

REASONING

1. Select the related letters/word/number from the given alternatives.

BDGH : OQTU :: FHKL : ?

- (A) JKLM (B) BCDE
(C) SUXY (D) WXYZ

2. A rat runs 20' towards East and turns to right runs 10' and turns to right runs 9' and again turns to left runs 5' and then turns to left runs 12' and finally turns to left and runs 6'. Now, which direction is the rat facing?

- (A) East (B) West
(C) North (D) South

3. Which one set of letters, when sequentially placed at the gaps in the given letter series shall complete it?

mnonopqopqrs _ _ _ _ _

- (A) mnopq (B) oqrst
(C) pqrst (D) qrstu

4. Select the one which is different from the other three responses.

- (A) 4, 12 (B) 8, 16
(C) 14, 24 (D) 6, 14

5. Select the one which is different from the other three responses.

- (A) BEH (B) CFI
(C) DGJ (D) EHL

6. Select the related word from the given alternatives.

Hirakund : Mahanadi :: Tehri Dam : ?

- (A) Damodar (B) Bhagirathi
(C) Yamuna (D) Son

7. Select the related numbers from the given alternatives: 121 : 12 :: 25 : ?

- (A) 5 (B) 6
(C) 7 (D) 8

8. Find out the odd number from the given alternatives.

- (A) 4246 (B) 8314
(C) 9546 (D) 5306

9. A series is given with one term missing. Choose the correct alternative from the given ones that will complete the series.

5, 7.5, 12.5, 22.5, ?

- (A) 42.5 (B) 42
(C) 44 (D) 43.5

10. If HOUSE is written as FQSUC, then how can CHAIR be written in that code?

- (A) DIBJS (B) SBJID
(C) SHBGD (D) AJYKP

11. Two statements are given below, followed by four conclusions I, II, III and IV. You have to consider the statements to be true if they seem to be at variance from commonly known facts. You have to decide which of the given conclusions, if any, follow from the given statements. Indicate your answer.

Statements:

All students in my class are bright.
Manish is not bright.

Conclusions:

I. Some students are not bright.

II. Manish must work hard.

III. Non-bright ones are not students.

IV. Manish is not a student of my class.

(A) Only I (B) II and III

(C) III and IV (D) Only IV

12. Which one of the following responses would be a meaningful order of the given words?

1. Hut
2. House
3. Palace
4. Bungalow
(A) 4, 3, 1, 2 (B) 2, 1, 4, 3
(C) 1, 4, 3, 2 (D) 1, 2, 4, 3

13. A series is given, with one term/number missing. Choose the correct alternative from the given ones that will complete the series.

0, 2, 6, 12, 20, ?, 42

- (A) 34 (B) 30
(C) 32 (D) 28

14. Pointing towards a man a woman said, "his brother's father is the only son of my grandfather" how is the women related to the man?

- (A) Aunt (B) Sister
(C) Daughter (D) Mother

15. Which interchange of signs will make the following equation correct?

$30 - 6 \div 4 + 2 \times 3 = 7$

- (A) + and \times (B) - and +
(C) - and \div (D) + and -

16. Arrange the following words as per order in the dictionary

1. Tortoise, 2. Torrid, 3. Torso, 4. Torque, 5. Tortuous
(A) 4, 2, 3, 1, 5 (B) 3, 2, 4, 1, 5
(C) 2, 3, 1, 5, 4 (D) 4, 3, 2, 1, 5

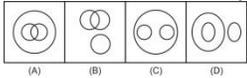
17. In the question, a word is represented by only one set of numbers as given in any one of the alternatives. The sets of numbers given in the alternatives are represented by two classes of alphabets as in two matrices given below. The columns and rows of Matrix I are numbered from 0 to 4 and that of Matrix II are numbered from 5 to 9. A letter from these matrices can be represented first by its row and next by its column, e.g., 'U' can be represented by 01, 12, etc., and 'L' can be represented by 56, 67, etc. Similarly you have to identify the set for the word 'SPARE'.

MATRIX - I					
	0	1	2	3	4
0	S	U	P	E	R
1	R	S	U	P	E
2	E	R	S	U	P
3	P	E	R	S	U
4	U	P	E	R	S

MATRIX - II					
	5	6	7	8	9
5	G	L	A	N	D
6	D	G	L	A	N
7	N	D	G	L	A
8	A	N	D	G	L
9	L	A	N	D	G

- (A) 22, 41, 85, 32, 14 (B) 12, 24, 21, 68, 14
(C) 44, 78, 67, 32, 42 (D) 33, 30, 43, 40, 43

18. Which of the following figures correctly represents the relations between: Doctors, Lawyers, Professionals.



19. Select the missing numbers from the given alternatives.

7	56	8
9	45	?
11	99	9

- (A) 6 (B) 9
(C) 5 (D) 4

20. In a class of 180, where girls are twice the number of boys, Ramu [a boy] ranked 34th from the top. If there are 18 girls ahead of Ramu, how many boys are there after him in rank?

- (A) 45 (B) 44
(C) 43 (D) 46

21. A mother is five times older than her daughter. After 5 years, she would be three times older than her daughter. Find the mother's present age.

- (A) 20 years (B) 22 years
(C) 25 years (D) 29 years

22. Consider the given statement/s to be true and decide which of the given conclusions can definitely be drawn from the given statement.

Statement: To achieve economic development, people should work hard.

Conclusions:

- I. Economic development is directly related to people's hard work.
II. Hard work, by all the people, is impossible.

- (A) Only I follows
(B) Only II follows
(C) Both I and II follow
(D) Neither I nor II follow

23. A piece of paper is folded and cut as shown below in the question figure from the given answer figures, indicates how it will appear when opened?

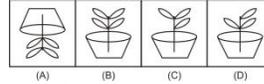
- (A) A
(B) B
(C) C
(D) D

24. Which of the following figure is the correct mirror image of the given figure?

Question Figure:-



Answer Figure:-

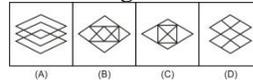


25. Select the answer figure in which the question figure is hidden/embedded.

Question Figure:-



Answer Figure:-



GENERAL KNOWLEDGE

26. Which among the following is not an inner planet?

- (A) Mercury (B) Saturn
(C) Venus (D) Earth

27. "Judicial Review" has been taken from:

- (A) U.K. Constitution (B) U.S.A. Constitution
(C) South African Constitution (D) Australian Constitution

28. Tripitakas are sacred books of _____.

- (A) Sikhs (B) Jews
(C) Buddhists (D) Muslims

29. The image formed on the retina of the eye is -

- (A) Upright and real (B) Larger than the object.
(C) Real and Inverted (D) Enlarged and real

30. Ryder Cup is associated with which sport?

- (A) Horse Race (B) Football
(C) Cycling (D) Golf

31. Which one of the following words is not mentioned in the preamble of the Indian Constitution?

- (A) Sovereign (B) Secular
(C) Federal (D) Democratic

32. The only operational Naval Base exclusively controlled by the Indian Navy is located at -

- (A) Puducherry (B) Okhla
(C) Karwar (D) Kakinada

33. The radio isotope used to detect tumors is?

- (A) Iodine - 131 (B) Cobalt - 60
(C) carbon - 14 (D) Sodium - 24

34. Which one of the following princely states acceded to the Indian on 15 August, 1947?

- (A) Hyderabad (B) Junagarh
(C) Kashmir (D) Mysore

35. At which one of the following place East-West Corridor connecting Silchar and Porbandar and North-South Corridor connecting Srinagar and Kanyakumari, intersect each other?

- (A) Jhansi (B) Agra
(C) Jabalpur (D) Nagpur
36. What is the IUPAC name of ethylene glycol?
(A) Ethyne- 1, 2 -diol (B) Ethane -1, 1 -ol
(C) Ethanal (D) Ethane - 1, 2 -diol
37. Which part of an eye is transplanted?
(A) Cornea (B) Retina
(C) Iris (D) Sclera
38. Who invented Penicillin?
(A) William Harvey (B) Louis Pasteur
(C) Alexander Fleming (D) Edward Jenner
39. The Universal donor group of blood is -
(A) O (B) A
(C) B (D) AB
40. Which of the following is a part of Atlantic Ocean?
(A) Arctic Sea (B) Baltic Sea
(C) Red Sea (D) Bering Sea
41. Questions of disqualification of member of the Parliament except in case of defection have to be decided by -
(A) The Election Commission in consultation with the Speaker of the Lok Sabha
(B) The Speaker or the Chairman of the respective House in consultation with the Election Commission
(C) The President according to the opinion of the Election Commission
(D) The Supreme Court
42. Question Hour in the Parliament refers to?
(A) The lunch hour after the sitting
(B) The last hour of the sitting
(C) The first hour of the sitting
(D) The second hour of the sitting
43. The vitamin which is generally excreted by humans in urine is?
(A) Vitamin A (B) Vitamin D
(C) Vitamin C (D) Vitamin E
44. Heat resistant variety of glass is -
(A) Pyrex glass (B) Hard glass
(C) Flint glass (D) None of these
45. Who was the Chairman of the Drafting Committee of the Constitution?
(A) J. B. Kripalani (B) Rajendra Prasad
(C) J. L. Nehru (D) B. R. Ambedkar
46. Emmerson Mnangagwa is President of which country?
(A) Kenya (B) Nairobi
(C) Egypt (D) Zimbabwe
47. India began a joint Army exercise 'IMBAX' with which Nation in Meghalaya?
(A) France (B) USA
(C) Myanmar (D) Bangladesh
48. Who among the following made the statement that "Swaraj is my birth right"?
(A) Swami Vivekanand (B) Raja Rammohan Roy
(C) BalGangadharTilak (D) Swami Dayanand
49. Who led the Bardoli Satyagraha?
(A) Mahatma Gandhi (B) Vallabhbbhai Patel

- (C) Morarji Desai (D) Rajendra Prasad
50. To which Indian state does Bharat Natayam dance belong?
(A) Kerala (B) Tamil Nadu
(C) Uttar Pradesh (D) Andhra Pradesh

QUANTITATIVE APTITUDE

51. On a certain Principal if the Simple interest for two years is Rs. 2400 and Compound interest for the two years is Rs. 2544, what is the rate of Interest?
(A) 12 percent (B) 6 percent
(C) 24 percent (D) 18 percent
52. What is the equation of the line which passes through the points (2, 3) and (-4, 1)?
(A) $x - 3y = -7$ (B) $x + 3y = 7$
(C) $x - 3y = 7$ (D) $x + 3y = -7$
53. What is the ratio of 40 paise and Rs. 6?
(A) 1: 8 (B) 1: 16
(C) 1:15 (D) 1: 5
54. Two pipes 1 and 2 can fill a tank in 2.5 hours and 4 hours respectively. If both pipes are opened together, then after what time should 1 be closed so that the tank is full in 2 hours, from the start
(A) 1 hr. 10 min (B) 1 hr. 15 min
(C) 1 hr. 20 min (D) 1 hr. 30 min
55. The height of a room is twice its breadth and breadth is $\frac{1}{16}$ th of its length. If its volume is 4000 m^3 , then what is its height?
(A) 10 m (B) 12 m
(C) 18 m (D) 20 m
56. Four bells commence tolling together and toll at interval of 4 sec, 6 sec, 8 sec and 14 sec. If they toll together at 12 o'clock then at what time will they toll together again?
(A) At 12 : 02 : 48 (B) At 12 : 03 : 40
(C) At 12 : 03 : 20 (D) At 12 : 03 : 44
57. The L.C.M. of two numbers is 12 times their H.C.F. The sum of the L.C.M. and H.C.F. is 403. If one of the number is 93 then the other number is
(A) 124 (B) 128
(C) 134 (D) 138
58. Two trains of length 120 m and 180 m respectively running in opposite directions at a speed of 50 km/h and 40 km/h respectively. In what time will they cross each other?
(A) 17 sec (B) 12 sec
(C) 36 sec (D) 22 sec
59. Gaurav spends 40% on hostel, 20% on books and stationaries and 50% of the rest on transport from the money got by his father. After spending on hostel, books and stationaries and transport he saves Rs. 450 which is half of the rest amount. How much money he got from his father?
(A) Rs. 3,000 (B) Rs. 6,000
(C) Rs. 4,500 (D) Cannot be determined
60. The salary of an employee of a company increase by 4% per month. If the salary in August is Rs. 6,300 then what will be his salary in October of the same year?
(A) Rs. 6,552 (B) Rs. 6,967
(C) Rs. 6,814 (D) Rs. 6,627

61. Calculate 95×105 .

- (A) 9075 (B) 9925
(C) 9025 (D) 9975

62. A train 400 meters long is moving at a speed of 20 m/s. Time taken to cross a bridge of 100 meters by the train is –

- (A) 5 seconds (B) 10 seconds
(C) 20 seconds (D) 25 seconds

63. ABC is a triangle in which $DE \parallel BC$ and $AD : DB = 5 : 4$. Then $DE : BC$ is

- (A) 4 : 5 (B) 9 : 5
(C) 4 : 9 (D) 5 : 9

64. If $\sin A + \sin^2 A = 1$ then what is the value of $\cos^2 A + \cos^4 A$?

- (A) $\frac{1}{2}$ (B) 1
(C) 2 (D) 3

65. A wholesaler sells a watch to a retailer at gain of 36% and the retailer sells it to a customer at a loss 25%. if the customer pays Rs. 2499, what had it cost the wholesaler?

- (A) Rs. 2548 (B) Rs. 2450
(C) Rs. 3123 (D) Rs. 2352

66. The ratio of quantities of an acid and water in a mixture is 1 : 3. If 5 litres of acid is further added to the mixture the new ratio becomes 1 : 2. The quantity of initial mixture in litres is?

- (A) 32 (B) 40
(C) 42 (D) 45

67. The value of $\sin^2 11^\circ + \sin^2 79^\circ$?

- (A) 1 (B) 0
(C) 2 (D) -1

68. A pole broke by the storm and its top struck the ground at an angle of 30° and at distance of 20 m from the foot of the pole. The height of the pole before it was broken was

- (A) $20\sqrt{3}$ (B) $60\sqrt{3}$
(C) $\frac{40}{\sqrt{3}}$ (D) $\frac{100}{\sqrt{3}}$

69. If $a^3 + b^3 + c^3 = 3abc$, then which of the following options is correct?

- (A) $a + b + c = 0$ (B) $a = b \neq c$
(C) $a = b = c$ (D) either (A) or (C)

70. Find the remainder when 2^{100} is divided by 31?

- (A) Zero (B) 1
(C) 2 (D) 30

71. The value of $\frac{1}{1 \times 2} + \frac{1}{2 \times 3} + \frac{1}{3 \times 4} + \dots + \frac{1}{19 \times 20}$ is?

- (A) 1 (B) $\frac{1}{20}$
(C) $\frac{19}{20}$ (D) $\frac{1}{2}$

DIRECTION (Q. 72-73):- Refer the below data table and answer the following Question.

Division/Standard	Boys	Girls
Division A/Standard 5	20	30
Division B/Standard 5	15	20
Division C/Standard 5	30	10
Division A/Standard 6	30	45
Division B/Standard 6	30	35
Division C/Standard 6	30	10

72. Find the ratio of the average number of boys and that of girls for standard 6 ?

- (A) 1 : 2 (B) 1 : 1
(C) 3 : 2 (D) 2 : 1

73. Ten points are to be deducted from this student's average of marks scored because of poor attendance. What will be this student's net average marks scored?

- (A) 62 (B) 61
(C) 72 (D) 71

74. A student multiplied a number by $\frac{11}{13}$ instead of $\frac{13}{11}$. What is the percentage error in the calculation?

- (A) 39.67 percent (B) 28.4 percent
(C) 14.2 percent (D) 19.83 percent

75. The two numbers are 63 and 77, HCF is 7, Find the LCM.

- (A) 668 (B) 693
(C) 674 (D) 680

ENGLISH

DIRECTION (Q. 76-77):- In the following question, some part of the sentence may have errors. Find out which part of the sentence has an error and select the appropriate option. If a sentence is free from error, select 'No Error'.

76. In case under (A) / any difficulty you (B) / should call me. (C) / No Error (D)

- (A) A (B) B
(C) C (D) D

77. Govardhan decided that (A) / he would go (B) / to the market the following day. (C) / No Error (D)

- (A) A (B) B
(C) C (D) D

DIRECTION (Q. 78-79):- In the following question, sentence given with blank is to be filled in with an appropriate word. Select the correct alternative out of the four and indicate it by selecting the appropriate option.

78. They have started a charitable _____ in their city.

- (A) Story (B) Foundation
(C) Incentive (D) Company

79. Even many setbacks in his endeavours never made him falter in his _____.

- (A) Wish (B) Supposition
(C) Ambitions (D) Question

80. Rearrange the parts of the sentence in correct order.

I wished him
P. success for all
Q. the years to come
R. great health and

- (A) QRP (B) RPQ
(C) PQR (D) QPR

DIRECTION (Q. 81-83):- In these questions, four alternatives are given for the idiom/phrase given in bold in the sentence. Choose the alternative which best expresses the meaning of the idiom/phrase given in bold.

81. The rustics **weretaken to the cleaners** when ventured into the city.

- (A) Lost all their money in business/gambling
- (B) were thoroughly beaten up
- (C) were frightened
- (D) were made to feel diffident

82. I do not think the law will interfere with us as we are just trying to **turn an honest penny**.

- (A) make a legitimate living
- (B) make a good living
- (C) have dealings in white money
- (D) become more honest

83. The boy **turned a deaf ear** to the pleadings of all his well-wishers.

- (A) listened carefully
- (B) was deadly opposed
- (C) posed indifference
- (D) did not pay any attention

DIRECTION (Q. 84-85):- In the following questions, out of the four alternatives choose the one which can be substituted for the given words/sentence.

84. Medicine used to calm or pacify

- (A) hypnotic
- (B) antidepressant
- (C) tranquillizer
- (D) fusion

85. Murder of a king

- (A) butchery
- (B) regicide
- (C) slaughter
- (D) infanticide

86. Hater of learning and knowledge

- (A) misologist
- (B) posologist
- (C) syllogist
- (D) zoologist

87. Select the synonym of - **Scourge**

- (A) Dirty
- (B) Curse
- (C) Baby
- (D) Devil

88. Select the synonym of - **Scum**

- (A) Filth
- (B) Scam
- (C) Detailed
- (D) Scrawny

89. Select the antonym of - **Reverence**

- (A) Devotion
- (B) Piety
- (C) Hatred
- (D) Praise

90. Select the antonym of - **Goading**

- (A) Inciting
- (B) Provoking
- (C) Mustering
- (D) Blocking

DIRECTION (Q. 91-95):- Read the passages carefully and choose the best answer to each question out of the four alternatives.

Greyhound racing is the sixth most popular spectator sport in the United States. Over the last decade, a growing number of racers have been adopted to spend their retirement as household pets, once their racing careers are over. Many people hesitate to adopt a retired racing greyhound because they think only very old-dogs are available. Actually even champion racers only work until they are about three- and a half years old. Because greyhounds usually live to be 12 to 15 years old, their retirement is much longer and active than other breeds and will need a large space to run. These are false impression. Greyhounds have naturally sweet, mild dispositions, and while they love to run they are sprinters rather than distance runners and are sufficiently exercised with a few daily laps around a fenced -in- backyard. Greyhounds do not make good watchdogs,

but they are very good with children get along well with other dogs (and usually cats as well) , and are affectionate and loyal. They are intelligent, well- behaved dogs, usually housebroken in only a few days. A retired racing greyhound is wonderful pet for almost anyone.

91. Based on the tone of the passage the author's main purpose is to

(A) Teach prospective owners how to transform their racing greyhound into a good pet.

(B) Show how the greyhound's nature makes it equally good as racer and pet.

(C) Encourage people to adopt retired racing greyhounds.

(D) Objectively present the pros and cons of adopting a racing greyhound

92. According to the passage, adopting a grey hound is a good idea for people who

(A) Do not have children

(B) Live in apartments

(C) Do not usually like dogs.

(D) Already have another dog or a cat.

93. Which of the following is implied by the passage?

(A) The public is more aware of greyhounds than they used to be.

(B) Greyhounds are more competitive than the other dogs.

(C) Greyhound racing should not be allowed.

(D) People who own pet rabbits should not adopt greyhounds.

94. One drawback of adopting a greyhound is that

(A) Greyhounds are not good with children

(B) Greyhounds are old when they retire from racing.

(C) The greyhound's sensitivity makes it temperamental.

(D) Greyhounds are not good watch dogs.

95. This passage is most like an advertisement because it

(A) Uses statistics to prove its point.

(B) Does not present information to substantiate its claims

(C) Says nothing negative about greyhounds.

(D) Encourages people to do something.

DIRECTION (Q. 96-97):- Improve the bracketed part of the sentence.

96. Tina said she (has went) to the temple before.

(A) have gone

(B) had gone

(C) has been gone

(D) Have been going

97. Yasmin wanted to have her own say in the (home-related) affairs.

(A) Housing

(B) Homemaking

(C) Domestic

(D) Homey

98. Select the word with the correct spelling.

(A) Anihilate

(B) Quisst

(C) Burdennsome

(D) Intricate

99. In the following question, a sentence has been given in Active/Passive voice. Out of four alternatives suggested, select the one, which best expresses the same sentence in Passive/Active voice.

Chetan tackled the situation carefully and covertly.

(A) Carefully and covertly Chetan tackles the situation.

(B) The situation is tackled carefully and covertly.

(C) The situation was tackled carefully and covertly by Chetan.

(D) Chetan carefully and covertly tackled the situation.

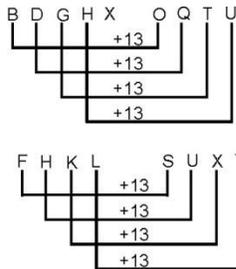
100. In the following question, a sentence has been given in Direct/Indirect speech. Out of the four alternatives suggested, select the one, which best express the same sentence in Indirect/Direct speech.

Neeraj said to Meera, "Tell me that yourself"

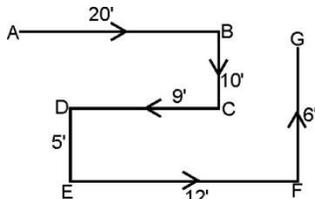
- (A) Neeraj said to Meera that she tell him that himself.
- (B) Neeraj said to Meera that she should tell him that herself
- (C) Neeraj told Meera to tell him that herself
- (D) Neeraj said to Meera to tell him herself

SSC CHSL MEMORY BASED PAPER -1 SOLUTION

1.(C)



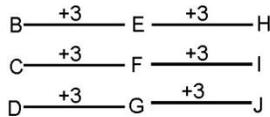
2. (C)



3. (C) mno/nopq/opqrs/pqrst

4. (C) $4 + 8 = 12$
 $8 + 8 = 16$
 $14 + 10 = 24$
 $6 + 8 = 14$

5. (D)



6. (B)

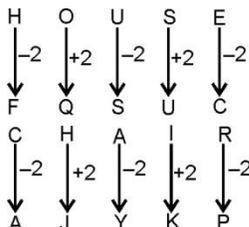
7. (B) $11^2 = 121$ and $11 + 1 = 12$
 $5^2 = 25$ and $5 + 1 = 6$

8. (B) $4246 \Rightarrow 4 \times 6 = 24$
 $8314 \Rightarrow 84 = 32 \neq 31$
 $9546 \Rightarrow 9 \times 6 = 54$
 $5306 \Rightarrow 5 \times 6 = 30$

9. (A)

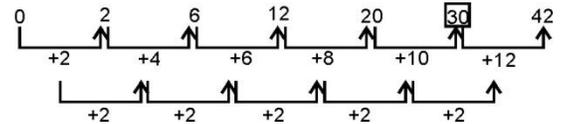
$5 + 2.5 = 7.5$
 $7.5 + 5 = 12.5$
 $12.5 + 10 = 22.5$
 $22.5 + 20 = 42.5$

10. (D)



11. (D)

12. (D)



13. (B)

14. (B)

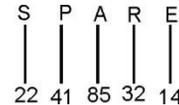
15. (C) $30 \div 6 - 4 + 2 \times 3 = 7$

$5 - 4 + 6 = 7$

16. (A)

- Torque
 Torrid
 Torso
 Tortoise
 Tortuous

17. (A)



18. (C)

19. (C) $56 = 7 \times 8$

$99 = 11 \times 9$

$45 = 9 \times 5$

20. (B)

Total no of students = 180
 Girls are twice the no of Boys
 No. of Girls in class = 120
 No. of boys in class = 60
 Ramu's Rank top 34 and 18 girls are ahead of Rammu
 \therefore No of Boys up to 34th rank from top = $34 - 18 = 16$
 No of boys after the rank of Ramu
 $= 60 - 16$
 $= 44$

21. (C)

Daughter = x
 Mother = 5x
 $x + 5 = 5x + 5$
 $3(x + 5) = 5x + 5$
 $2x = 10$
 $x = 5$
 $5x = 5 \times 5$
 $= 25$

22. (A)

23. (B)

24. (B)

25. (C)

51. (A) $CI = P \left(1 + \frac{r}{100 \times n} \right)^{nt} - P$

$$SI = \frac{P \times r \times 2}{100} = 2400$$

$$Pr = 120000$$

$$C.I = P \left(1 + \frac{r}{100} \right)^2 - P = 2544$$

$$P \left(1 + \frac{r^2}{10000} + \frac{2r}{100} \right) - P = 2544$$

$$(Pr) \times \frac{r}{10000} + \frac{Pr}{100} = 2544$$

$$\frac{120000r}{10000} + 2400 = 2544$$

$$= r = 12\%$$

52. (A) (x_1, y_1) and (x_2, y_2) is

$$(y - y_1) = \frac{y_2 - y_1}{x_2 - x_1} \times (x - x_1)$$

Equation of the line which passes through the Points (2,

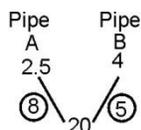
$$3) \text{ and } (-4, 1) \text{ is } (y - 3) = \frac{1 - 3}{-4 - 2} \times (x - 2)$$

$$= -6y + 18 = -2x + 4$$

$$= x - 3y = -7$$

53. (C) To take out ratio Both the quantities should be of the same unit so, Rs. 6 = 600 Paise 40 Paise : 600 Paise = 1 : 15

54. (B)



Part filled by pipe 2 in 2 hours = 10 units

$$\text{Time taken by A to fill rest} = \frac{10}{8} = 1\frac{1}{4} \text{ hr}$$

55. (A) Volume of a room = Length \times Breadth \times Height

Height of a room is twice its breadth and $\frac{1}{8}$ th of its length

$$\text{Breadth} = \frac{1}{2} \times \text{height and Length}$$

$$= 16 \times \text{Breadth}$$

$$\text{Volume} = 4000$$

$$= \frac{1}{2} \times \text{Height} \times 8 \times \text{Height} \times \text{Height} = 4000$$

$$= \text{Height}^3 = 1000$$

$$= \text{Height} = 10 \text{ m}$$

56. (A) L.C.M of 4, 6, 8 and 14 sec = 168 sec = 2 min 48 sec

57. (A) ATQ

$$x + 12x = 403$$

$$x = 31$$

$$\text{LCM} = 12 \times 31 = 372$$

$$93 \times \text{second no} = 31 \times 372$$

$$\text{second no} = \frac{31 \times 372}{93}$$

$$= 124$$

58. (B) Train are running in opposite Direction Relative speed =

$$(50 + 40) \text{ km/h} = 90 \times \frac{5}{8} \text{ m/sec}$$

$$= 25 \text{ m/s}$$

$$\text{Required Distance} = 120 + 180$$

$$= 300 \text{ m}$$

$$\text{Required time} = \frac{300}{25}$$

$$= 12 \text{ sec}$$

59. (C) Total Expenses of hostel and Books = 40% + 20% = 60%

Half of rest = 40% and 120% Expense on transport

$$20\% \text{ of } \frac{1}{2} = 450$$

$$20\% = 900$$

$$100\% = 4500$$

60. (C) Salary for september = $6300 \times \frac{104}{100} = 6552$

$$\text{Salary for october} = 6552 \times \frac{104}{100} = 6814 \text{ (approx)}$$

61. (D) = $95 \times 105 = (100 - 5) \times (100 + 5)$
 $= 95 \times 105 = 100^2 - 5^2 (a^2 - b^2) = (a + b)(a - b)$
 $= 95 \times 105 = 10000 - 25$
 $= 95 \times 105 = 9975$

62. (D) Length of train = 400 m

Speed of train = 20 m/s

Total Distance to be covered = 400 + 100

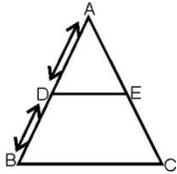
$$= 500 \text{ m}$$

$$\text{Time} = \frac{\text{Distance}}{\text{speed}}$$

$$T = \frac{500}{20}$$

$$= 25 \text{ seconds}$$

63. (D)



$$\frac{AE}{AC} = \frac{AD}{AB} = \frac{DE}{BC}$$

$$= \frac{AD}{DB} = \frac{5}{4}$$

$$= \frac{AD}{AB} = \frac{DE}{BC} = \frac{5}{9}$$

$$= DE : BC = 5 : 9$$

- 64. (B)** $\sin A + \sin^2 A = 1$
 $\sin A = 1 - \sin^2 A = \cos^2 A$ (i)
 $(\because \sin^2 \theta + \cos^2 \theta = 1)$
 Squaring on Both sides
 $\sin^2 A = \cos^4 A$ (ii)
 Substitute (i) and (ii)
 $\cos^2 A + \cos^4 A = \sin A + \sin^2 A = 1$
 $\therefore \cos^2 A + \cos^4 A - 1$

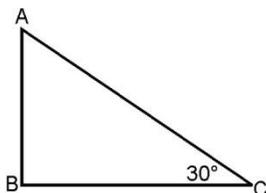
- 65. (B)** CP of watch be x for wholesaler
 SP for wholesaler = $\frac{136}{100}x$
 CP for retailer = SP for wholesaler
 SP for retailer = $\frac{75}{100} \times \frac{136}{100}x = \frac{75}{100} \times \frac{136}{100}x = 2499$
 $x = \text{Rs } 2450$

- 66. (B)** Ratio of acid & water = $\frac{x+5}{3x} = \frac{1}{2}$
 $x = 10$

Initial quantity = $40 \times 10 = 40$

- 67. (A)** $\sin^2 11^\circ + \sin^2 79^\circ = \sin^2 11^\circ$
 $+ \sin^2 (90 - 11^\circ) = \sin^2 11^\circ + \cos^2 11^\circ = 1$

- 68. (A)**



Let the height of Pole before breakage be AB + AC.
 So, $AB = BC \tan 30^\circ$ and $AC = BC / \cos 30^\circ$
 $\therefore AB = \frac{20}{\sqrt{3}}$ and $AC = \frac{40}{\sqrt{3}}$
 So, $AB + AC = 20\sqrt{3}$

- 69. (D)** $a^3 + b^3 + c^3 = 3abc$ only if either $a + b + c = 0$ or $a = b = c$

70. (B) $\frac{2^{100}}{31} = \frac{(2^5)^{20}}{31} = \frac{(32)^{20}}{31} = 1^{20}$
 $= 1$

71. (C) $\frac{1}{1 \times 2} + \frac{1}{2 \times 3} + \frac{1}{3 \times 4} + \dots + \frac{1}{19 \times 20}$
 $= \left[1 - \frac{1}{2}\right] + \left[\frac{1}{2} - \frac{1}{3}\right] + \left[\frac{1}{3} - \frac{1}{4}\right] + \dots + \left[\frac{1}{19} - \frac{1}{20}\right]$
 $= 1 - \frac{1}{20} = \frac{19}{20}$

(72-73)

- 72. (B)** Average no. of the boys of standard 6
 $= \frac{30+30+30}{3} = 30$

Average no. of the girls of standard 6
 $= \frac{45+35+10}{3} = 30$

Required Ratio = 30 : 30
 $= 1 : 1$

- 73. (A)** Average of Five Subjects = $\frac{\text{Total marks of the subjects}}{\text{No of subjects}}$
 $= \frac{(65+55+80+75+85)}{5}$

$= 72$

Student net Average marks = $72 - 10$
 $= 62$

- 74. (B)** Let the number be x

wrong number = $\frac{11x}{13}$

Actual number = $\frac{13x}{11}$

Error = $\frac{13x}{11} - \frac{11x}{13}$
 $= \frac{48x}{143}$

Percentage Error = $\frac{\frac{48x}{143}}{\frac{13x}{11}} \times 100$

$= 28.4\%$

- 75. (B)** LCM \times HCF = 63×77

LCM = $63 \times \frac{77}{7}$

$= 693$

76(A): Error lies in the **A** part of the sentence, “**In case under**” should be replaced with “**In case of**”.

77(D): There is no error in the given sentence. So, **Option D** is correct answer.

78(B): Option B is appropriate word to be filled up in the given sentence.

79(C): Option C is appropriate word to be filled up in the given sentence.

80(B): The correct sequence is – **RPQ**. So, **Option B** is correct answer.

81(A): Option A expresses the correct meaning of the given phrase. So, **Option A** is correct answer.

Were taken to the cleaners - to be soundly defeated or bested; to lose by a wide margin.

82(C):Option C expresses the correct meaning of the given phrase. So, **Option C** is correct answer.

Turn an honest penny - to earn money in an honorable and legitimate way.

83(D): Option D expresses the correct meaning of the given phrase. So, **Option D** is correct answer.

turn a deaf ear - refuse to consider it and do not pay any attention to it.

84(C): Tranquillizer - a medicinal drug taken to reduce tension or anxiety.

So, **Option C** can best substitute the given phrase.

85(B): Regicide - a person who kills or takes part in killing a king. So, **Option B** can best substitute the given phrase.

86(A): Misologist - distrust or hatred of reasoning, argument, or knowledge.

So, **Option A** can best substitute the given phrase.

87(B): Option B is the correct synonym for the given sentence. **Scourge** - an affliction, bane or a curse.

88(A): Scum - dirt or filth.

So, **Option A** is correct antonym for the given word.

89(C):Reverence - devotion.

So, **Option C** is correct antonym for the given word.

90(D): Goading - inciting or provoking someone to do something. So, **Option D** is correct antonym for the given word.

91(C):According to the passage, **Option C** is correct choice.

92(D): According to the passage, **Option D** is correct choice.

93(A): According to the passage, **Option A** is correct choice.

94(D): According to the passage, **Option D** is correct choice.

95(D): According to the passage, **Option D** is correct choice.

96(B): Option B is correct answer. ‘**Had gone**’ should be used in place of ‘**has went**’ because the tense to be used here must be in past perfect.

97(C): Option C is correct answer.

98(D): Option D is correctly spelt word. **Intricate** -very detailed or complex.

99(C): Option C is correct answer.

100(C):Option C is correct answer.

SSC CHSL Memory Based Paper 1(ANSWER KEY)

1(C)	2(C)	3(C)	4(C)	5(D)	6(B)	7(B)	8(B)	9(A)	10(D)
11(D)	12(D)	13(B)	14(B)	15(C)	16(A)	17(A)	18(C)	19(C)	20(B)
21(C)	22(A)	23(B)	24(B)	25(C)	26(B)	27(B)	28(C)	29(C)	30(D)
31(C)	32(C)	33(A)	34(D)	35(A)	36(D)	37(A)	38(C)	39(A)	40(B)
41(C)	42(C)	43(C)	44(A)	45(D)	46(D)	47(C)	48(C)	49(B)	50(B)
51(A)	52(A)	53(C)	54(B)	55(A)	56(A)	57(A)	58(B)	59(C)	60(C)
61(D)	62(D)	63(D)	64(B)	65(B)	66(B)	67(A)	68(A)	69(D)	70(B)
71(C)	72(B)	73(A)	74(B)	75(B)	76(A)	77(D)	78(B)	79(C)	80(B)
81(A)	82(C)	83(D)	84(C)	85(B)	86(A)	87(B)	88(A)	89(C)	90(D)
91(C)	92(D)	93(A)	94(D)	95(D)	96(B)	97(C)	98(D)	99(C)	100(C)