

**B**

**Question Booklet  
Serial No.**

**660001**



# **MAHAEXAM**

**PRE SECONDARY SCHOLARSHIP MOCK EXAMINATION - 2017**

**Medium : English**

**Subject : First Language - Mathematics**

**Date : 05/02/2017 Time : 1.30 Hr. Std. : 8th Total Marks : 150**

***Instructions :***

- (1) This question paper will be of 75 questions carrying 2 marks each.
- (2) All questions are compulsory.
- (3) Each question will have Four alternatives. ①②③④
- (4) The answer sheet provided separately along with the question paper will have 4 circles ①②③④. Darken the correct alternative circle completely either with black or blue ink ballpen.  
For example, if the answer for a question is 2, the circle having 2 should be completely made black or blue like this ①●③④
- (5) Any of the answer coloured or marked as follows will get zero mark.  
① ② ③ ④
- (6) Answers marked in pencil will not be considered.
- (7) Answer once given cannot be changed.
- (8) Answers marked in more than one circle will not be considered.
- (9) Time limit of the examination is fixed. So if you do not know the answer to any of the questions, go to the next one. If time remains after attempting the final question attempt the questions left out.

**Subject : First Language & Mathematics**

**Time : 11.00 am to 12.30 pm**

**Question Paper****PART - I : FIRST LANGUAGE**

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- Q.1** Find out the word that explains the meaning completely.  
Organised journey with a purpose to find an unknown place.  
1) tour                      2) expedition                      3) trekking                      4) travelling
- Q.2** Select the correct adjective adverb pairs.  
1) brute - brutal              2) unity - unite              3) fresh - refresh              4) infant - infancy
- Q.3** Choose the correct option to complete the relationship grown is to groan as pause is to \_\_\_\_  
1) stop                      2) paws                      3) pose                      4) pace
- Q.4** Fill in the blanks with correct modal auxiliaries.  
You \_\_\_\_ light a matchstick, the room is full of gas.  
1) needn't                      2) mustn't                      3) won't                      4) doesn't
- Q.5** Identify the tense.  
We went out to celebrate after we had won the trophy.  
1) past tense    2) past continuous tense  
3) present perfect tense    4) past perfect tense
- Q.6** Identify the type of sentence and choose the correct option.  
The journey was very long so I was tired to go.  
1) simple                      2) compound                      3) complex                      4) Interrogative
- Q.7** Identify the underlined subordinate clauses and choose the correct option.  
It was a celebration because school was over.  
1) None of these              2) Adjective clause              3) Adverb clause              4) Noun clause
- Q.8** Choose the correct answer to the given riddles.  
'I travel all over the world, but always stay in my corner. What am I ?  
1) passport                      2) ticket                      3) viza                      4) A stamp
- Q.9** Fill in the blank with the correct question tag.  
Everybody has learnt the lesson, \_\_\_\_ ?  
1) has they ?                      2) have they ?                      3) didn't they ?                      4) haven't they ?
- Q.10** Choose the correct sentence without the adverb 'too'.  
The words are too difficult to understand.  
1) The words are very difficult so can't understand.  
2) The words are so difficult that they cannot be understand.  
3) The words are not easy.  
4) The words are so difficult to understand.
-



**Q.20 to Q.22 :** Read the interviews and answer the question below:

Ashwini : Hi, Ayesha its a great pleasure to see you after so long. I was thinking of you when I watched K.B.C.

Ayesha : Why, what was the matter ?

Ashwini : The person sitting on the hot seat was smart and had an excellent knowledge as you have.

Ayesha : Oh! Those were the days, very challenging and full of excitement.

Ashwini : Today also people remembered it.

Ayesha : Yes but not all programme of that standard.

**Q.20** The conversation is about \_\_\_\_

- 1) T. V. show                      2) Interview                      3) talk show                      4) chat

**Q.21** What is the full form of K. B. C. ?

- 1) kaun Banega champion ?                      2) kaun Banega crorepati ?  
3) king - Banega chor                      4) kuchh Batein chotti

**Q.22** Choose the wrong opposites.

- 1) pleasure × displeasure                      2) remember × forget  
3) smart × dumb                      4) excitement × enjoyment

**Q.23 to Q.24 :** Read the poem given below and answer the question.

A world of machines is where we live

It's such a tragedy.

The human touch is all but gone,

Like ancient history.

Voice mail, computers and fax machines,

E-mail and web-sites galore.

If we should survive a thousand more years.

There's bound to be very much more.

I want to talk to a person,

someone who knows what I need,

I'm tired of listening to menus.

Just answer the telephone please.

**Q.23** The word galore means,

- 1) gorgeous                      2) in large quantities                      3) victory                      4) latest

**Q.24** What is the human touch compared to ?

- 1) tragedy                      2) not here                      3) machines                      4) ancient history

**Q.25** State the number of innovation mentioned in the poem.

- 1) 6                      2) 5                      3) 4                      4) 7

## PART - II : MATHEMATICS

- Q.26** How many two digit numbers contain the digit 3 ?  
1) 10                      2) 11                      3) 20                      4) 18
- Q.27** Which of these numbers given below divides all the three 336, 252, 322 exactly.  
1) 8                      2) 28                      3) 14                      4) 16
- Q.28** Find the square root of the followings  $38\frac{11}{25}$ .  
1)  $6\frac{1}{8}$                       2)  $6\frac{1}{9}$                       3)  $6\frac{1}{5}$                       4)  $4\frac{1}{5}$
- Q.29** Write the number 10000000000 as power of 10. Choose any two correct answer.  
1)  $0.1 \times 10^{12}$                       2)  $10 \times 10^{11}$                       3)  $1 \times 10^{11}$                       4)  $10 \times 10^{10}$
- Q.30** The ratio between two number is 4 : 7 and their sum is 77. Find the numbers.  
1) 29 and 49                      2) 28 and 49                      3) 82 and 49                      4) 82 and 94
- Q.31** What is the average of first ten composite numbers ?  
1) 1.12                      2) 11.5                      3) 12                      4) 11.2
- Q.32** Identify the pythagorean triplet form the following ?  
1) 7, 20, 21                      2) 3, 5, 7                      3) 9, 40, 41                      4) 11, 60, 62
- Q.33** What is the measure of the complementary angle of the angle whose measure is  $(2x - 90)^\circ$ .  
1)  $2x$                       2)  $2(90-x)$                       3)  $(90-x)(x-90)$                       4)  $2x + 90$
- Q.34** The measure of an angle is four times the measure of its supplementary angle. Find its measure.  
1)  $36^\circ$                       2)  $18^\circ$                       3)  $72^\circ$                       4)  $144^\circ$
- Q.35** The measure of an inscribed angle is 80. What is the measure of the arc it intercepts ?  
1)  $80^\circ$                       2)  $40^\circ$                       3)  $160^\circ$                       4)  $280^\circ$
- Q.36** The angles of a cyclic quadrilateral are  $(3x + 20)^\circ$  and  $(2x + 30)^\circ$  and it inscribed in a circle. Find their measures?  
1)  $72^\circ, 100^\circ$                       2)  $98^\circ, 82^\circ$                       3)  $96^\circ, 84^\circ$                       4)  $89^\circ, 91^\circ$
-

- Q.37** If the adjacent sides of a quadrilateral are congruent then it is \_\_\_\_\_ (Choose two correct one)  
1) Trapezium                      2) Rhombus                      3) Kite                      4) Square
- Q.38** The height of a cylindrical tank is 1m and its diameter is 70cm. How many liters of water can it hold ?  
1) 385 liters                      2) 3850 liters                      3) 38.50 liters                      4) 38500 liters
- Q.39** The radius of a sphere is 28 cm. What is its surface area ?  
1) 9568 sq.cm                      2) 9656 sq.cm                      3) 656 sq.cm                      4) 9856 sq.cm
- Q.40** The volume of a cubical block is 125 sq.cm. What is the area of one of the surface of the block ?  
1) 50 sq.cm.                      2) 25 sq. cm.                      3) 150 sq.cm.                      4) 1.25 sq.cm.
- Q.41** Sides of right angled triangle are 8cm and 6cm. Then find its perimeter.  
(Select two correct alternatives.)  
1) 0.24 m.                      2) 28 cm                      3) 24 cm                      4) 0.28 m.
- Q.42** If lengths of diagonals of rhombus are 24 cm and 32 cm respectively find its perimeter.  
1) 48 cm                      2) 112 cm                      3) 100 cm                      4) 80 cm
- Q.43** A wire of length 720 cm cut at 8 places into same parts. Then what is the length of cut part in decimeter.  
1) 90                      2) 800                      3) 80                      4) 900
- Q.44** 150 tiles are fitted in one room. If area of one tile is  $30\text{ cm} \times 30\text{ cm}$ . Length of room is 4.5 m then what is breadth of that room ?  
1) 2m                      2) 3.5m                      3) 2.5m                      4) 3m
- Q.45** 4 Litre + 40 ml = ..... Litre.  
1) 4.004                      2) 4.40                      3) 4.040                      4) 0.440
- Q.46** The area of a rhombus is 990 sq.cm. If the length of one of its diagonals is 36cm. What is the length of other.  
1) 46 cm                      2) 55 cm                      3) 38 cm                      4) 56 cm
- Q.47** If principle amount = Rs. 12000 rate of interest = 8% no of years = 3.5 years then find simple interest.  
1) Rs. 3000                      2) Rs. 2360                      3) Rs. 3360                      4) Rs. 3460
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**Q.56** Which of the following is the smallest fraction ?

$$\frac{10}{7}, \frac{-3}{4}, \frac{-4}{5}, \frac{-2}{3}$$

1)  $\frac{-4}{5}$

2)  $\frac{10}{7}$

3)  $\frac{-2}{3}$

4)  $\frac{-3}{4}$

**Q.57**  $\frac{1}{3 + \frac{1}{3}} = ?$  (Choose any two correct options.)

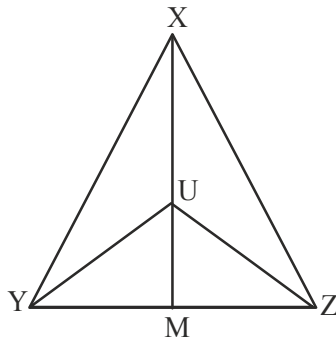
1)  $\frac{3}{10}$

2)  $\frac{10}{3}$

3)  $\frac{1}{3}$

4) 0.3

**Q.58** In the figure. How many triangles have Y as vertex ?



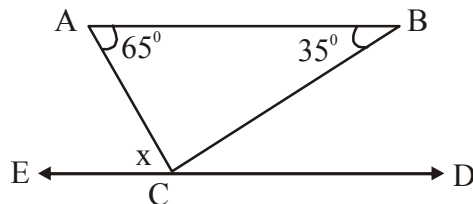
1) 2

2) 3

3) 5

4) 4

**Q.59** Measures of two angles are given if line ED || seg AB. Find value of x.



1)  $65^\circ$

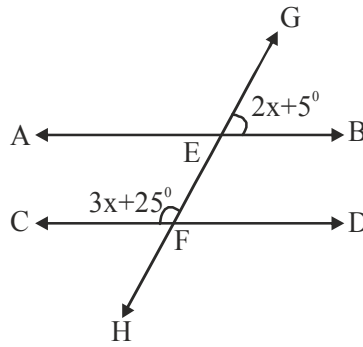
2)  $35^\circ$

3)  $56^\circ$

4)  $53^\circ$

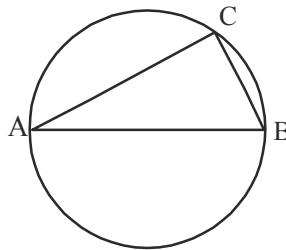


**Q.60** In fig. line  $AB \parallel$  line  $CD$ . Line  $GH$  is transversal. If  $m\angle EFC = (3x + 25)^\circ$  and  $m\angle GEB = (2x + 5)^\circ$  find  $m\angle DFH$ .



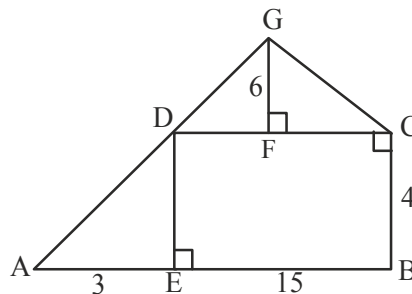
- 1)  $115^\circ$                       2)  $65^\circ$                       3)  $135^\circ$                       4)  $120^\circ$

**Q.61** In figure alongside seg.  $AB$  is a diameter  $l(AC) = 12$  cm,  $l(BC) = 5$  cm, Find the radius of circle.



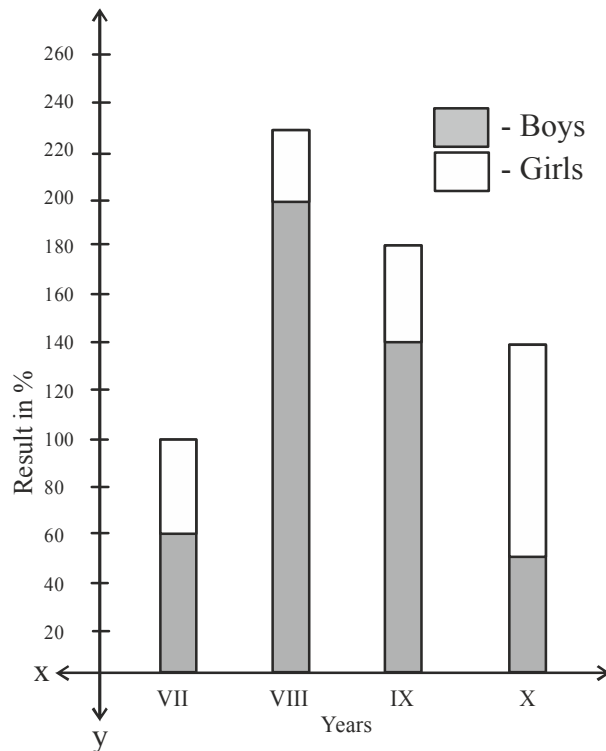
- 1) 13 cm                      2) 6.5 cm                      3) 17 cm                      4) 7 cm

**Q.62** In the adjoining figure, measurements are given. Find out the area of the total figure in square units.



- 1) 162                      2) 66                      3) 111                      4) 51

**Q.63 to Q.65 :** Given below is a graph which shows the number of boys and girls students in std. VII, VIII, IX and std.X. Observe the graph and answer the questions.



- Q.63** How many girls are there in all the standards ?  
 1) 40                      2) 180                      3) 200                      4) 90
- Q.64** Which class has the highest number of girls ?  
 1) X                      2) IX                      3) VII                      4) VIII
- Q.65** In which class boys are least ?  
 1) VIII                      2) VII                      3) IX                      4) X
- Q.66**  $42\% - (7\% \times 14\%) = x$ . Find value of  $x$ . Find two correct values.  
 1) 4102                      2)  $4102 \times 10^{-2}$                       3)  $4102 \times 10^{-4}$                       4) 0.4102
- Q.67** If length of rectangle is increase by 10% and breadth decrease by 5% then. What difference occurs in area of that rectangle ?  
 1) Increase by  $3\frac{1}{2}$                       2) Decrease by  $3\frac{1}{2}$                       3) Increase by  $4\frac{1}{2}$                       4) Decrease by  $\frac{4}{2}$

- Q.68** What is the sum of the opposite number of  $(5a - 2b)$  and  $(4a + b)$ .  
 1)  $-9a + b$                       2)  $9a - b$                       3)  $-9a^2 + b$                       4)  $-9a - b$
- Q.69** If  $\frac{(55)^0 + (105)^0}{(55)^0 \times (105)^0} + \frac{(65)^0 + (185)^0}{(65)^0 \times (185)^0} = ?$   
 1) 1                                      2) 2                                      3) 3                                      4) 4
- Q.70**  $4a^2 + 12ab + (m + 5)b^2$  is a perfect square then  $m = ?$   
 1) -4                                      2) +4                                      3) +1                                      4) -2
- Q.71** If  $\frac{x+2}{x} = \frac{x+1}{x+2}$  then  $x = ?$   
 1) 2                                      2) 4                                      3) -4                                      4) 5
- Q.72**  $\left(x^3 - \frac{1}{3375y^3}\right)$  has factors from following ? Choose the correct one.  
 1)  $\left(x - \frac{1}{15y}\right)\left(x + \frac{1}{225y}\right)$                       2)  $\left(x - \frac{1}{15y}\right)\left(x^2 + \frac{x}{15y} + \frac{1}{15y^2}\right)$   
 3)  $\left(x - \frac{1}{15y}\right)\left(x^2 + \frac{x}{15y} + \frac{1}{225y^2}\right)$                       4)  $\left(x + \frac{1}{15y}\right)\left(x^2 - \frac{x}{15y} + \frac{1}{225y^2}\right)$
- Q.73**  $(4.1)^2 + (1.7)^2 + (3.2)^2 + 2 \times (4.1)(1.7) + 2 \times (1.7)(3.2) + 2(3.2)(4.1) = ?$   
 1) 8.1                                      2) 81                                      3) 0.0081                                      4) 0.081
- Q.74**  $\frac{1 + a + b + ab}{1 + a} = ?$   
 1)  $b + ab$                                       2)  $1 + b$                                       3)  $2b$                                       4)  $a + b$
- Q.75** If  $x = 37$  and  $y = 43$  then  $\sqrt{(x+y)^2} = ?$   
 1) 3600                                      2)  $80x^2y^2$                                       3) 80                                      4)  $4\sqrt{5}$

