



No of Questions : 100
Time : 90 minutes
MODAL TEST -3

1. Instead of multiplying a number by 0.72 , a student multiplied it by 7.2. If his answer was 2592 more than the correct answer, the original number was,

a) 40 b) 420 c) 500 d) 560
2. The digit in the unit's place of the product

a) $(2464)^{1793} \times (615)^{317} \times (131)^{491}$ is

a) 0 b) 2 c) 3 d) 5
3. The numbers x, y, z are respectively proportional to 2, 3, 5 and the sum of x, y and z is 80. If the number z is given by the equation $z = ax - 8$, then a is

a) 6 b) $\frac{3}{2}$ c) 3 d) $\frac{5}{2}$
4. The number of trees in each row of a garden is equal to the total number of rows in the garden. After 111 trees have been uprooted in a storm, there remain 10914 trees in the garden. The number of rows of trees in the garden is

a) 100 b) 105 c) 115 d) 125
5. What is the LCM of 64 and 56

a) 448 b) 488 c) 484 d) 408
6. The average temperature of the first 4 days of a week was 37°C and that of the last 4 days of the week was 41°C . If the average temperature of the whole week was 39°C , then temperature of the fourth day was

a) 38°C b) 38.5°C c) 39°C d) 40°C
7. A person was asked to state his age in years. His reply was "take my age 3 yr hence, multiply it by 3 and then subtract 3 times my age 3 yr ago and you will know how old I am".
 What was the age of the person?

a) 24 yr b) 20 yr c) 32 yr d) 18 yr

BEST Learning Center, TNPSC BANK SSC POLICE & All Other Competitive Exams

Call Enquiry: 7418968881 / 7418978881, No: 11, Kalyaniammal street, Ambattur, CH-53. Land Mark: Close to Canara bank



8. Neha's weight is 140% of Tina's weight. Mina's weight is 90% of Lina's weight. Lina weights twice as much as. Tina. If Neha's weight is x% of Mina' weight, then x is equal to
- a) $64 \frac{2}{9}$ b) $77 \frac{7}{9}$ c) 90 d) $128 \frac{4}{7}$
9. We slip on smooth inclined plane, due to
- a) gravitational forces b) relative velocity
 c) lack of normal force d) excess of friction
10. Which of the following is not a colloid?
- a) Chlorophyll b) Smoke c) Ruby Glass d) Milk
11. The function of ball bearings in a wheel is
- a) to increase friction b) to convert kinetic friction into rolling friction
 c) to convert static friction into kinetic friction d) just for convenience
12. Which one of the following is an example of a gel?
- a) Cheese b) Milk c) Face cream d) Shaving cream
13. If lime water is kept in the air, then it turns milky due to the presence of
- a) carbon dioxide b) nitrogen c) oxygen d) sulphur dioxide
14. How many neutrons are there in ${}_{92}\text{U}^{238}$ atom?
- a) 92 b) 238 c) 146 d) 330
15. The sounds having a frequency of 20 Hz to 20000 Hz are known as
- a) audible sounds b) ultrasonics c) Infrasonics d) megasonics
16. Speed of sound in air is unaffected by change in
- a) pressure b) humidity c) temperature d) volume
- Directions** (Q.Nos. 20 and 21) In the following questions, select the related word/letter/number from the given alternative
17. a E H J b) J M L c) P S R d) V Y X



18. a) Puppy b) Cow c) Fawn d) Cub
19. Arrange the following words as per order in the dictionary.
- 1) Patriot 2. Pastor 3. Patron 4. Pattern 5) Pastern
- a) 5, 2, 3, 1, 4 b) 5, 2, 1, 3, 4 c) 5, 2, 4, 1, 3 d) 5, 2, 4, 3, 1

Directiona (Q. Nos 20 and 21) In the following questions, select the related word/letter number from the given alternatives.

20. 72 : 90 :: 156 : ?
- a) 184 b) 168 c) 182 d) 176
21. Lions : Pride of lions :: Cat:?
- a) Clowder b) Herd c) School d) Bunch

Direction (Q. Nos. 22) The question given below consists of a question followed by two statements labeled as I and II. We have to decide whether these statements give enough information required to answer the question or not.

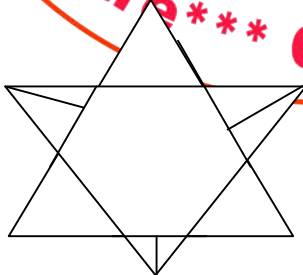
Given answer

- a) If Statement I alone is sufficient to answer the question
- b) If Statement II alone is sufficient to answer the question
- c) If Statement I and II together are needed to answer the question
- d) If Statement I and II together are not sufficient to answer the question
22. Who is older Ritu or Situ?
- I. situ was born in the year 1980 and is 5 yr younger than Ritu's brother.
- II. Ritu is twice as old as her brother
23. Who has chosen with Meera Puruskar 2018 by Rajasthan Sahitya Academy?
- a) Sawai Singh Shekhawat b) Brij Bhushna Kabra
- c) Manisha Gulyani d) Man Singh
24. Which country has built the world's tallest timber tower named Mjos Tower?



- a) Japan b) Russia c) Egypt d) Norway
25. What number when added to each of the numbers 6, 7, 15, 17 will make the resulting numbers proportional?
 a) 6 b) 5 c) 4 d) 3
26. Zinc and copper are in the ratio 5 : 3 in 400 g of an alloy. How much of copper (in g) should be added to make the ratio 5 : 4?
 a) 72 b) 200 c) 50 d) 66
27. Jasmine allows 4% discount on the marked price of her goods and still earns a profit of 20%. What is the cost price of a shirt, if its marked price is Rs.850?
 a) Rs. 650 b) Rs. 720 c) Rs.700 d) Rs.680
28. A borrows Rs. 800 at the rate of 12% per annum simple interest and B borrows Rs. 910 at the rate of 10% per annum simple interest. In how many years, will their amounts of debt be equal?
 a) 18 b) 20 c) 22 d) 24
29. In what time Rs.8000 will amount to Rs.9261 at 10% per annum compound interest, when the interest is compounded half-yearly?
 a) $3\frac{1}{2}$ yr b) $1\frac{1}{2}$ yr c) $2\frac{1}{2}$ yr d) 2yr
30. Two persons can complete a piece of work in 9 days. How many more persons are needed to complete double the work in 12 days?
 a) 3 b) 2 c) 4 d) 1
31. A can do a work in 20 days and b can do the same work in 30 days. In how many days, can A and B together do the work?
 a) 10 b) 12 c) 15 d) 16
32. Fat can be separated from milk in a cream separator because of
 a) cohesive force b) gravitational force
 c) centripetal force d) centrifugal force
33. Jhum cultivation refers to



- a) cultivation of neem trees b) cultivation of medicinal plants
- c) tribal method of shifting cultivation d) cultivation of timber plants
34. Which one of the following is not a vegetative structure of plants?
- a) Suckers b) Tubers c) Fibres d) offsets
35. Which of the following does not carry oxygenated blood?
- a) Pulmonary Vein b) Pulmonary Artery
- c) Aorta d) Renal Artery
36. Biogas produced by fermentation of manure, sewage, cattle dung, etc. predominantly comprises
- a) methane, nitrogen and hydrogen b) methane and carbon dioxide
- c) methane and carbon monoxide d) methane and nitric oxide
37. For a body moving with non-uniform acceleration
- a) displacement-time graph is linear
- b) displacement-time graph is non-linear
- c) velocity-time graph is non-linear
- d) velocity-time graph is linear
38. How many triangles are in the given figure
- 
- a) 12 b) 14 c) 16 d) 20
39. Two Statements are given followed by two Conclusions I and II. You have to decide which of the given conclusions, if any, follow from the given statements.



Statement The crop condition continues to be critical even after the rains.

Conclusions

- I. the crop condition was not critical before rains.
- II. The crop condition was expected to improve after the rains.

- a) Only Conclusion II follow
- b) Both Conclusions I and II follow
- c) Neither Conclusion I nor II follow
- d) Only Conclusion I follow

40. In the following question, by using which mathematical operators will the expression become correct? $15 _ 3 _ 4 _ 20$

- a) \times , \div and $>$
- b) $+$, \times and $<$
- c) \div , \times and $=$
- d) $+$, \times and $=$

41. A statement is given followed by two conclusions. Read the conclusions and then decide which of the conclusions, if any, logically follows from the two given statements, disregarding the known facts.

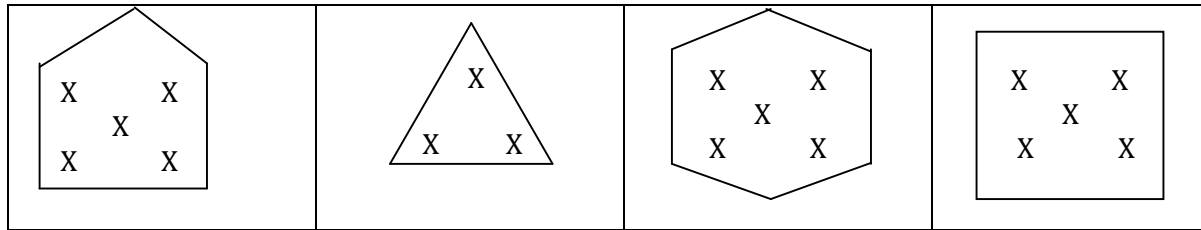
Statements In a one day cricket match, the total runs made by a team were 200. Out of these 160 runs were made by spinners.

Conclusions

- I. 80% of the team consists of spinners.
- II. The opening batsmen were spinners.

- a) Only Conclusion I follows
- b) Only Conclusion II follows
- c) Either I or II follows
- d) Neither I nor II follows

42. Select the figure which is different from others.



A b c d

43. Which of the following vedic texts is related to Mathematics?
 a) Altharvaveda b) Salva Sutras c) charaka Samhita d) Ashtadhyayi
44. Where do Bhagirathi and Alaknanda join to form Ganga?
 a) Gangotri b) Karnaprayag c) Devprayag d) rudraprayag
45. The largest freshwater lake in the world is
 a) Lake Victoria b) Lake Michigan c) Lake Balkhash d) Lake Superior
46. A train 300 m long is running at a speed of 25 m/s. It will cross a bridge of 200 m in
 a) 5 s b) 10s c) 20s d) 25s
47. Find the value of $1-2 \sin^2 \theta + \sin^4 \theta$.
 a) $\sin^4 \theta$ b) $\cos^4 \theta$ c) $\tan^4 \theta$ d) $\sec^4 \theta$
48. a man goes from Mysore to Bangalore at a uniform speed of 40 km/h and comes back to Mysore at a uniform speed of 60 km/h. his average speed for the whole journey is
 a) 48 km/h b) 50 km/h c) 54 km/h d) 55 km/h
49. If $a+b+c=0$, then the value of $\frac{a^2 + b^2 + c^2}{a^2 - bc}$ is
 a) 0 b) 1 c) 2 d) 3
50. If $x \frac{1}{x} = 2$, then $x^{2013} + \frac{1}{x^{2014}}$ is equal to



- a) 0 b) 1 c) -1 d) 2
51. The area of a right angled isosceles triangle having hypotenuse $16\sqrt{2}$ cm is
- a) 144 cm^2 b) 128 cm^2 c) 112 cm^2 d) 110 cm^2
52. A clock is set right at 8 am. The clock gains 10 min in 24h. What will be the right time when the clock indicates 1 pm on the following day?
- a) 11 : 40 pm b) 12 : 48 pm c) 12 pm d) 10 pm
53. A stone is dropped from the roof of a house towards the ground. The kinetic energy of the stone will be maximum
- a) just after it is dropped b) when it is just on the half-way
- c) just before it touches the ground d) when it touches the ground
54. One carat of diamond is equal to
- a) 100 mg b) 150mg c) 200 mg d) 250 mg
55. Electrons are filled into different orbitals and this distribution of electrons into orbitals of an atoms is termed as
- a) shell b) electronic configuration
- c) Both (a) and (b) d) None of the above
56. 'Plaster of Paris' is made by partial dehydration of
- a) Epsom salt b) gypsum salt c) blue vitriol d) green vitriol
57. Wood spirit is
- a) methyl alcohol b) gypsum salt c) butyl alcohol d) propyl alcohol
58. A simple microscope consists of a concave lens of power -10D and convex lens of power $+10\text{D}$ and convex lens of power $+20\text{D}$ in contact. If the image formed at infinity, then calculate the magnifying power ($D=25$) cm.
- a) 2.5 b) 3.5 c) 2.0 d) 3.0



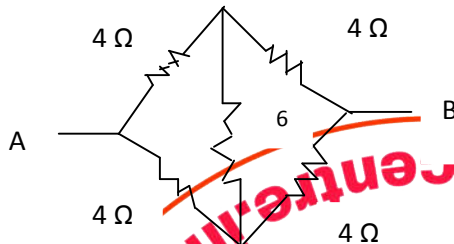
59. If $2463 = 36$ and $5552 = 30$, then $6732 = ?$
- a) 32 b) 36 c) 34 d) 39
60. In a certain code language, BAD is written as '7' and 'SAP' is written as '9'. How is 'BAN' written in that code language?
- a) 8 b) 3 c) 4 d) 6
61. F is the brother of A. C is the daughter of A. K is the sister of F, G is the brother of C. Who is the uncle of G?
- a) A b) 3 c) 4 d) 6
62. From the given alternative words, select the word which can be formed using the letters of the given word.
- CHRONOLOGICAL
- a) CALLS b) LOGICS c) CALICO d) ANALOGY
63. Select the missing number from the given responses.
- | | | |
|-----|----|-----|
| 134 | 34 | 100 |
| 117 | 86 | 31 |
| 87 | ? | 64 |
- a) 120 b) 23 c) 55 d) 30
64. Kanna is taller than Malik. Dev is shorter than Krish whereas Krish is taller than Malik. Veena is shorter than Krish but taller than Malik and Dev is taller than Veena. Who is the shortest?
- a) Dev b) Kanna c) Veena d) Malik
65. A Bill is a 'Money Bill' or not will be decided by
- a) Finance Minister b) President
 c) Chairman of Rajya Sabha d) Speaker of Lok Sabha
66. What is the minimum age required to become Prime Minister of India
- a) 18 years b) 25 years c) 30 years d) 35 years



67. The Kalinga Prize for the popularization of science is constituted by
 a) UNICEF b) UNESCO c) ISRO d) DST
68. The sum of n terms in the series
 $1 + \frac{1}{2} + \frac{1}{2^2} + \frac{1}{2^3} + \dots$ is
 a) $\frac{2^{n-1}}{2^{n-1}}$ b) $\frac{2^{n-1}-1}{2^{n-2}}$ c) $2-2^n$ d) $\frac{2^{n-1}}{2^n}$
69. Kamla got married 6 yr ago. Today her age is $1\frac{1}{4}$ times her age at the time her son's age is $\frac{1}{10}$ times her age. Her son's age is
 a) yr b) 3yr c) 4 yr d) 5 yr
70. A starts a business with Rs. 2000 and B joins him after 3 months with Rs. 8000. Find the ratio of their profits at the end of the year.
 a) 1 : 3 b) 2 : 4 c) 3 : 1 d) 2 : 1
71. A and B are two alloys of gold and copper prepared by mixing metals in the ratio 7:2 and 7:11, respectively. If equal quantities of the alloys are melted to form a third alloy C, the ratio of gold and copper in C will be
 a) 5:7 b) 5:9 c) 7:5 d) 9:5
72. A cistern has two pipes. One can fill it with water in 8 h and the other can empty it in 5h. In how many hours will the cistern be emptied if both the pipes are opened together when $\frac{3}{4}$ of the cistern is already full of water?
 a) $3\frac{1}{3}$ b) 6 c) 10 d) $13\frac{1}{3}$
73. $\mu_g = \frac{3}{2}$ and $\mu_w = \frac{4}{3}$ If the speed of light in glass is 2.00×10^8 m/s, then the speed in water will be
 a) 2.67×10^8 m/s b) 2.25×10^8 m/s
 b) 1.78×10^8 m/s d) 1.50×10^8 m/s



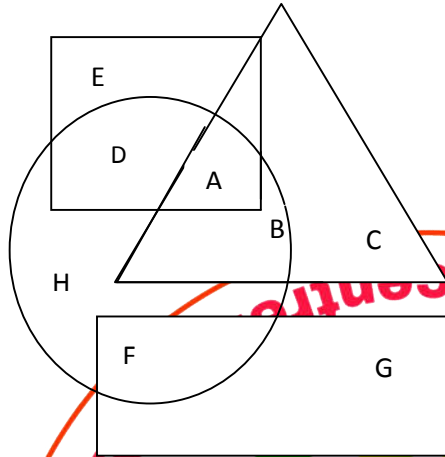
74. The effective resistance between point A and B is



- a) 60Ω b) 40 Ω c) 20 Ω d) 10 Ω
75. A 100% efficient transformer has 100 turns in the primary and 25 turns in its secondary coil. If the current in the secondary coil is 4 A, then the current in the primary coil is
- a) 16A b) 8A c) 4A d) 1A
76. To which of the following organism, mushroom is associated?
- a) Algae b) Fern c) Fungi d) Lichen
77. Select the incorrect statement
- a) Vaccines are preparations of antigens which generate permanent passive immunity against all pathogens
- b) First vaccine was formed by Edward Jenner
- c) DPT is a vaccine that provides immunity for three different diseases
- d) Tetanus is caused by a rod shaped bacterium
78. Light and dark bands (striations) are seen in
- a) voluntary striated muscles b) voluntary unstriated muscles



A



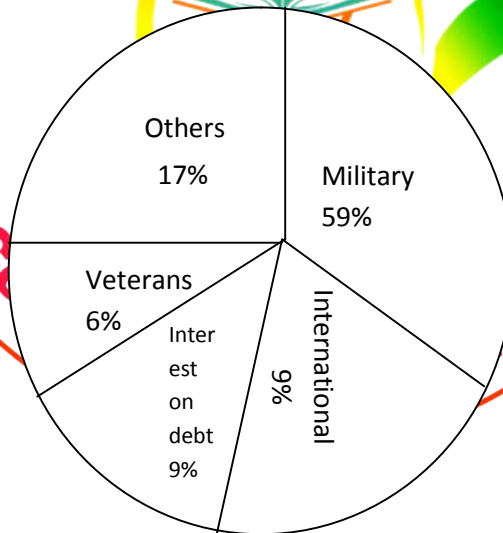
a) A,B

b) E, D

c) D, H, F

d) G, C

Direction (Q. Nos. 82 and 83) study the following pie chart and answer the questions that follow.



82. In year 2012, if India had a total expenditure of Rs. 120 billion, then how many billions did it spend on interest on debt?

a) Rs. 10.8 billion

b) Rs. 12.2 billion

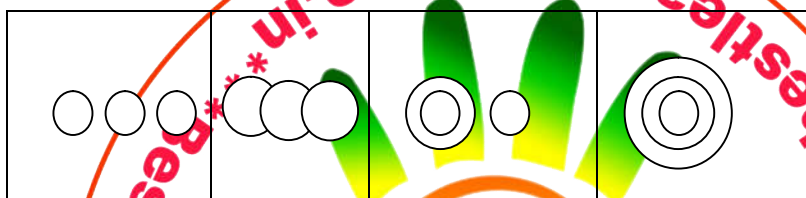
c) Rs. 10.2 billion

d) Rs. 12.8 billion



83. If Rs. Billion were spent in year 2012 for veterans, then what would have been the total expenditure for that year (in billions)?
- a) Rs. 100 billion b) Rs. 50 billion
 c) Rs. 150 billion d) Rs. 120 billion

84. Which one of the following diagrams best depicts the relationship between second, Minutes and Hours?



a) b) c) d)

85. Who wrote the famous book 'A Tiger for Malgudi'?

a) Mulk Raj Anand b) RK Narayan
 c) Arundhati Roy d) Manohar Malgonkar

86. Which of the following is not an extension of a picture file on a computer?

a) extension of a picture file on a computer?
 a) .jpg b) .png c) .gif d) .mdb

87. The system of communal electorate

a) Indian Councils Act of 1892 b) Morley-Minto Reforms of 1909
 c) Montagu-Chelmsford Reforms (1919) d) Government of India Act, 1935

88. Who will be the beneficiary of umbrella scheme 'PM-AASHA' approved by the Union Cabinet?

a) Farmers b) Pregnant women c) Infant d) Schedule tribes

89. Each interior angle of a regular octagon in radian is



a) $\frac{\pi}{4}$

b) $\frac{3\pi}{4}$

c) $\frac{2\pi}{3}$

d) $\frac{\pi}{3}$

90. Simplify

$$\left[3 \frac{1}{4} \div \left\{ 1 \frac{1}{4} - 0.5 \left\{ 2 \frac{1}{2} - \frac{1}{4} - \frac{1}{6} \right\} \right. \right]$$

$$4 \times \frac{1}{12}$$

a) 245

b) 233

c) 234

d) 299

91. For a given data mean is 40 and mode is 25, then find the median

a) 35

b) 30

c) 20

d) 32

92. Ashok went 8 km South and turned West and walked 3 km. Again he turned North and walked 5 km. He took a final turn to East and walked 3 km. In which direction was Ashok from the starting point?

a) East

b) North

c) West

d) South

93. Two statements are given followed by two conclusion. Read the conclusions and then decide which of the conclusion, if any, logically follows from the two given statements, disregarding the known facts.

Statements

All fathers are sons.

No sons are educated

Conclusions

I. All sons are educated.

II. No Fathers are educated.

a) Only Conclusion I follows

b) Only Conclusion II follows

c) Neither I nor II follows

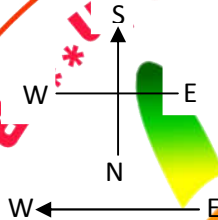
d) Both conclusions I and II follow

94. You are driving your car on a road and suddenly a child comes from the wrong side and he is injured by your car. You know that, it was not your mistake. The parents of child and some other people come there



- a) you start shouting on them for their carelessness
 b) start telling them the law, that it was wrong side and the fault was of child
 c) run away from the accident site
 d) tell people to take the child to the hospital first

95. A constant current flows in a horizontal wire in the plane of the paper from East to west as shown in the figure. The direction of magnetic field at a point will be North to South.



- a) directly above the wire b) directly below the wire
 c) at a point located in the plane of the paper, on the North side of the wire
 d) at a point located in the plane of the paper, on the South side of the wire.
96. Fibre optics work on the principle of
 a) scattering of light b) total internal absorption
 c) total internal reflection d) optical rotation
97. Which of the following is used to split white light into different colours?
 a) Glass slab b) Convex lens c) Concave lens d) Prism
98. The Finance Minister of Mughal Empire during Akbar's rule was
 a) Todarmal b) Man Singh c) Birbal d) Tansen
99. Who is called the 'Father of Economics'?
 a) Max Muller b) Karl Marx c) Adam Smith d) Alfred Marshall
100. Which grading index has been introduced by HRD ministry to assess quality of school education in states?
 a) 70 point b) 80 point c) 75 point d) 65 point





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

