

- (a) 19 (b) 20 (c) 18 (d) 24

- 4). Select the Venn diagram that best illustrates the relationship among the following classes.

Women, Researchers, Introverts

- (a) 
- (b) 

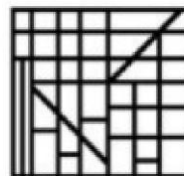


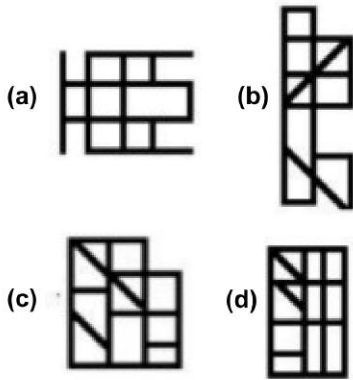
- 5). A cube is made by folding the given sheet. In the cube so formed, what would be the symbol of the opposite side of the '#' symbol?



- (a) + (b) % (c) & (d) \$

- 6). Select the option figure that is embedded in the given (rotation is NOT allowed).



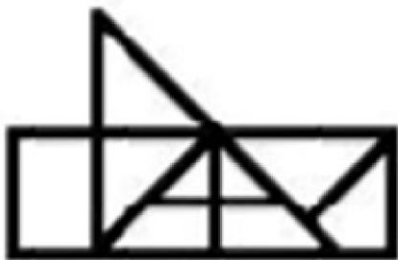


- 7). Select the correct mirror image of the given combination when the mirror is placed at 'PQ' as shown.

M y 7 O Q F j | P
Q

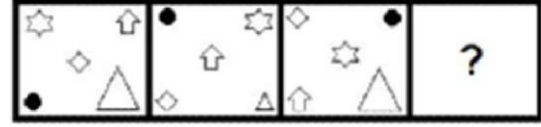
- (a) j F O O 7 y M
- (b) M 7 O O 7 y M
- (c) j F O O 7 y M
- (d) M 7 O O 7 y M

- 8). How many triangles are there in the given figure?



- (a) 11 (b) 13 (c) 10 (d) 12

- 9). Select the figure from among the given options that can replace the question mark(?) in the following series.



- (a)
- (b)
- (c)
- (d)

- 10). In a certain code language, 'PERMIT' is written as 'VVLNOG'. How will 'INERTIA' be written in that language.

- (a) OHYXZCU (b) XOYHCZU (c) OMYIZRU
(d) XYOHBCU

- 11). P, L, T, B, N and D are six members of a business family. N is the son of B, who is not the mother of N. L is the brother of B. D and B are the married couple. T is the daughter of D, who is sister of P. How is N related to T?

- (a) Sister (b) Mother (c) Father (d) Brother

- 12). Four words have been given, out of which three are alike in some manner and one is different. Select the word that is different.

- (a) Memory (b) Weight (c) Intelligence
(d) Aptitude

- 13). Select the number from the given options that can replace the question mark (?) in the following series.

24, 35, 51, 73, 102, ?

- (a) 139 (b) 151 (c) 149 (d) 131

- 14). Out of the total number of players, 100/3% are in hotel X and the remaining are in hotel Y. If 20 players from hotel Y are shifted to hotel X, then the number of players in hotel X becomes 50% of the total number of players. If 20 players from hotel X are shifted to hotel Y, then the number of players in hotel X becomes what per cent of the total number of players?

- (a) 26.34% (b) 12.75% (c) 20.67% (d) 16.67%

- 15). Four number-pairs have been given, out of which three are alike in some manner and one is different. Select the number-pair that is different.

- (a) 14:210 (b) 18:342 (c) 17:307 (d) 12:156

- 16). Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.

Statements:

All polygons are angles.

All angles are diagonals.

All cones are cubes.

All cubes are decagons.

Conclusions:

I. Some diagonals are polygons.

II. All diagonals are decagons.

III. No polygons is a cone.

IV. Some cubes are angles.

- (a) Both conclusions II and IV follow
(b) Only conclusions I follow
(c) Both conclusions I and II follow
(d) Both conclusions I and III follow

- 17). Select the option in which the words share the same relationship as that shared by the given pair of words.

Horse : Neigh

- (a) Parrots : Bray (b) Pigs : Buzz
(c) Hares : Boom (d) Duck : Quack

- 18). Select the combination of letters that when sequentially placed in the blanks of the given series will complete the series.

L _ UA _ Z _ N _ AP _ L _ U _ PZ

- (a) N, P, L, U, Z, N, A (b) N, L, P, A, N, U, Z
(c) P, N, L, Z, U, A, N (d) P, L, U, Z, N, A, N

- 19). Select the letter-cluster from the among given options that can replace the question mark(?) in the following series.

PNNA, RPPE, TRRI, VTTO, ?

- (a) YUUV (b) XWWU (c) YVVU (d) XVUU

- 20). Select the option in which the numbers are related in the same way as are the numbers of the following set.

(25, 18, 225)

- (a) (15, 34, 190) (b) (24, 22, 264) (c) (9, 16, 170)
(d) (17, 15, 220)

- 21). In a certain code language, 'AROUND' is coded as '52182412144' and 'FIX' is coded as '63624'. How will 'PLASTIC' be coded as that language?

- (a) 1612521920363 (b) 1612261920183
(c) 1612522021363 (d) 1812521920383

- 22). Four letter-clusters have been given, out of which three are alike in some manner and one is different. Select the letter-cluster that is different.

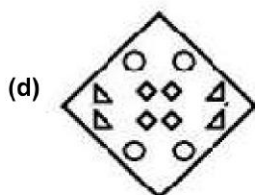
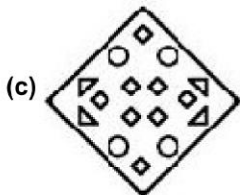
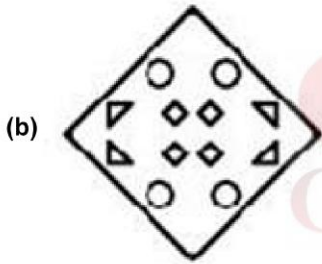
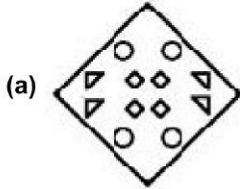
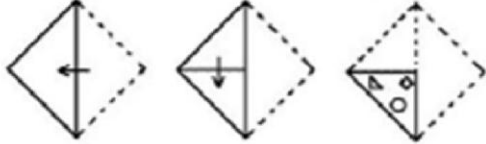
- (a) CYUQ (b) TPLH (c) NJFA (d) FBXT

- 23). Select the correct combination of mathematical signs that can sequentially replace the * signs and balance the given equation.

$42 * 7 * 64 * 11 * 6 * 4$

- (a) $\times, +, -, \div, =$ (b) $\times, -, +, \div, =$ (c) $\div, +, -, \times, =$
(d) $\div, -, +, \times, =$

24). The sequence of folding a piece of paper and the manner in which the folded paper has been cut is shown in the following figures. How would this paper look when unfolded?



25). Select the correct option that indicates the arrangement of the given words in the order in which they appear in an English dictionary.

1. Freeze
2. Freedom
3. Fryer
4. Frozen
5. Fraud
6. Fringe

- (a) 5, 2, 1, 6, 4, 3 (b) 5, 1, 2, 6, 4, 3
(c) 5, 2, 1, 6, 3, 4 (d) 5, 6, 2, 1, 4, 3

General Awareness

1). Electron-volt is a unit of _____.

- (a) potential difference (b) current (c) energy
(d) power

2). Who among the following had written Kitab – ul – Hind that gave an incisive description of early 11th century India?

- (a) Al - Kindi (b) Al - Biruni (c) Al - Bukari
(d) Al - Khwarizmi

3). Which of the following schemes is aimed at helping accelerate the uptake of broadband internet services?

- (a) PM-DHWANI (b) PM-INTERNET
(c) PM-WANI (d) PM-VAARTA

4). _____ is the structural and functional unit of the kidney.

- (a) Medulla (b) Nephron (c) Cortex (d) Ureter

5). Which of the following is the application of science such as physics, chemistry, biology, computer service and engineering to the matter of law and to the identification of various facts of civilian investigation?

- (a) Kalology (b) Morphology (c) Psychology
(d) Forensic science

6). Which of the following is a process in which hot, less dense materials rise upward and are replaced by colder, more dense materials?

- (a) Convection (b) Conduction (c) Radiation
(d) Condensation

7). Which of the following places is famous for a copper mine?

- (a) Satna (b) Gaya (c) Khetri (d) Keonjhar

8). Where has the 9th India International MSME Expo and Conference 2023 been organized recently?

- (a) Mumbai (b) Chennai (c) New Delhi
(d) Pune

9). Recently the Chief Minister of which state has unveiled the 'Singh Soochna' web app?

- (a) Maharashtra (b) Gujarat (c) Madhya Pradesh
(d) Kerala

10). Which payment bank has recently launched India's first eco-friendly debit card?

- (a) fino payment bank
(b) India Post Payment Bank
(c) Airtel Payment Bank
(d) Paytm Payments Bank

11). Baghmara Pitcher Plant Sanctuary is located in which of the following states?

- (a) Karnataka (b) Assam (c) Goa
(d) Meghalaya

12). Who has recently become the highest paid Instagram celebrity in Asia?

- (a) Akshay Kumar (b) Virat Kohli
(c) Shahrukh Khan (d) Salman Khan

13). Gurdwara Patalpuri Sahib is located on the bank of river.

- (a) Sutlej (b) Yamuna (c) Ganga (d) Beas

14). In which of the following years was the Planning Commission of India set up?

- (a) 1950 (b) 1945 (c) 1958 (d) 1962

15). In which of the following years was the Second Round Table Conference in London held?

- (a) 1939 (b) 1925 (c) 1941 (d) 1931

16). Which of the following statements about Swami Dayanand Saraswati is INCORRECT?

- (a) He was the founder of Arya Samaj.
(b) His birthplace was Gujarat.
(c) He authored the book 'Satyarth Prakash'.
(d) He was the founder of Brahmo Samaj.

17). Who among the following was one of the founders of the Hindustan Republican Association?

- (a) Ram Prasad Bismil (b) Lala Lajpat Rai
(c) Jatindranath Mukherjee (d) Surya Sen

18). Which of the following has the same dimensions as that of linear momentum?

- (a) Impulse (b) Energy (c) Work (d) Stress

19). In Leh, the first ever snow climbing festival was held in which valley?

- (a) Markha (b) Ripchar (c) Dras (d) Nubra

20). At present who is working on the post of President of Veterinary Council of India?

- (a) Umesh Sharma (b) Dipankar Seth
(c) Rajeev Arora (d) KK Verma

21). Which of the following is NOT a town/city on the west coast of India?

- (a) Karwar (b) Mangalore (c) Surat
(d) Gopalpur

22). Where has the India Startup Festival 2023 started recently?

- (a) Mumbai (b) Gurugram (c) Bangalore
(d) Bhopal

23). Unique Transaction Reference number is a ____ character code used to uniquely identify a transaction in the RTGS system.

- (a) 45 (b) 22 (c) 34 (d) 17

24). Who among the following replaced Moraji Desai as the Prime Minister of India in 1979?

- (a) Jagjivan Ram (b) Charan Singh (c) Devi Lal
(d) Chandrasekhar

25). Recently India's first post office near LOC has been inaugurated in which district of Jammu and Kashmir?

- (a) Rajouri (b) Kupwara (c) Kishtwar (d) leh

English Comprehension

- 1). Select the most appropriate ANTONYM of the given word.

SEIZE

- (a) Snatch (b) Catch (c) Loosen (d) Grab

- 2). Select the INCORRECTLY spelt word.

- (a) Creature (b) Specified (c) Decrease
(d) Pieceful

- 3). Select the most appropriate ANTONYM of the given word.

Gradual

- (a) Slow (b) Regular (c) Gentle (d) Abrupt

- 4). Select the option express the given sentence in passive voice.

The invigilator is advising the students not to carry calculators into the examination hall.

- (a) The students were advised not to carry calculators into the examination hall.
(b) The students are being advised by the invigilator not to carry calculators into the examination hall.
(c) The students have been advised not to carry calculators into the examination hall by the invigilator.
(d) The students were advised the invigilator not to carry calculators into the examination hall.

- 5). Select the most appropriate synonym of the given word.

Regime

- (a) Country (b) Rule (c) Space (d) Territory

- 6). Select the most appropriate synonym of the given word.

Generic

- (a) Definite (b) Universal (c) Precise
(d) Specific

- 7). Select the most appropriate meaning of the given idiom.

Raise the bar

- (a) To raise the price (b) To grow taller
(c) To set higher goals (d) To win a competition

- 8). The following sentence has been split into four segments. Identify the segment that contains a grammatical error.

Had you/ not reached in time,/ we will have/ lost our lives.

- (a) not reached in time (b) Had you
(c) we will have (d) lost our lives

- 9). Select the most appropriate meaning of the given idiom.

Bang for the buck

- (a) More value for money
(b) Less value for money
(c) Dash against something (d) A sorrow heart

- 10). Select the most appropriate option to substitute the underlined segment in the given sentence. If no substitution is required, select 'No substitution'.

The toy drummer plays the drum if you press the button at the back.

- (a) Playing the drum if you pressed
(b) Will play the drum if you will press
(c) Played the drum if you pressing
(d) No substitution

- 11). Select the most appropriate option to substitute the underlined segment in the given sentence. If no substitution is required, select 'No substitution'.

While washing your hands, rub them together for 20 seconds to remove the microbes on them.

- (a) No substitution (b) the microbes on their
(c) the microbes on they
(d) the microbes on those

- 12). Select the option that can be used as one-word substitute for the given group of words.

A group of three novels or plays, each complete in itself

- (a) Trivet (b) Trilogy (c) Triplet (d) Triumvir

- 13). Select the option that expresses the given sentence in indirect speech.

"Everything is going to be alright," said the doctor.

- (a) The doctor said that everything will be alright.
(b) The doctor said that everything was going to be alright.
(c) The doctor said that everything is going to be alright.
(d) The doctor said that everything are going to be alright.

- 14). Select the most appropriate option to fill in the blank.

India is a formally moving ahead to _____ 21 MIG-29 and 12 Sukhoi-30MKI fighters from Russia along with upgrades of their existing fleets.

- (a) procure (b) achieve (c) accomplish
(d) advance

- 15). Sentence of a paragraph are given in jumbled order. Arrange the sentence in the right order to form a meaningful and coherent paragraph.

- A. When we got near, we saw it was the steam rising from hot springs.
B. We saw in the distance a great column of smoke.
C. We wondered if it came from a chimney or a burning house.
D. We thought of taking a bath in the hot water.

- (a) BCAD (b) ACDB (c) BCDA (d) ABCD

- 16). Select the most appropriate option to fill in the blank.

Work and domestic _____ made Kajal short-tempered.

- (a) gravities (b) weights (c) forces
(d) pressures

- 17). Sentence of a paragraph are given below in jumbled order. Arrange the sentence in the right

order to form a meaningful and coherent paragraph.

A) But the eagle, in wrath, gave the beetle a flap of his wing, and straightway seized upon the hare and devoured him.

B) The beetle therefore interceded with the eagle, begging of him not to kill the poor suppliant, and pleaded with him not to kill so small an animal.

C) When the eagle flew away, the beetle flew after him, to learn where his nest was.

D) A hare, being pursued by an eagle, took himself for refuge to the nest of a beetle, whom he

begged to save him.

- (a) DBAC (b) ACDB (c) CBAD (d) DCAB

- 18). Select the option that can be used as a one-word substitute for the given group of words.

A herd of flock of animals being driven in a body

- (a) Drove (b) Cluster (c) Throng (d) Crowd

- 19). The following sentence has been divided into parts. One of them contains an error. Select the part that contains the error from the given options.

You must avoid riding in a crowded bus / or travelling in a metro/ during rush hour/ as both are quiet unpleasant experiences.

- (a) or travelling in a metro
(b) you must avoid riding in a crowded bus
(c) as both are quiet unpleasant experiences
(d) during rush hour

- 20). Select the INCORRECTLY spelt word.

- (a) Exterminated (b) Voilence (c) Wilderness
(d) Unmanageable

In the following passage, some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank.

What every tourist must take back from Bhutan is pure honey, especially Putka, "Antibiotic" honey produced (###Q1###) _____ Melipona Bees (stingless bees) a breed found in protected

areas (###Q2###) _____ 700 to 1,500 metres above sea level. Due (###Q3###) _____ their small size, they can get larger nutrients (###Q4###) _____ regular honeybees. It has a tangy/sour taste and can (###Q5###) _____ your sore throat in a matter of minutes.

21). Select the most appropriate option to fill in the blank number 1

(a) With (b) By (c) Through (d) Of

22). Select the most appropriate option to fill in the blank number 2

(a) After (b) Between (c) Among (d) Midst

23). Select the most appropriate option to fill in the blank number 3

(a) For (b) To (c) Of (d) At

24). Select the most appropriate option to fill in the blank number 4

(a) And (b) Then (c) Though (d) Than

25). Select the most appropriate option to fill in the blank number 5

(a) Appease (b) Pacify (c) Calm (d) Soothe

2). To do a certain work A and B work on alternate days with B beginning the work on the first day. A alone can complete the same work in 24 days. If the work gets completed in _____ days, then B alone can complete th part of the original work in:

(a) days (b) 4 days (c) days (d) 6 days

3). The value of $20 \div 5 \text{ of } 8 \times [9 \div 6 (6 - 3)] - (10 \div 2 \text{ of } 20)$ is:

(a) 0 (b) 2 (c) 1 (d) 6

4). x, y are two points in a river. Points P and Q divide the straight lien xy into three equal parts. The river flows along xy and the time taken by a boat to row from x to Q and from y to Q are in the ration of 4 : 5. The ratio of the speed of the boat downstream to that of the river current is equal to:

(a) 3:4 (b) 4:3 (c) 10:3 (d) 3:10

5). What is the compound interest Rs.8192 for Years at 15% per annum, if interest is compounded 5 monthly?

(a) 1740 (b) 1640 (c) 1735 (d) 1634

6). A chord 21 cm long is drawn in a circle of a diameter 25 cm. The perpendicular distance of the chord form the centre is:

(a) $\sqrt{46}$ (b) $\sqrt{56}$ (c) $\sqrt{23}$

(d) $\sqrt{41}$

Quantitative Aptitude

1). Study the following table and answer the question.

Number of cars sold by dealers A, B, C, D, & E during first six months of 2018

| Month Dealer | January | February | March | April | May | June |
|-----------------|---------|----------|-------|-------|-----|------|
| A | 620 | 640 | 628 | 635 | 430 | 625 |
| B | 600 | 642 | 635 | 580 | 450 | 620 |
| C | 640 | 635 | 640 | 540 | 625 | 740 |
| D | 520 | 645 | 722 | 740 | 600 | 780 |
| E | 548 | 638 | 720 | 740 | 650 | 800 |

The ratio of the total number of cars sold by dealers B in January, April and June to the total number of cars sold by dealers A and D in March is:

(a) 8:9 (b) 7:5 (c) 4:3 (d) 10:9

7). Study the table and answer the question.

Table shows District-wise data of the number of primary school teachers posted in school of a city.

| District | Male Teachers | Female Teachers |
|----------|---------------|-----------------|
| East | 1650 | 2375 |
| North | 1075 | 2651 |
| West | 1280 | 1520 |
| South | 1170 | 1085 |
| Central | 690 | 859 |

What is the ratio of the number of male teachers to the number of female teachers in the city?

(a) 78:113 (b) 195:283 (c) 586:849 (d) 391:566

- 8). If $\frac{\cos^2 \theta}{\cot^2 \theta + \sin^2 \theta - 1} = 3$, $0^\circ < \theta < 90^\circ$, then the value of $(\tan \theta + \operatorname{cosec} \theta)$ is:

(a) $\frac{4\sqrt{3}}{3}$ (b) $2\sqrt{3}$ (c) $3\sqrt{3}$ (d) $\frac{5\sqrt{3}}{3}$

- 9). When x is subtracted from each of 19, 28, 55 and 91, the numbers so obtained in this order are in proportion. What is the value of x ?

(a) 5 (b) 8 (c) 7 (d) 9

- 10). A shopkeeper earns a profit of 21% after selling a book at 21% discount on the printed price. The ratio of the cost price and selling price of the book is:

(a) 121:100 (b) 79:100 (c) 100:79 (d) 100:121

- 11). If $8(x+y)^3 - 27(x-y)^3 = (5y-x)(Ax^2 + By^2 + Cxy)$, then what is the value of $(A+B-C)$?

(a) -26 (b) -16 (c) 16 (d) 36

- 12). Study the table and answer the question.

In the table, production and sale (in 1000 tonnes) of a certain product of a company over 5 years is given.

| Years | Production (in 1000 tonnes) | Sale (in 1000 tonnes) |
|-------|--------------------------------|--------------------------|
| 2015 | 1250 | 1000 |
| 2016 | 1400 | 1290 |
| 2017 | 1450 | 1100 |
| 2018 | 1500 | 1450 |
| 2019 | 1600 | 1390 |

In which year(s) sale is more than 90% of the production?

- (a) 2015, 2017, 2019 (b) 2016, 2017
(c) 2017, 2018 (d) 2016, 2018

- 13). If $x + \frac{1}{x} = 4$, then the value of $x^5 + \frac{1}{x^5}$ is:

(a) 736 (b) 776 (c) 684 (d) 724

- 14). $\triangle ABC \sim \triangle PQR$. The areas of $\triangle ABC$ and $\triangle PQR$ are 64 cm^2 and 81 cm^2 , respectively and AD and PT are the medians of $\triangle ABC$ and $\triangle PQR$, respectively. If PT = 10.8 cm, then AD = ?

(a) 8.4 cm (b) 12 cm (c) 9 cm (d) 9.6 cm

- 15). The average of 28 numbers is 77. The average of first 14 numbers is 74 and the average of last 15 numbers is 84. If the 14th number is excluded, then what is the average of remaining numbers? (correct to one decimal places)

(a) 73.1 (b) 74.7 (c) 77 (d) 76.9

- 16). Let $\triangle ABC \sim \triangle PQR$ and

$$\frac{\text{ar}(\triangle ABC)}{\text{ar}(\triangle PQR)} = \frac{144}{49}$$

If AB = 12cm, BC = 7 cm and AC = 9 cm, then PR (in cm) is equal to:

(a) $\frac{108}{7}$ (b) $\frac{21}{4}$ (c) 12 (d) $\frac{49}{12}$

- 17). Study the following table and answer the question:

Number of cars sold by dealers A, B, C, D & E during first six months of 2018

| Month Dealer | January | February | March | April | May | June |
|-----------------|---------|----------|-------|-------|-----|------|
| A | 620 | 640 | 628 | 635 | 430 | 625 |
| B | 600 | 642 | 635 | 580 | 450 | 620 |
| C | 640 | 635 | 640 | 540 | 625 | 740 |
| D | 520 | 645 | 722 | 740 | 600 | 780 |
| E | 548 | 638 | 720 | 740 | 650 | 800 |

In July 2018, if the sales of cars by the dealers D increase by the same percentage as in June 2018 over its previous month, then what is the number of cars sold by D in July 2018?

(a) 1014 (b) 959 (c) 975 (d) 1020

- 18). Some fruits are bought at 15 for Rs.140 and an equal number of fruits at 10 for Rs.120. If all the fruits are sold at Rs.132 per dozen, then what is the profit percent in the entire transaction?

(a) 3 (b) (c) (d)

- 19). Sides AB and DC of a cyclic quadrilateral ABCD are produced to meet at E and sides AD and BC are produced to meet at F. If $\angle ADC = 78^\circ$ and $\angle BEC = 52^\circ$. Then the measure of $\angle AFB$ is:

(a) 32° (b) 28° (c) 30° (d) 26°

- 20). If $x + y = 4$ and $\frac{1}{x} + \frac{1}{y} = \frac{16}{15}$, then what

is the value of $(x^3 + y^3)$?

(a) 18 (b) 1 (c) 21 (d) 19

- 21). $\frac{\cos \theta}{\cos \theta - 1} + \frac{\cos \theta}{\cos \theta + 1} - \tan^2 \theta$, $0^\circ < \theta < 90^\circ$, is equal to:

(a) $\sec^2 \theta + 1$ (b) $\sec^2 \theta$ (c) $2\sec^2 \theta$
(d) $1 - \tan^2 \theta$

- 22). Length of each side of a rhombus is 13 cm and one of the diagonal is 24 cm. What is the

area (in cm^2) of the rhombus?

(a) 300 (b) 240 (c) 60 (d) 120

- 23). The income of A is 45% more than the income of B and the income of C is 60% less than the sum of the incomes of A and B. The income of D is 20% more than that of C. If the difference between the incomes of B and D is Rs.13200, then the income (in Rs.) of C is:

(a) 75000 (b) 73500 (c) 72000 (d) 72500

- 24). Find the value of $\cot 25^\circ \cot 35^\circ \cot 45^\circ \cot 55^\circ \cot 65^\circ$.

(a) $\frac{1}{\sqrt{3}}$ (b) $\sqrt{3}$ (c) 1 (d) $\frac{\sqrt{3}}{2}$

- 25). If the 5-digit number $676xy$ is divisible by 3, 7 and 11, then what is the value of

$(3x - 5y)$?

(a) 11 (b) 10 (c) 7 (d) 9