| PRE SECONDA | RY SCHOLARSHIP EXAMINATION (Std. 8 th), FEBRUARY 2018 |
|--------------------------|--------------------------------------------------------------------------------------|
| Seat No. | |
| | 0 5 1 1 Set A |
| Paper No. I Pages: 32 | Medium : EnglishTime : 11:00 to 12:30First Language and MathematicsTotal Marks : 150 |

- (1) This question paper contains two sections. In Section I there are 1 to 25 questions of First Language and in Section II there are 26 to 75 questions of Mathematics. All 75 questions are compulsory.
- (2) All questions carry **2** marks each.
- (3) Time limit to solve the question paper is **90** minutes.
- (4) Separate answer sheet is given to record the answers. Each question has been given four alternatives. Read them carefully. Select the correct answer and shade the correct answer in the answer sheet. Example :- If the correct alternative for Q. No. 6 is 2, then record your answer as follows:

Question No. 6 ① ① ③ ④

- (6) While recording the correct option in the answer sheet, use only black or blue ball pen. Otherwise it will be credited as 'Zero' mark.
- (7) Answer once recorded cannot be changed.
- (8) Maximum 20% questions are having two correct alternatives. Candidate has to darken both the circles with correct answers. These questions will have the instruction 'Select two correct alternatives'.
- (9) Any kind of answers recorded in more than one circle will not be considered except for those questions having instruction ' Select two correct alternatives'.
- (10) The rough work is to be done in the box given under each page or on the last page of the question paper.
- (11) The exam has limited time, in case you are not able to solve a question, kindly solve the next question. In the end if time permits you can try to solve the unsolved questions.
- (12) If you find any question incomplete or with error, then do not ask anything to the Supervisor or Centre Incharge.
- (13) For any error/mistake/objection issues, school or parents should not send written application to Block Education Officer or Education Officer. These error/ mistake/objection issues should be register online through respective school login only.
- (14) The error/ mistake/ objection issues should be register online within 10-days from the publication of Interim answer key on MSCE website.
- (15) Questions can be cancelled due to printing mistake or any other reason, on the basis of the suggestions given by the Committee of Experts.
- (16) Along with the question paper of the respective medium, the English version of question paper is also provided. In case of doubt please refer to the English version of the same question.

विभाग I

प्रथम भाषा

Instructions for Q. Nos. 1 to 2 : Read the following news and choose the correct option.

Over 10,000 people participate in Final Yoga Event in China. Press trust of India, June 25, 2017

Beijing: More than 10,000 people took part in the final event marking the 3rd International Day of Yoga in China today. The event the final in the series of programme organised in 12 cities was held in eastern China. Spread over 10 practice venues, with nearly nine Indian Yoga teachers taking the stage, a mass yoga session was held concurrently for the 10,000 participants. A large number of Indian students pursuing medicine traveled to Wu-xi for event. Mayor of Wu-xi said that, Yoga is another Facet of the 10ng-standing cultural co-operation between India and China and with today's massive event he expects that Yoga will become the 'signature name card' for the city.

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1. By reading the news, we can say that –

- (1) News reporters, police
- (2) Audience and evaluators
- (3) Yoga teachers, participants.
- (4) Editors, critics.

2. What is the headline suggests ?

- (1) People's participation in yoga event
- (2) Event in China
- (3) Signature name card
- (4) The relation between India and China

3. Choose one alternative of comparative degree. Naomi is not one of the cleverest girls in the class.

- (1) Naomi is not so clever as some other girls in the class.
- (2) Some girls of the class are cleverer than Naomi.
- (3) Naomi is as clever as other girls in the class.
- (4) Naomi is the cleverest girl in the class.
- 4. Choose one alternative. Fill in the blank with the correct question tag.

Everybody has learnt the lesson, ____?

- (1) has they ? (2) didn't they ?
- (3) have they ? (4) haven't they ?

5. Choose the correct alternative for the underlined word.

There is <u>little</u> hope for his nephew's recovery. Yet he showed <u>little</u> concern for his nephew.

(1) adverb

(2) noun

(3) adjective

(4) preposition.

- 6. Choose one alternative to the given riddle. I travel all over the world, but always stay in my corner, what am I ?
 - (1) passport(2) stamp(3) visa(4) ticket
- 7. Choose two options for the following underlined word. How can you replace it?

India is the land of *medicants*. Baba Amte was one such soul, popular and with profound respect known as _____.

- (1) teacher (2) sadhu
- (3) sage (4) philosopher.

Instructions for Q. Nos. 8 to 9 : Read the passage and choose the correct alternative.

Trees give shade for the benefit of others and while they themselves stand in the sun, and endure scorching heat, they produce the Fruit by which others get profit. The character of good men is like that of trees. What is the we use of this perishable body, if no use of it is made for the benefit of mankind? Sandalwood– the more it is rubbed, the more scent does it yeild. Sugercane– the more it cut into pieces the more juice it produces. Gold–the more it burned, the more brightly it shines. The men with noble hearts do not lose their qualities even in losing their life. Life itself is unprofitable to a man who does not live for others. Those who lay down their lives for the sake of friend or even for the sake of a stranger will assuredly dwell Forever in a world of bliss.

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8. Choose two correct options.

The person assuredly dwell in a world of bliss who lay down their lives

(1) For the sake of oneself.

_•

- (2) For the sake of stranger.
- (3) For the sake of a Friend.
- (4) For the sake of profit.

9. What is that which shines brightly after it burned?

| (1) candle | (2) sandalwood |
|------------|----------------|
| (3) gold | (4) copper |

10. Choose the correct option to complete the following quotation.

——— don't do different things, they do the things differently.

- (1) successors(2) followers(3) leaders(4) winners
- (1) 1 (2) 2 (3) 3 (4) 4

11. Choose correct alternative for the following web. Choose correct passive voice.



12. Choose one alternative to complete the sentence of Indirect speech.

He asked them _____ they would listen to such a man.

- (1) that (2) whether
- (3) to (4) what

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(1) 2

Instructions for Q. Nos. 13 to 14 : Read the poem and choose the correct option.

Walk a little slower, daddy

said a little child so small

I'm following in your Footsteps.

And I don't want to fall.

Someday when I'm all grown up,

You're what I want to be

Then I'll have a little child

who'll want to follow me.

And I would want to lead just right.

And know that I was true;

So walk a little slower Daddy, for I must Follow you.

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13. Choose two correct options.

Why does the boy say to his father to walk little slower?

- (1) because he doesn't want to fail.
- (2) because he wants to lead just right.
- (3) because he is following his foot steps.
- (4) because he feels sick.

14. What did the boy in the poem don't want to?

(1) to be slow(2) to fall(3) to follow(4) to lead

15. Complete the dialogue by choosing one alternative.

Vilas – Where are your neighbours ? I want to meet them.

Sakshi – They _____ be away for the weekend but I am not sure.

- (1) might (2) can
- (3) useto

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(4) should

16. Choose one alternative for the following.

Raman was illeterate. He did not get a good job. It became very difficult for him to make both ends meet.

- (1) to live with in one's income.
- (2) to live with family.
- (3) to live with friends.
- (4) to live without income.

17. Complete the following sentence by choosing one alternative.

— was established to make peace among countries.

- (1) UNO
- (2) WHO
- (3) USA
- (4) SEATO

18. Choose the correct option.

Pick up the code-mixing sentence.

- (1) Food is the vital source of energy. (2) Food is Purna Brahma.
- (3) Food gives us strength. (4) Without food no one can live.
- (1) 4 (2) 3 (3) 1 (4) 2

Instructions for Q. Nos. 19 to 20 : Read the above website and answer the questions. Choose the correct option.

| REERIS STATE | प्राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण NATIONAL COUNCIL OF EDUCATIONAL RESEARC | परिषद् H AND TRAINING Sitemap |
|--------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| Home >> Programmes >> | National Talent Search Exam >> Other Details | RECENT |
| Other Details | | |
| For NTS Nation Phone No : 0 E-mail : m For State Level NT | al Level Examination Inquiry: 011-26560464 (Timings 2.30 PM to 4.30 PM only) otsexam.ncert@gov.in I'S Examination Enquiry : Contact the Liaison Officer of your State | |
| For NTS Schola | rship disbursement Inquiry: | |
| Phone No: 0 E-mail: s | 011-26562704, 011-26567401, 011-26567402(Timings 2.30 PM to 4.30 PM only)New! cholarship.nts@gov.in | |
| For Nurturance | e programme for NTS Awardees: | |
| E-mail : n | nurturance.nts@gov.in | |



19. To whom should we enquire about state level NTS Examination.

- (1) State officer (2) National officer
- (3) Liaison officer (4) State Chairman

20. Which of the following is not there in drop-up menu bar?

- (1) Home
 (2) Publications
 (3) Other details
 (4) Contacts
 (1) 4
 (2) 1
 (3) 2
 (4) 3
- 21. Choose one alternative. Find out which figure of speech is used in the following sentence.

Keshav heard a bad news. The news was dagger to his heart.

(1) simile

(2) metaphor

(3) personification

(4) apostrophe

Instructions for Q. Nos. 22 to 23 :



22. How many mails have an attachment?

(1) 3 (2) 6 (3) 4 (4) 2

23. From whom the person get notification of payment reminder ?

- (1) Travelo City
- (3) Shreyash Enterprises
- (3) Tata Docomo customer sevices
- (4) Chetna Birla

24. Choose the correct option.

Anita sent a text to her mother as she had an urgent meeting. In her note she wrote 'HAND' at the end of the message.

What does the underlined word means ______.

- (1) How is your day ?
- (2) Have a nice day
- (3) Don't mind
- (4) Have a nice dinner

25. Choose one alternative. Find out type of sentence.

I shall do it now or I shall not do it at all.

- (1) compound sentence.
- (2) simple sentence.
- (3) complex sentence.
- (4) principal clause.

Section II

Mathematics

- 26. Which of the following square number is the difference between the 49th even number after 1575 and 70th even number before 1028 ?
 - (1) 24 (2) 28 (3) 19 (4) 26

27. When Ravina read $\frac{3}{4}$ th part and 17 pages of a Marathi book, 28 pages were left to be read. When Kajal read $\frac{3}{5}$ th part and 20 pages of History book, 26 pages were left to be read.

How many more pages are there in Ravina's book than the number of pages in the book that Kajal has?

- (1) 65 (2) 75 (3) 55 (4) 45
- 28. The ratio of the present ages of Aryan and Aditi is 4 : 5. Ratio of the present ages of Aditi and Atharva is 3 : 2. If the present age of Aryan is 24 years, find the present age of Atharva.
 - (1) 30 years (2) 16 years (3) 18 years (4) 20 years



29.
$$\left(\frac{\sqrt{6.25} + \sqrt[3]{0.729} + \sqrt{1.21}}{\sqrt{20.25}}\right)^2 = ?$$

(1) 100 (2) 1 (3) 9 (4) 4

30. In the options below, lengths of **3** sides, to draw a triangle are given. In which option we can't draw a triangle ?

- (1) 5.5 cm, 4 cm, 7 cm (2) 7.2 cm, 3.7 cm, 5.2 cm
- (3) 4.2 cm, 3.4 cm, 8.5 cm (4) 8 cm, 4 cm, 5.3 cm
- 31. The diameter of a wheel of a bullock cart is 1.4 m. How much distance will be covered if the wheel completes 750 rotations? (Choose two correct options)

| (1) 3300 m | (2) 4400 m |
|------------|-------------|
| (3) 3.3 km | (4) 4.40 km |

- 32. How much more or less than 600 is the sum of all those two digit prime numbers that we get by interchanging the digits from the two digit prime numbers ?
 - (1) more by 171 (2) less by 161
 - (3) more by 161 (4) less by 171

- 33. $\frac{\sqrt{(\sqrt{100})^2} [(64)^2]^{\frac{1}{6}}}{(\sqrt{36})} = ?$ (Choose two correct options) (1) 2³ (2) 8
 - (3) 10^0 (4) 1
- 34. The measures of four angles of a quadrilateral are $(2x + 10)^\circ$, $(3x + 15)^\circ$, $(4x 30)^\circ$ and $(2x 20)^\circ$ respectively; then find the measure of the smallest exterior angle of it.
 - (1) 60° (2) 120°
 - (3) 100° (4) 80°
- 35. Two electric poles are erected on the ground. The height of the poles is 20 m and 28 m respectively. The distance between the poles is 15 m. To join the top of the poles, how much wire will be required ?
 - (1) 8 m (2) 15 m
 - (3) 48 m (4) 17 m

36. Factorise the following expression and choose the correct alternative.

| $27x^3 - \frac{64}{x^3}$ | |
|-----------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| (1) $\left(3x + \frac{4}{x}\right)\left(9x^2 - 12 + \frac{16}{x^2}\right)$ | (2) $\left(3x - \frac{4}{x}\right)\left(9x^2 + 12 + \frac{16}{x^2}\right)$ |
| (3) $\left(3x - \frac{4}{x}\right) \left(9x^2 - 12 - \frac{16}{x^2}\right)$ | $(4) \left(3x + \frac{4}{x^2}\right) \left(9x^2 + 12 + \frac{16}{x}\right)$ |
| If $\frac{5x-16}{7x-18} = \frac{2}{3}$, find x | |
| (1) 16 | (2) 20 |

(3) 15 (4) 12

37.

- 38. Adesh walked 200m to North from his house. Then he turned in 90° and walked 150m to west. Again he turned in 90° and walked 300m to the North. After some time, he again turned through 90° and walked 150m to West. Then he turned through 90° to his left and walked 100m to the south. How far is he now, from his house?
 - (1) 900 m (2) 750 m
 - (3) 500 m (4) 600 m



- 39. 23 km 46 Decameter 19 km 8 Hectometer 6 Decameter =? (Choose two correct options)
 - (1) 4355 m
 (2) 4.355 km
 (3) 3600 m
 (4) 3.654 km
- 40. The presentage of Shreya's mother is 4 times the age of Shreya, After 6 years her mother's age will be $2\frac{1}{2}$ times the age of Shreya. Find the present age of Shreya.
 - (1) 8 years (2) 10 years
 - (3) 6 years (4) 9 years
- 41. The squares given in the following figure are congruent. The area of the given figure is 54 sq. units. Find the perimeter of the given figure.



- (1) 54 sq. units (2) 63 units
- (3) 162 units (4) 54 units
- 42. If a = m, b = m 4, c = m + 2, then 4a + 3b 7c = ?
 - (1) 26 (2) 14
 - (3) -26 (4) -14

- 43. There are two wires of length 44 cm each. One wire is turned to give the form of a circle and the other is turned in the form of a square. Find the difference in the areas of two figures so formed.
 - (1) 110 cm^2 (2) 33 cm^2 (3) 66 cm^2 (4) 44 cm^2

44. Which of the following alternatives are not correct?

- (1) A square can be called as a rectangle.
- (2) All the properties of a rhombus are present in a square.
- (3) If the side of a square is doubled then its area is 4 times the original area.
- (4) All the properties of a square are present in a parallelogram.

45. In the following figure seg PQ || seg RS and seg EF || seg GH. Find ∠MNH.





46. Following is the frequency distribution table showing the ages of 100 students who had joined 'Sanskar Camp'. Find the mean of the ages.

| Age (years) | Frequency |
|-------------|-----------|
| 8.0 | 20 |
| 10.5 | 30 |
| 12.0 | 25 |
| 7.0 | 25 |

(Choose two correct options)

- (1) 9.5 years
 (2) 10 years 3 months
 (3) 10.25 years
 (4) 9 years 6 months
- 47. How many bricks of length, breadth, and height 25 cm, 15 cm, 5 cm respectively will be required to build a wall 50 m long 6 m high and $\frac{1}{2}$ m wide?
 - (1) 60,000 (2) 48,000
 - (3) 1,20,000 (4) 80,000
- 48. Which of the following alternative means that '20% of one number is equal to 25% of the other number'.
 - (1) 3y = 2x (2) 6x = 4y
 - (3) 4x = 5y (4) 2x = 3y

49. How much water will be contained in a cylindrical cement tank if diameter of the tank is 7 m and height is 6 times the radius?

| (1) 808500 litres | (2) 880500 litres |
|-------------------|-------------------|
| (3) 850800 litres | (4) 800500 litres |

50. In the following figure EF || IH. ∠F and ∠I are right angles. If EF = 24 cm, EI = 9 cm, FG = 7 cm and IH = 40 cm.

Find the perimeter of the figure.



- 51. Ameya had ₹ 360 with him. The number of notes of ₹ 10 is double the number of notes of ₹ 50 and the number of notes of ₹ 5 are more by 12 than the number of notes of ₹ 50. Find the total number of notes.
 - (1) 36 (2) 30
 - (3) 24 (4) 28



52. $\frac{3}{6\frac{1}{4}}$ as a percent will become : (1) 18% (2) 48% (3) 52% (4) 66%

- 53. A sum amounts to ₹ 7440 in 3 years and to ₹ 8400 in 5 years by simple interest. Find the rate of interest.
 - (1) 8% (2) 6%
 - (3) 10% (4) 9%
- 54. The multiplicative inverse of $\frac{1}{m+n}$ is 19. If n = –4, find 'm'
 - (1) 15 (2) 23 (3) -15 (4) -23
- 55. To join all the points on the circumference of the circle how many more segments should be drawn ?



56. Gopichand gives 40% discount on the purchase of ₹ 50,000. Hiralal gives first 25% discount on the purchase of ₹ 50,000 and then again gives 15% discount to the customers. How much more or less amount will Hiralal receive than Gopichand?

| (1) less by ₹1875 | (2) more by ₹1785 |
|-------------------|-------------------|
| (3) more by ₹1875 | (4) no difference |

57. The present population of a city is 3,02,500. If the population increases by 10% every year, what was the population of the city two years ago?

(1) 2,80,000 (2) 2,75,000

- (3) 2,48,000 (4) 2,50,000
- 58. Line AB || Line RS || Line CD. Line PQ is the transversal. Find the total number of pairs of corresponding angles and interior angels.



59. The surface area of a sphere is 1386 cm². Find the radius of the sphere.

- (1) 11.5 cm (2) 10.5 cm
- (3) 8.5 cm (4) 10.25 cm
- 60. Which polynomial will you get after subtracting (4 + 9y + 2x) from the sum of (8x 6y + 4) and (6y 3x + 7)?
 - (1) 3x 9y + 7 (2) 3x 3y + 7
 - (3) 7x + 9y + 15 (4) 7x 9y 15

61. Which of the following statements are false. (Choose two correct options)

- (1) Average of five consecutive odd numbers is an odd number.
- (2) The average of the given numbers in a group can be more than each number in the group.
- (3) Average of two even numbers can be an odd number.
- (4) If every number in a given group is reduced by a common number, then the average of the group does not change.

- 62. A fruit-seller purchased 48 dozens oranges at the rate of ₹ 48 per dozen, out of that 1 dozen oranges were spoiled. He sold the remaining oranges at the rate of ₹ 6 per orange. Find the profit that he earned in this transaction.
 - (1) ₹ 1128 (2) ₹ 1220
 - (3) ₹ 1080 (4) ₹ 1440
- 63. Find the degree of the following polynomial.
 - m⁵ n² p + 4 m⁴ n⁷ + $\frac{2}{3}$ m³ n² p + 15 m². (1) 11 (2) 14
 - (3) 7 (4) 2
- 64. In the following figure, seg OP \perp seg ST, chord LM || chord ST, 'O' is the centre of the circle. ON = 6 cm and LM = 16 cm. Find the length of the longest chord that can be drawn in circle.



- 65. The length of a side of a rhombus is 4.1 cm and one of its diagonals is 1.8 cm long. Find the area of the rhombus.
 - (1) 10.8 sq. cm (2) 3.6 sq. cm
 - (3) 7.2 sq. cm (4) 8.1 sq. cm

66.
$$\left(m + \frac{1}{m}\right)^2 - \left(m - \frac{1}{m}\right)^2 = ?$$

(1) 0 (2) $\left(4 + \frac{2}{m^2}\right)$ (3) $\left(m^2 + \frac{1}{m^2}\right)$ (4) 4

- 67. A company deputed three representatives to promote its sales. The representatives were instructed that the first representative should report after every 6 days, the second representative should report after every 8 days and the third, representative should report after every 12 days, in the office. Find the minimum number of days when all the three will meet in the office together.
 - (1) 48 (2) 32
 - (3) 24 (4) 72

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68. Read the following statements and choose the correct alternative.

- (A) The numbers that are divisible by 6 are completely divisible by 2 and 3 also.
- (B) The numbers divisible by 15 are also completely divisible by 3 and 5.
- (C) 600 is completely divisible by 2, 3 and 5.
- (1) Only 'A' is correct.
- (2) Only 'B' is correct.
- (3) All the three statements 'A', 'B' and 'C' are correct.
- (4) All the three statements 'A', 'B' and 'C' are incorrect.
- 69. The area of a circle with centre 'O' is 308 cm². Find the perimeter of the shaded semi-circle from the following figure.
 - (1) 72 cm (2) 58 cm
 - (3) 108 cm (4) $36\sqrt{2}$ cm

4)
$$36\sqrt{2}$$
 cm

70.
$$\frac{(4.8)^{2} + (3.2)}{(4.8)^{2} - (4.8)(3.2) + (3.2)^{2}} = ?$$
(1) 1.6
(2) 10

(3) 8

 $(10)^3 + (22)^3$



(4) 1

71. The co-ordinate of point P on the number line is $\frac{4}{7}$. Distance between point P and Q is $\frac{9}{7}$. Find the co-ordinate of Q.

(1)
$$\frac{13}{7}$$
 (2) $\frac{5}{7}$
(3) $\frac{-13}{7}$ (4) $\frac{-5}{7}$

- 72. How many times will be the area of a square with side 20 cm to that of the area of a square with diagonal 20 cm.
 - (1) Half (2) Two times
 - (3) Four times (4) Three times
- 73. Two articles were sold for ₹ 1485 each. One of them incurred a loss of 10% while the other earned a profit of 10%. What was the percentage of profit or loss in the overall transaction ?
 - (1) 1.0% profit
 - (2) 5% loss
 - (3) 1.0% loss
 - (4) No profit no loss

Instructions for Q. Nos. 74 to 75 : The following pie diagram show the monthly expenses of a family on different items. If the monthly income of the family is ₹ 23,400 answer the following questions.

- A Education
- B Miscellaneous expenses
- C Clothing
- D Food grains



74. What is the total expenditure on Education?

- (1) ₹ 3250 (2) ₹ 5850
- (3) ₹ 11700 (4) ₹ 9360

75. How much more expenses are incurred on clothing to that on Food grains?

- (1) ₹ 3510 (2) ₹ 6110
- (3) ₹ 4240 (4) ₹ 4420



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