PREVIOUS YEAR PAPER

DSSSB PGT Maths (Male) 2021 — 31 July 2021

DSSSB PGT · 31 July 2021

112 of the paper's 300 questions · +1 for a correct answer, −0.25 for a wrong one · 180 minutes

Left out of the original paper: 188 (any question that needs a figure, a symbol or formatting we cannot show, or whose text did not read back cleanly from the booklet).

Questions from the Delhi Subordinate Services Selection Board's paper of 31 July 2021. Each question is followed by its answer, and the answer key is repeated on the last page.

Take it as a timed practice test: exambharo.com/dsssb-pgt/previous-year-papers/dsssb-pgt-2021-maths-male-31-jul/

Mental Ability

1. From the given responses, find the missing term in the series.
A2P, D3Q, H5R, M7S, S11T, Z13U, ?

(a) G15V
(b) H17V
(c) E15V
(d) H17S

Answer: (b)

2. From the given responses, find the missing letter in the series.
X, V, T, R, P, ?

(a) N
(b) S
(c) Q
(d) O

Answer: (a)

3. In the following question, select the odd word from the given alternatives.

(a) Volt
(b) Ampere
(c) Resistance
(d) Faraday

Answer: (c)

4. Select the related word from the given alternatives.
Car : Garage : : Aeroplane : ?

(a) Airhostess
(b) Flying
(c) Hangar
(d) Landing

Answer: (c)

5. Select the related letters from the given alternatives.
GOAL : 20 :: SEA : 15 :: MESSI : ?

(a) 30
(b) 25
(c) 40
(d) 15

Answer: (b)

7. In a row, Anu is the 12th person from the left end, Ali is the 18th person from the right end and Abhi is the 24th person from the left end. If Anu and Ali interchange their positions then Anu is 34th from the left end. How many persons are there between Ali and Anu at present?

(a) 23
(b) 21
(c) 19
(d) 17

Answer: (b)

8. If 18th January 2012 was Tuesday then which day will be 23rd June 2012?

(a) Wednesday
(b) Thursday
(c) Friday
(d) Saturday

Answer: (c)

9. In the question below, there are two statements followed by four conclusions given in options. You have to take the given statements to be true even if they seem to be at variance with commonly known facts and then decide which of the given conclusion logically follow(s) from the given statements.
Statements:
All metals are gold.
All gold are silver.

(a) All silver are metals
(b) All gold are metals
(c) Some metals are silver
(d) Some metal is not silver

Answer: (c)

10. In the question below are given two statements followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. Read both the conclusions and then decide which of the given conclusions logically follows from the given statements.
Statements:
All roses are fruits.
All fruits are trees.
Conclusions:
I. All trees are roses.
II. Some fruits are roses.

(a) If only Conclusion I follows

(b) If only Conclusion II follows

(c) If either Conclusion I or II follows

(d) If both Conclusions I and II follow

Answer: (b)

11. In the question given, relations between different elements are shown in the statements. These statements are followed by two conclusions. Find out which of the given conclusions follow(s) the given statements and select the correct alternative from the given choices.
Statements:
$J > D = W \geq K$; $D = L \geq E$
Conclusions:
I. $E < J$
II. $K \geq L$

(a) Only conclusion I is true

(b) Only conclusion II is true

(c) Either conclusion I or II is true

(d) Neither conclusion I nor II is true

Answer: (a)

12. Select the set in which the numbers are related in the same way as are the numbers of the following set.
(5, 12, 13)

(a) (13, 11, 17)

(b) (9, 11, 15)

(c) (11, 13, 14)

(d) (7, 24, 25)

Answer: (d)

General Awareness

21. Which of the following individuals designed the Rashtrapati Bhavan?
    (a) Francis Octavius Bedford
    (b) Edwin Landseer Lutyens
    (c) Ignatius Bonomi
    (d) Thomas Baldwin

    Answer: (b)

22. Guru Nanak Dev, on whose birth anniversary Gurunanak Jayanti is celebrated, was born in which year?
    (a) 1469
    (b) 1487
    (c) 1529
    (d) 1687

    Answer: (a)

23. Which of the following rulers built Charminar?
    (a) Mohammed Quli Qutab Shah
    (b) Nizamia Unani
    (c) Shah Jahan
    (d) Sher Shah Suri

    Answer: (a)

24. In which year, Unorganized Workers Social Secu Act was passed?
    (a) 2006
    (b) 2000
    (c) 2005
    (d) 2008

    Answer: (d)

25. Which among the following is not a money market instrument?
    (a) Cash Management Bill
    (b) Certificate of Deposit
    (c) Commercial Paper
    (d) Debenture

    Answer: (d)

26. What is the pH value of a neutral solution?
    (a) Less than 7
    (b) More than 7
    (c) 7
    (d) 0

    Answer: (c)

27. Which of the following elements has a valency of 2?
    (a) Beryllium
    (b) Nitrogen
    (c) Carbon
    (d) Silicon
    Answer: (a)

28. The lower most layer of Soil is called what?
    (a) A-Horizon
    (b) Bedrock
    (c) B-Horizon
    (d) C-Horizon
    Answer: (b)

29. The Shyok and Gilgit are tributaries of which river?
    (a) Ganga
    (b) Brahmaputra
    (c) Godavari
    (d) Indus
    Answer: (d)

30. In what year did the Battle of Plassey took place?
    (a) 1857
    (b) 1757
    (c) 1747
    (d) 1769
    Answer: (b)

31. In which town did the Mutiny of 1857 began?
    (a) Delhi
    (b) Lucknow
    (c) Kolkata
    (d) Meerut
    Answer: (d)

32. Which of the following individuals was the Guardian of the Mughal King Akbar?
    (a) Khusru
    (b) Abdul Kalif
    (c) Bairam Khan
    (d) Adil Shah
    Answer: (c)

33. Who is the only Chief Justice to be appointed as the Acting President of India?
    (a) M. Hidayatullah
    (b) A.K. Sarkar
    (c) VV Giri
    (d) Ramnath Kovind
    Answer: (a)

34. Who was the first Chief Election Commissioner of India?
    (a) KV Sundaram
    (b) Sukumar Sen
    (c) SP Sen Verma
    (d) OP Rawat
    Answer: (b)

35. Which of the following individuals is the author of the book "Chandrakanta"?
    (a) Devaki Nandan Khatri
    (b) Subhadra Kumari Chauhan
    (c) Jiashankar Prasad
    (d) Munshi Premchand
    Answer: (a)

36. Who is the current Prime Minister of Japan?
    (a) Shinzo Abe
    (b) Yoshihide Suga
    (c) Naoto Kan
    (d) Yoshiro Mori
    Answer: (b)

37. What is the name of China's Space Agency?
    (a) China National Space Administration
    (b) China National Space Agency
    (c) China National Science Agency
    (d) Chinese Space Administration
    Answer: (a)

38. Which company has built the world’s biggest airplane ever, named Roc?
    (a) Boeing
    (b) Airbus
    (c) HAL
    (d) Stratolaunch
    Answer: (d)

39. Who was the winner of the US Open 2020?
    (a) Roger Federer
    (b) Rafael Nadal
    (c) Dominic Thiem
    (d) Novak Djokovic

    Answer: (c)

40. What is the full-form of ATP?
    (a) Academy of Tennis Players
    (b) Association of Tennis Professionals
    (c) Agency for Tennis Professionals
    (d) Asian Tennis Professionals

    Answer: (b)

Arithmetic Ability

44. Find the least square number which is divisible by 4, 8, 9, 10 and 12?
    (a) 1024
    (b) 900
    (c) 3600
    (d) 1440

    Answer: (c)

46. The number of visitors for the Jim Corbett natic park from Monday to Friday were 1029, 1340, 943, 881 and 1147 respectively. The averag mb of visitors for the park per day of the week was 1220. What is the average number of visit weekends (i.e., Saturday and Sunday)?
    (a) 1500
    (b) 1560
    (c) 1650
    (d) 1600

    Answer: (d)

47. Hari is saving some part of his monthly salary to buy a car. Then he will buy the car in 48 months. How much percent should be increase his savings to buy the car in 36 months?
    (a) 25 percent
    (b) 33.33 percent
    (c) 20 percent
    (d) 16.66 percent

    Answer: (b)

48. In a town, 40 percent of male population and 30 percent of female population are married. Assuring that one man marries one woman and vice- versa, find the percentage of total population who are married?

(a) 30 percent

(b) 34.28 percent

(c) 31.42 percent

(d) 32.14 percent

Answer: (b)

49. The profit earned on selling a bike for Rs.66750 is the same as the loss incurred on selling the bike for Rs.43250. find the cost price of the bike.

(a) Rs.55000

(b) Rs.57500

(c) Rs.50000

(d) Rs.52500

Answer: (a)

50. A and B started a business together with initial investment of Rs. 3200 and Rs. 4800, respectively. After 3 months, C joined them with an investment of Rs. 4000. If after a year, they received a total profit of Rs. 4950, then find the profit share of B.?

(a) Rs. 2240

(b) Rs. 1860

(c) Rs. 1920

(d) Rs. 2160

Answer: (d)

51. Sum of age of Abhi before 9 years and age of Anjali after 6 years is 41 years. Ages of Abhi and Anjali after 8 years will be in the ratio 7 : 8 respectively. What is the difference between their present ages?

(a) 4 years

(b) 8 years

(c) 6 years

(d) 2 years

Answer: (a)

52. At what percent per annum will Rs.3000 amounts to Rs.3993 in 3 years ,if the interest is compounded annually?

(a) 9 percent

(b) 10 percent

(c) 11 percent

(d) 13 percent

Answer: (b)

53. A man walks at 6 m/sec and reaches his destination in 80 minutes. A woman covers the same distance in 1.2 hr. What is the speed of the woman (in km/hr)?

(a) 21.6
(b) 24
(c) 20
(d) 28.8

Answer: (b)

54. A 275 metre long train crosses a platform of equal length in 33 seconds. What is the speed of the train in kmph?

(a) 66
(b) 60
(c) 64
(d) 72

Answer: (b)

55. A alone can do a piece work 18days.A began the work but leaves after 4 days.B completed the remaining work in 21 days. In how mant days B alone could do the work?

(a) 27 days
(b) 28 days
(c) 26 days
(d) 36 days

Answer: (a)

57. The curved surface area of a cylinder is [illegible] cm. If the total surface of the cylinder is 429 cm2, then what is the radius of the cylinder (given [illegible])?

(a) 7 cm
(b) 4.9 cm
(c) 3 cm
(d) 3.5 cm

Answer: (d)

General English

61. In the following question, four sentences are given out of which three sentences are grammatically incorrect while one is correct. Find out which sentence is grammatically correct and select the appropriate option.

(a) Trump quickly fired back as he moved to inflict greater economic pain to Iran.
(b) He will punish anyone who bought or trades the country's iron, steel, aluminum and copper.
(c) The White House had already acted forcefully to prevent all countries to buy Iran's oil.
(d) Tehran can expect further actions unless it fundamentally alters its conduct.

Answer: (d)

62. Identify the segment in the sentence which contains the grammatical error from the given options.
Peter decides to revising his chapters instead of watching television.

(a) Peter

(b) to revising

(c) instead of

(d) watching

Answer: (b)

65. Select the most appropriate option to fill in the blank.
The measures _____ to bring the budget into balance can only be described as unusual, perhaps even extreme.

(a) take

(b) took

(c) taking

(d) taken

Answer: (d)

66. Select the most appropriate option to fill in the blank.
In most situations, you will be _____ small doses of work at the beginning of a new job.

(a) ordered

(b) remarked

(c) determined

(d) assigned

Answer: (d)

67. Rearrange the following sentences in their correct order to form a meaningful paragraph.
P. Not too far from the bright lights of Mumbai, a silent scourge is killing thousands of young children.
Q. Their ill-fed bodies vulnerable to infection most succumbed to ailments as minor as diarrhea.
R. Stalked by chronic hunger and disease, nearly 30,000 children below the age of six have died in the last year alone in the state's rural belt.
S. It may be considered the country's dollar magnet and envied for its robust industrial base but this image of Maharashtra cloaks a macabre reality.

(a) RQSP

(b) SPRQ

(c) QSRP

(d) RSQP

Answer: (b)

68. In the question given below, rearrange the sentences in the correct order, and choose the correct option. The first and sixth (last) statements are given in the right sequence and are fixed.
1. I was awakened in the night by a noise in the house.
P: I quickly put on my dressing gown and crept downstairs.
Q: In the living room I discovered two burglars breaking into my desk.
R: As I switched on the light I saw that it was 2 o'clock.
S: They were both tall, dark men.
6. As soon as they saw me standing there, they rushed to the window and jumped out.

(a) PQRS
(b) PQSR
(c) PSRQ
(d) RPQS

Answer: (d)

69. Select the synonym of the given word.
APPARENT

(a) Obvious
(b) Hidden
(c) Concealed
(d) Latent

Answer: (a)

70. Select the antonym of the given word.
ABUNDANCE

(a) Scarcity
(b) Surplus
(c) Huge
(d) Immense

Answer: (a)

71. Which of the following is correctly spelt?

(a) Distinction
(b) Destinction
(c) Distination
(d) Distiniction

Answer: (a)

72. Which of the following is incorrectly spelt?

(a) Difference
(b) Contrast
(c) Dissimilarity
(d) Disimilitude

Answer: (d)

73. Select the most appropriate meaning of the given idiom/ phrase.
Hit the hay

(a) Go to bed

(b) Being treated the same unpleasant way you have treated others

(c) Go through something difficult

(d) Getting a good start is important

Answer: (a)

74. Select the alternative which best expresses the meaning of the idiom/phrase bold in the sentence.
He was all at sea when he began his new job.

(a) Happy

(b) Sad

(c) Puzzled

(d) Triumphant

Answer: (c)

75. Select the word which means the same as the group of words given.
The study of human societies and cultures and their development.

(a) Anthropology

(b) Calligraphy

(c) Choreography

(d) Physiotherapy

Answer: (a)

76. Why does a child start to cry when its mo[illegible]ves the room?

(a) because child tries to recognise other things in the room

(b) because child does not want to stay alone in the room

(c) because child fears with other thing in absence of mother

(d) because the child is deeply attached to the mother the primary caregiver

Answer: (d)

77. A young baby of around 8–12 months can show fear of unknown people. What does this line refer to?

(a) capacity of the child to develop control over bladder and bowel movements

(b) capacity to recognise familiar faces and thereby indicates a fear of unfamiliar people

(c) capacity to learn to walk, pick up things with precision, and manage his or her body in many ways

(d) the child is developing an attachment with family members, particularly with the mother and father

Answer: (b)

79. Which of the following best expresses the opposite meaning to the given word “Discarded”?

(a) retained

(b) dismissed

(c) cast-off

(d) disposed

Answer: (a)

Discipline1

103. If $A \cap B = B$ holds for all sets B of the universal Set S, then

(a) $A' = B$

(b) $A = S$

(c) $A = B$

(d) $A = \varnothing$

Answer: (b)

115. Let A be a set of 4 elements and B be a set of 3 elements, then the total number of surjective mappings from A to B is

(a) 36

(b) 12

(c) 72

(d) 144

Answer: (a)

Discipline2

123. If b = c = 0 in the equation ax 2 + bx + c = 0, then the value of roots are

(a) 0, 1

(b) 1, 1

(c) 0, 0

(d) 1, 0

Answer: (c)

125. If a, b and c are real and rational and satisfies the condition a + b+ c = 0, of the equation ax 2 + bx + c = 0 , then the roots are

(a) Rational, Real

(b) Irrational, Real

(c) Complex

(d) Not Existing

Answer: (a)

126. The roots of the equation ax 2 + bx + c = 0 being equal and having opposite signs can be possible only when

(a) a = 0

(b) b = 0

(c) c = 0

(d) a = b = c = 0

Answer: (b)

129. If the subtraction of two roots is 2, of the equation 2x 2 - 12x + m + 2 = 0, then the value of m is

(a) m = 2

(b) m = 7

(c) m = 14

(d) m = -2

Answer: (c)

137. If f is Riemann integrable with respect to α on [a, b], then:

(a) f is bounded and α is increasing function

(b) f and α are both bounded

(c) f is increasing and α is bounded function

(d) f and α are increasing

Answer: (a)

138. Which one of the following is not correct on an interval [a, b]?

(a) Every integrable function is bounded

(b) Every discontinuous function is integrable

(c) Every continuous function is integrable

(d) Every continuous function has a primitive

Answer: (b)

Discipline3

147. Complete the series:
34,___, ___, ___, ___,48

(a) 36.4, 39.8, 42.6, 46.2

(b) 36.8, 39.6, 42.4, 45.2

(c) 36.9, 39.7, 42.6, 46.8

(d) 37.0, 39.9, 43.1, 46.2

Answer: (b)

148. If 5, x, 405 is in G.P., then what is the value of x?

(a) +45

(b) -45

(c) ±15

(d) ±45

Answer: (a)

Discipline4

162. The locus of the middle points of the parallel chords of a parabola is -

(a) A straight line passing through its vertex

(b) A straight parallel to the axis of the parabola

(c) A directrix

(d) A straight perpendicular to the axis of the parabola

Answer: (b)

168. For what value of a, the equation axy - 8x + 9y – 12 = 0 represents a pair of straight lines?

(a) a = 6

(b) a = 0, 6

(c) a = 0, 2

(d) a = 0

Answer: (a)

171. A solution-curve of the equation xy' = 2y, passing through (1, 2) also passes through

(a) (24, 5)

(b) (0, 0)

(c) (4, 12)

(d) (2, 3)

Answer: (b)

175. The differential equation ydx - 2xdy = 0, repres s

(a) A family of parabolas

(b) A family of catenaries

(c) A family of straight lines

(d) A family of circles

Answer: (a)

176. If the equation Mdx + Ndy = 0 has one and only one solution, then the number of integrating-factor is

(a) Two

(b) One

(c) Infinite

(d) Finite

Answer: (c)

179. The p – discriminant does not contain one of the following:

(a) Nodal-locus

(b) Envelop

(c) Tac - locus

(d) Cuspidal - locus

Answer: (a)

Discipline5

181. If A is an idempotent matrix and A + B = I, then B is:

(a) An involuntary matrix

(b) An idempotent matrix

(c) A null matrix

(d) A nilpotent matrix

Answer: (b)

182. If A and B are idempotent matrices of same order, then AB is idempotent matrix if and only if:

(a) AB = 0

(b) AB + BA = 0

(c) BA = 0

(d) AB = BA

Answer: (d)

184. If A and B are orthogonal matrices and det(A) + det(B) = 0 then (A + B) is a

(a) Singular

(b) Idempotent

(c) Non-singular

(d) Orthogonal

Answer: (a)

185. For what value of λ, the system of equation 3x y + z = 10, 2x + 3y + 2z = 10, x + 2y + λz = 10 is inconsistent?

(a) 1.3

(b) 1.5

(c) 1.4

(d) 1.6

Answer: (c)

186. The skew symmetric determinant of odd order is

(a) -1

(b) 0

(c) 1

(d) Square of a polynomial function of its elements

Answer: (b)

189. Rank of singular matrix of order 5 can be at most

(a) 5

(b) 2

(c) 3

(d) 4

Answer: (d)

198. Let P(x) be a quadratic polynomial such that P(0) = 1. If P(x) leaves remainder 4 when divided by x - 1 and it leaves remainder 6 when divided by x + 1, then

(a) P(-2) = 11

(b) P(-2) = 19

(c) P(2) = 11

(d) P(2) = 19

Answer: (b)

Discipline6

203. The remainder when 4x 4 – 10x 2 + 1 is divided by (x + 2) is:

(a) 2

(b) 32

(c) 24

(d) 25

Answer: (d)

210. In the equation f(x) = 2x 2 + 3x + 5 the value of x changes from 2 to 2.02 then the expectation will increase and decrease respectively

(a) 0.2208 and 0.22

(b) 0.2204 and 0.22

(c) 0.2204 and 0.24

(d) 0.2208 and 0.24

Answer: (a)

218. If f(z) = |z| 2 , then:

(a) f is continuous but not differentiable at 0

(b) f is neither continuous nor differentiable at 0

(c) f is continuous and differentiable at 0

(d) f is discontinuous at 1

Answer: (c)

Discipline7

224. If a constraint is multiplied by a non-zero constant of a L.P.P, then the solution

(a) Does not change with original solution

(b) is increased by addition of that non-zero constant

(c) is increased by multiplication of that non-zero constant

(d) is decreased by subtraction of that non-zero constant

Answer: (a)

230. Which one of the following is not a non-degenerate basic solution in a system of 2 equations with 4 unknowns?

(a) (10, - 42, 0, 0)

(b) (0, 22, - 43, 0)

(c) (0, 0, - 8, 0)

(d) (7, 0, - 9, 0)

Answer: (c)

231. If A = [a, b] be any usual metric in R then A^o (interior of A) equals to-

(a) [a, b]

(b) [a, b)

(c) (a, b)

(d) (a, b]

Answer: (c)

232. In a metric space (X, d), A be a metric space, then the largest open subset of A C (complement of A) is

(a) Interior of A

(b) Exterior of A

(c) Boundary of A

(d) Closure of A

Answer: (b)

Discipline8

247. A one to one continuous map of compact space X onto a Hausdorff space Y is _____ 1. Open map
2. Not an open map
3. Not a homeomorphism

(a) Only 1

(b) Only 2

(c) Only 2 and 3

(d) Neither 1 nor 2 nor 3

Answer: (d)

249. Every topological space (X, 3) is compact if _____

(a) X is not finite

(b) 3 is not finite

(c) Every open cover of X is reducible to finite sub cover

(d) X is not compact at each points

Answer: (c)

Discipline9

264. Which one of the following statements is false?

(a) Data that are on nominal scale are presented using frequency tables

(b) Pie charts are better than bar graphs for comparing relative sizes

(c) The scatter - plot is the basic graphic tool for investigating relationship between two intervals or ratio scaled variables

(d) Means and standard deviation of ordinal data are meaning-less

Answer: (b)

271. Marks of a chemistry test follow a normal distribution with a mean of 65 and a standard deviation of 12. Approximately what percentage of the students have scored below 50?

(a) 89 percent

(b) 18 percent

(c) 11 percent

(d) 15 percent

Answer: (c)

276. Multiplication of the number 0.5321E5 and 0.4387E10 is

(a) 0.2334323E15

(b) 0.2334E15

(c) 0.233433E15

(d) 0.23343227E15

Answer: (b)

279. Let A be the set of rational numbers in the ope interval (0, 7) and f : A → R be a uniformly continuous function. Which of the followin true

(a) f is necessarily a constant function

(b) f is bounded

(c) f is differentiable on (0, 7)

(d) f is differentiable at all the rational points in (0, 7)

Answer: (b)

Teaching Methodology

282. Mathematics is a sequential subject because – 1. Content proceed from simple to complex 2. The content of mathematics has logical structure

(a) Only 1

(b) Only 2

(c) Both 1 and 2

(d) Neither 1 nor 2

Answer: (c)

283. In mathematics, reasoning is used for – 1. Deductive reasoning
2. Inductive reasoning

(a) Only 1
(b) Only 2
(c) Both 1 and 2
(d) Neither 1 nor 2

Answer: (c)

284. Which part of mathematics has been designed with an intention to orient the students towards the mathematical tools relevant in life?

(a) Applied mathematics
(b) pure mathematics
(c) Biomathematics
(d) Statistic

Answer: (a)

285. The Greek philosopher, Socrates is the exponent of

(a) Lecture method
(b) Question-Answer method
(c) Tutorial method
(d) Demonstration method

Answer: (b)

287. Statement accepted without proof is called-

(a) Theorem
(b) Defined terms
(c) Unidefined Terms
(d) Axioms or postulate

Answer: (d)

288. Who gave the ideas of infinity in mathematics?

(a) Brahmagupta
(b) Aryabhatta
(c) Ramanujan
(d) Bhaskaracharya

Answer: (c)

289. If a student is unable to answer a question during a lecture, then as a teacher what should be your response?

(a) You shall scold the student
(b) Tell the student the correct answer and then move ahead
(c) Try to understand why the student was unable to answer
(d) Advise him to study harder

Answer: (c)

290. Who is known as father of geometry?

(a) Pythagoras
(b) Bhaskaracharya
(c) Brahmgupta
(d) Euclid

Answer: (d)

291. Mathematical proposition are

(a) Always true
(b) Always false
(c) True as well as false
(d) Either true or false

Answer: (d)

293. Which of the following should be a required human-quality for teachers?
1. A teacher should take full interest in school and community problems 2. A teacher should do maximum effort to make his pupils disciplined.

(a) Only 1
(b) Only 2
(c) Both 1 and 2
(d) Neither 1 nor 2

Answer: (c)

294. Which is not an example of set?

(a) The set of positive integers
(b) The set of all rivers in India
(c) The set of all capital cities in India
(d) The collection of intelligent student in class XII

Answer: (d)

295. If children find Mathematics tough, then they must -

(a) work out the problem as shown on the blackboard
(b) Try to remember the process
(c) Ensure that they understand the basic of each process
(d) Sit quietly and listen

Answer: (c)

296. Four stages of children intellectual development has been defined by-

(a) Skinner
(b) Piaget
(c) Kohlberg
(d) Ericson

Answer: (b)

297. Johann Friedrich Herbar is associated with -

(a) Development of mathematics as a subject

(b) Evolution of curriculum- field

(c) Evolution of extra-curricular activities

(d) Development of Algebra for children

Answer: (b)

298. Which of the following problems are faced by teachers while teaching Mathematics?
1. A sense of fear and failure regarding mathematics among a majority of children 2. In reality, Mathematics can be taught only to a limited few with proper IQ towards the subject

(a) Only 1

(b) Only 2

(c) Both 1 and 2

(d) Neither 1 nor 2

Answer: (a)

299. Which of the following should be introduced in the secondary stage of Mathematics curriculum?

(a) Mathematical games

(b) Algebra

(c) Trigonometry

(d) Regular shapes: : triangles, circles, quadrilater

Answer: (c)

300. Alternating or changing our existing s[illegible]mes[illegible]ight of new information is known as -

(a) Schema

(b) Assimilation

(c) Accomodation

(d) Equilibration

Answer: (c)

Answer key

Answer key from the Delhi Subordinate Services Selection Board's official answer key for this sitting. "—" means the key gave none.

Mental Ability

1	**(b)**	2	**(a)**	3	**(c)**	4	**(c)**	5	**(b)**	7	**(b)**	8	**(c)**	9	**(c)**		
10	**(b)**	11	**(a)**	12	**(d)**												

General Awareness

21	**(b)**	22	**(a)**	23	**(a)**	24	**(d)**	25	**(d)**	26	**(c)**	27	**(a)**	28	**(b)**		
29	**(d)**	30	**(b)**	31	**(d)**	32	**(c)**	33	**(a)**	34	**(b)**	35	**(a)**	36	**(b)**		
37	**(a)**	38	**(d)**	39	**(c)**	40	**(b)**										

Arithmetic Ability

44	**(c)**	46	**(d)**	47	**(b)**	48	**(b)**	49	**(a)**	50	**(d)**	51	**(a)**	52	**(b)**		
53	**(b)**	54	**(b)**	55	**(a)**	57	**(d)**										

General English

61	**(d)**	62	**(b)**	65	**(d)**	66	**(d)**	67	**(b)**	68	**(d)**	69	**(a)**	70	**(a)**		
71	**(a)**	72	**(d)**	73	**(a)**	74	**(c)**	75	**(a)**	76	**(d)**	77	**(b)**	79	**(a)**		

Discipline1

103	**(b)**	115	**(a)**														

Discipline2

123	**(c)**	125	**(a)**	126	**(b)**	129	**(c)**	137	**(a)**	138	**(b)**						

Discipline3

147	**(b)**	148	**(a)**														

Discipline4

162	**(b)**	168	**(a)**	171	**(b)**	175	**(a)**	176	**(c)**	179	**(a)**						

Discipline5

181	**(b)**	182	**(d)**	184	**(a)**	185	**(c)**	186	**(b)**	189	**(d)**	198	**(b)**				

Discipline6

203	**(d)**	210	**(a)**	218	**(c)**												

Discipline7

224	**(a)**	230	**(c)**	231	**(c)**	232	**(b)**										

Discipline8

247	**(d)**	249	**(c)**

Discipline9

264	**(b)**	271	**(c)**	276	**(b)**	279	**(b)**

Teaching Methodology

282	**(c)**	283	**(c)**	284	**(a)**	285	**(b)**	287	**(d)**	288	**(c)**	289	**(c)**	290	**(d)**				
291	**(d)**	293	**(c)**	294	**(d)**	295	**(c)**	296	**(b)**	297	**(b)**	298	**(a)**	299	**(c)**				
300	**(c)**																		