

ଶିବସ୍ୱାମୀ ମାଷ୍ଟି

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Secretary

Question 03130

Booklet No.

OTET
2016 (2nd)
PAPER - I

Time : 2 Hrs. 30 Minutes

Full Marks : 150

Shubram

Roll No. 1620205099

SET : B

ପରୀକ୍ଷାର୍ଥୀଙ୍କ ନିମନ୍ତେ ନିର୍ଦ୍ଦେଶାବଳୀ

- ୧। ପରୀକ୍ଷାର୍ଥୀଙ୍କର ପ୍ରାର୍ଥନା ସାମଗ୍ରିକ (ଅସ୍ଥାୟୀ) । ଯଦି କୌଣସି ପରୀକ୍ଷାର୍ଥୀ ଦେଖିବା ତଥ୍ୟ ଭୁଲ, ମିଥ୍ୟା କିମ୍ବା ଅସମ୍ପୂର୍ଣ୍ଣ ବୋଲି ଯେକୌଣସି ସମୟରେ ପ୍ରମାଣିତ ହୁଏ, ତେବେ ତାଙ୍କର ପ୍ରାର୍ଥନା ନାକତ ହୋଇଯିବ ।
- ୨। ଓ.ଏମ୍.ଆର୍. ପର୍ଯ୍ୟନ୍ତ ଥିବା ବୃତ୍ତକୁ କଳା/ନୀଳ ବଲ୍ ପଏଣ୍ଟ କଲମ ଦ୍ୱାରା ସମ୍ପୂର୍ଣ୍ଣରୂପେ କଳା/ନୀଳ କରିବାକୁ ହେବ । ଆଂଶିକ କଳା କରାଯାଇଥିଲେ ତାହାର ମୂଲ୍ୟାୟନ ହେବନାହିଁ ।
- ୩। ବୃତ୍ତ କିମ୍ବା ଅଧିକ ବୃତ୍ତକୁ ସମ୍ପୂର୍ଣ୍ଣ/ଆଂଶିକ କଳା/ନୀଳ କରାଯାଇଥିଲେ ତାହାର ମଧ୍ୟ ମୂଲ୍ୟାୟନ ହେବନାହିଁ ।
- ୪। କଳା/ନୀଳ କରାଯାଇଥିବା ବୃତ୍ତକୁ 'x' ଚିହ୍ନ ଦ୍ୱାରା/କଟାକଟି କରି/ଧଳା ରଙ୍ଗ ଲଗାଇ/ରବର/କ୍ଲେଡ ଦ୍ୱାରା ଲିଭାଇ କରି କିମ୍ବା ଯେକୌଣସି ଉପାୟରେ ଉତ୍ତର ବଦଳାଇ ଥିଲେ ତାହାର ମୂଲ୍ୟାୟନ ହେବନାହିଁ ।
- ୫। ଏହି ପ୍ରଶ୍ନପତ୍ର ପୃଷ୍ଠିକାଟିକୁ ନିର୍ଦ୍ଦେଶ ନପାଠ୍ୟା ପୂର୍ବରୁ ଖୋଲାଯିବ ନାହିଁ । ନିଜର ରୋଲ୍ ନମ୍ବର ଠିକ୍ ଭାବରେ ଏହି ପୃଷ୍ଠିକାରେ ଏବଂ ଓ.ଏମ୍.ଆର୍. ପର୍ଯ୍ୟନ୍ତ ଲେଖିବା ଆବଶ୍ୟକ ।
- ୬। ଏହି ପୃଷ୍ଠିକାରେ ଲିଖିତ ପୃଷ୍ଠା ସଂଖ୍ୟା ଏବଂ ପ୍ରଶ୍ନସଂଖ୍ୟା ଓ ସେଗୁଡ଼ିକର କ୍ରମିକ ନମ୍ବର ଭଲ ଭାବରେ ଯାଞ୍ଚ କରିନିଅନ୍ତୁ । ଯଦି କିଛି ତ୍ରୁଟି ଥାଏ ତେବେ ପାଞ୍ଚ ମିନିଟ୍ ମଧ୍ୟରେ ଏହା ବଦଳରେ ଅନ୍ୟ ଏକ ଠିକ୍ ପୃଷ୍ଠିକା ନିରୀକ୍ଷକଙ୍କଠାରୁ ସଂଗ୍ରହ କରନ୍ତୁ । ପାଞ୍ଚ ମିନିଟ୍ ପରେ କୌଣସି ଆପତ୍ତି ଗ୍ରହଣ କରାଯିବ ନାହିଁ ।
- ୭। ଓଡ଼ିଶା ପରୀକ୍ଷା ପରିଚାଳନା ଆଇନ, ୧୯୮୮ ଅନୁସାରେ ପରୀକ୍ଷା ପରିଚାଳନା କରାଯିବ ।

Instructions to the Candidates

1. The admission to the examination is provisional. In the event of any information furnished by the candidate found false/incorrect/incomplete detected at any stage, the candidature shall be rejected.
2. Darken the circles in the OMR Sheet completely with Blue / Black ball point pen only. Partial darkening shall not be evaluated.
3. Darkening two or more circles completely/partially shall not be evaluated.
4. Changing the darkened circle in any manner putting 'x' mark/using white fluid/erasing by rubber/blade etc. shall not be evaluated.
5. This question booklet shall not be opened until instructed. Write your Roll No. correctly in this booklet as well as in the OMR answer sheet.
6. The candidate should check the No. of printed pages and Questions along with their Serial Nos. In case of any discrepancy found exchange the defective one and collect another correct one from the invigilator within five minutes and thereafter no complaint shall be entertained.
7. The examination shall be conducted as per the Odisha Examination Act, 1988.

(Turn over)

SEAL

SEAL

61. Which of the following is correctly punctuated ?

(A) He said to me Good luck !

(B) He said to me "Good luck !"

(C) He said to me, "Good luck !" ✓ ✓

(D) He said to me, "good luck !"

62. Every boy and every girl _____ given a packet of sweets.

(A) was

(B) were

(C) are ✓

(D) have been

63. Though he is seventy, he _____ his childhood clearly.

(A) remembered

(B) was remembering

(C) remembers ✓

(D) had remembered

64. Some of the furniture _____ broken.

(A) has been

(B) have been

(C) are

(D) were

65. Mr. Tripathy is _____ UNESCO worker.

(A) a

(B) an ✓

(C) the

(D) any

66. It is a _____ table.

(A) large wooden round

(B) round wooden large

(C) wooden round large

(D) large round wooden

67. Mr. Mahapatra was really lucky to catch the train to Mumbai.

When he reached the station, the train _____ .

(A) had left

(B) has left

(C) was leaving

(D) is leaving

68. The room is full of gas.

You _____ light a match.

(A) needn't

(B) mightn't

(C) mustn't ✓

(D) won't

69. Do you work _____ holiday ?

(A) of

(B) on

(C) at ✓

(D) in

70. They walked _____.

(A) to the theatre in a hurry last night

(B) to the theatre in hurry last night ✓

(C) in a hurry to the theatre last night

(D) to the theatre last night in a hurry

71. When a part of the word is spoken with extra force, it is called _____.

(A) pause

(B) intonation

(C) stress ✓

(D) pronunciation

72. In order to assess the holistic development of the learner we have to undertake _____.

(A) Unit End Evaluation

(B) Month End Evaluation

(C) Term End Evaluation

(D) Continuous and Comprehensive Evaluation ✓

73. The phonic transcription of the word 'Love' is _____.

(A) | e ɔ v |

(B) | e ^ v | ✓

(C) | e 3 : v |

(D) | e ə v |

74. Rhyming words are associated with _____ .
- (A) prose (B) poetry
(C) story (D) drama
75. Find the statement which is not appropriate.
- (A) English is taught in India as a language of communication.
(B) English is taught in India as a language of comprehension.
(C) English is taught in India as a school subject.
(D) English is taught in our schools as a foreign language.
76. Which of the following is suitable for learners at elementary level ?
- (A) Controlled writing (B) Imaginative writing
(C) Free writing (D) Creative writing
77. Which is the last macro skill in natural sequence of learning a language ?
- (A) writing (B) listening
(C) reading (D) speaking
78. Guessing the meaning of difficult words in a text is a subskill of _____ .
- (A) listening (B) speaking
(C) reading (D) writing

79.

One, two ;
Buckle my shoe.
Three, four ;
Knock at the door.

Children sing this rhyme to enjoy and learn –

- (A) letters (B) punctuation
(C) numbers (D) spelling

80. Dividing a sentence into sense groups is called _____ .

- (A) stroke (B) cluster
(C) intonation (D) chunking

Read the passage carefully and answer the questions (No. 81 to No. 85) that follow choosing the correct alternatives given :

A French general was, once, conducting his army through a very difficult pass, in a range of high mountains. He exhorted his soldiers to bear patiently, the fatigues of the march. "It is easy for you to talk," muttered one of the soldiers near him, to his companions, "you are mounted on a fine horse, but we poor wretches have to tramp on foot." The general overheard the remark, and insisted on discontented soldier taking his place, but, scarcely had he mounted, when a shot from the mountain-side struck and killed him.

81. The passage describes :

- (A) a revolt in the army ✓ (B) quarreling of soldiers
(C) an altercation with the general (D) a fateful event

82. Which of the following statements is correct ?

- (A) The general gave his horse to the soldier.
(B) The general shot the soldier for grumbling.
(C) The general didn't hear the remark of the soldier.
(D) The general gave a warning to the soldier.

83. The general, described in the passage, was _____ .

- (A) cruel (B) selfish
(C) patient (D) considerate

(Turn over)

84. Which of the following words in the passage means 'talk indistinctly usually in a low voice' ?

(A) exhort

(B) mutter

(C) mount

(D) insist

85. The incident took place in _____ .

(A) Germany

(B) France ✓

(C) England

(D) India

Read the passage carefully and answer the questions (No. 86 to No. 90) that follow choosing the correct alternatives given :

Tolerance means magnanimity and patience. Tolerance is a sign of respect and consideration for others. It is a virtue.

When someone points out your mistakes, don't lose your temper. Resist the urge to quarrel with the other person. Instead, ask yourself, "Am I wrong ? If the other person, perhaps, is right ?"

Tolerance makes a person develop wider vision. Don't allow yourself to be disturbed by small irritations. Learn to accept what is disagreeable. You will then enjoy greater freedom of thought and expression.

Indeed, developing tolerance is not easy but worth trying. Once you have learnt the art of loving and giving you can easily be tolerant.

Be kind towards the weak and poor. Never discriminate people for reasons of religion, caste and creed. Learn to rise above narrow royalties so that you can broaden your outlook.

86. This passage talks about _____ .

(A) respect

(B) consideration

(C) virtue ✓

(D) tolerance

87. If someone points out our mistakes, _____.

(A) we should get angry

(B) we should not control ourselves

(C) we should not tolerate

(D) we should examine whether we are right or wrong ✓

88. One can enjoy greater freedom and expression when _____.

(A) he is easily irritated by small incidents

(B) he does not accept disagreeable things

(C) he easily becomes worried

(D) he accepts disagreeable things ✓

89. A person can easily be tolerant if he knows _____.

(A) how to argue with others

(B) the art of loving and giving ✓

(C) how to escape himself

(D) the art of discrimination

90. 'You' in the last sentence refers to _____.

(A) the writer

(B) the readers ✓

(C) the teachers

(D) the students

ଗଣିତ
MATHEMATICS

OTET-P-I/16 (2nd)

91. କେଉଁଟି ଗଣିତ ଶିକ୍ଷା ଅନ୍ତର୍ନିହିତ ସଂରଚନା ସମ୍ପର୍କିତ ନୁହେଁ ?

- (A) ନିର୍ଦ୍ଦିଷ୍ଟ କ୍ରମ
- (B) ବିଶ୍ଳେଷଣ ଓ ସଂଶ୍ଳେଷଣ
- (C) ସଂକ୍ଷିପ୍ତ ଅଭିବ୍ୟକ୍ତି
- (D) ନିର୍ଦ୍ଦିଷ୍ଟତା

92. କେଉଁଟି ଏକ ପର୍ଯ୍ୟବେକ୍ଷଣ କୌଶଳ ଅଟେ ?

- (A) ମାନକୀକୃତ ପରୀକ୍ଷଣ
- (B) ରେଟିଂ ସ୍କେଲ
- (C) ସାକ୍ଷାତକାର
- (D) ପ୍ରଶ୍ନଗୁଚ୍ଛ

93. ନିମ୍ନୋକ୍ତ ଶୈକ୍ଷିକ ଉଦ୍ଦେଶ୍ୟଗୁଡ଼ିକ ମଧ୍ୟରୁ କେଉଁଟି ଅନ୍ୟ ତିନୋଟି ଠାରୁ ଭିନ୍ନ ?

- (A) ଠିକ୍ ଉତ୍ତର ଚୟନ
- (B) ବିନ୍ଦୁ ସଂଯୋଗଦ୍ୱାରା ଜ୍ୟାମିତିକ ଚିତ୍ର ଅଙ୍କନ
- (C) ସାନରୁ ବଡ଼ କ୍ରମରେ ସଂଖ୍ୟାଗୁଡ଼ିକର ସଜ୍ଜାକରଣ
- (D) ମୌଳିକ ସଂଖ୍ୟାଗୁଡ଼ିକର ପୃଥକୀକରଣ

91. Which is not connected with internal structure of Mathematics ?

- (A) Specific sequence
- (B) Analysis and synthesis
- (C) Precise expression
- (D) Exactness

92. Which is an observational technique ?

- (A) Standardised Achievement test
- (B) Rating scale
- (C) Interview
- (D) Questionnaire

93. Which instructional objective is different from the other three ?

- (A) Recognition of correct answer
- (B) Drawing geometrical figures by dot joining
- (C) Arranging numbers in ascending order
- (D) Separation of prime numbers

94. ଗଣିତ ଶିକ୍ଷାଦାନ ନିମନ୍ତେ ଶ୍ରେଷ୍ଠିକ ଉଦ୍ଦେଶ୍ୟଗୁଡ଼ିକର କେଉଁ କ୍ରମଟି ଠିକ୍ ?

(A) ବୋଧ, ବିଶ୍ଳେଷଣ, ଜ୍ଞାନ ଓ ପ୍ରୟୋଗ

(B) ଜ୍ଞାନ, ପ୍ରୟୋଗ, ବୋଧ ଓ ବିଶ୍ଳେଷଣ

(C) ପ୍ରୟୋଗ, ବିଶ୍ଳେଷଣ, ଜ୍ଞାନ ଓ ବୋଧ

(D) ଜ୍ଞାନ, ବୋଧ, ପ୍ରୟୋଗ ଓ ବିଶ୍ଳେଷଣ

95. ବୌଦ୍ଧିକ ବିକାଶର କେଉଁ ପର୍ଯ୍ୟାୟରେ ଶିକ୍ଷାର୍ଥୀ ବାସ୍ତବ ବସ୍ତୁ ସାହାଯ୍ୟରେ ଗାଣିତିକ ଜ୍ଞାନ ଆହରଣ କରିଥାଏ ?

(A) ସଂବେଦନାକାରକ

(B) ପ୍ରାକ୍ ସଂକାର୍ଯ୍ୟଧର୍ମୀ

(C) ସ୍ଥୂଳ ସଂକାର୍ଯ୍ୟଧର୍ମୀ

(D) ବିମୂର୍ତ୍ତ ସଂକାର୍ଯ୍ୟଧର୍ମୀ

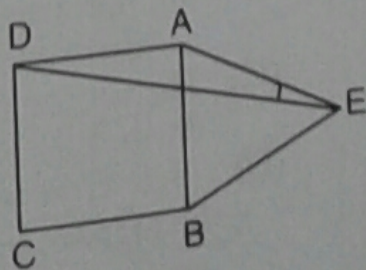
96. ଦତ୍ତ ଚିତ୍ରରେ ABCD ଏକ ବର୍ଗଚିତ୍ର ଏବଂ ABE ଏକ ସମବାହୁ ତ୍ରିଭୁଜ । \overline{AE} ଅଙ୍କନ କରାଯାଇଛି । $\angle AED$ ର ପରିମାଣ କେତେ ଡିଗ୍ରୀ ?

(A) 60

(B) 45

(C) 30

(D) 15



94. Which is the correct order of instructional objectives of teaching Mathematics ?

(A) Understanding, Analysis, Knowledge and Application

(B) Knowledge, Application, Understanding and Analysis

(C) Application, Analysis, Knowledge and Understanding

(D) Knowledge, Understanding, Application and Analysis

95. At what stage of cognitive development, the child acquires Mathematical Knowledge using real objects ?

(A) Sensory motor

(B) Pre-operational

(C) Concrete operational

(D) Formal operational

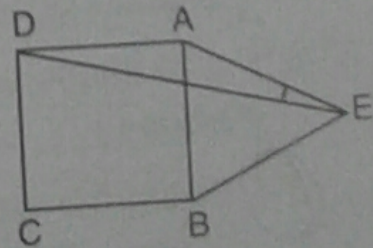
96. In the given figure, ABCD is a square and AEB is an equilateral triangle. \overline{AE} is drawn. What is the measure of the angle $\angle AED$ in degree ?

(A) 60

(B) 45

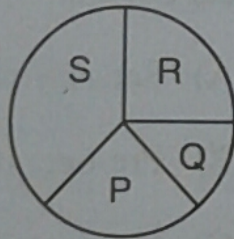
(C) 30

(D) 15



97. ଗୋଟିଏ ବିଦ୍ୟାଳୟରେ ଫୁଟବଲ୍, କ୍ରିକେଟ୍, ଭଲିବଲ୍ ଓ ବ୍ୟାଡ୍ମିଣ୍ଟନ, ଏହି ଚାରୋଟି ଖେଳର ବ୍ୟବସ୍ଥା ଅଛି ଏବଂ ପ୍ରତ୍ୟେକ ଛାତ୍ର/ଛାତ୍ରୀ କେବଳ ଗୋଟିଏ ଖେଳ ଖେଳିବାର ନିୟମ ଅଛି । ଦତ୍ତ ବୃତ୍ତଲେଖରେ ଫୁଟବଲ୍ ଖେଳାଳି, କ୍ରିକେଟ୍ ଖେଳାଳି, ଭଲିବଲ୍ ଖେଳାଳି ଓ ବ୍ୟାଡ୍ମିଣ୍ଟନ ଖେଳାଳି ମାନଙ୍କର ସଂଖ୍ୟାକୁ ଯଥାକ୍ରମେ P, Q, R ଓ S ଦ୍ୱାରା ସୂଚିତ କରାଯାଇଛି । P, Q, R କୁ ସୁଗାଢ଼ଥୁବା ବୃତ୍ତକଳାର ସମ୍ପୂର୍ଣ୍ଣ ଚାପ ତ୍ରୟ ଡିଗ୍ରୀ ପରିମାପଗୁଡ଼ିକ ଯଥାକ୍ରମେ 100° , 50° ଓ 70° । ଯଦି ଫୁଟବଲ୍ ଖେଳୁଥିବା ପିଲାସଂଖ୍ୟା ଠାରୁ କ୍ରିକେଟ୍ ଖେଳୁଥିବା ପିଲାସଂଖ୍ୟା 25 କମ୍ ହୁଏ, ତେବେ ବ୍ୟାଡ୍ମିଣ୍ଟନ ଖେଳୁଥିବା ପିଲାସଂଖ୍ୟା କେତେ ?

- (A) 70
- (B) 60
- (C) 65
- (D) 85



98. ହିଷ୍ଟୋଗ୍ରାମ୍ ପ୍ରସ୍ତୁତିରେ ନିମ୍ନସ୍ଥ କେଉଁ ଉକ୍ତି ଭୁଲ୍ ?

- (A) ସ୍ତମ୍ଭର ଓସାର ସଂପୂର୍ଣ୍ଣ ସଂଭାଗ ବିସ୍ତାର ଉପରେ ନିର୍ଭର କରେ ।
- (B) ସ୍ତମ୍ଭର ଉଚ୍ଚତା ସଂପୂର୍ଣ୍ଣ ସଂଭାଗର ବାରମ୍ବାରତା ଉପରେ ନିର୍ଭର କରେ ।
- (C) କ୍ରମିକ ସ୍ତମ୍ଭଗୁଡ଼ିକୁ ଲଗାଲଗି କରି ଅଙ୍କନ କରାଯାଏ ।

(D) ହିଷ୍ଟୋଗ୍ରାମ୍‌ର ପ୍ରଥମ ସ୍ତମ୍ଭ ସର୍ବଦା y-ଅକ୍ଷକୁ ଲାଗି ରହିଥାଏ ।

97. A school has the provisions for four games, such as foot ball, cricket, volley ball and badminton. The school also has the rule that each student is to play only one of the above games. The given pie-chart shows the number of students playing each of the four games where P, Q, R and S denote the number of students playing foot ball, cricket, volley ball and badminton respectively. The degree measures of the arcs of the concerned sectors representing P, Q and R are 100° , 50° and 70° respectively. If the number of students playing cricket is less than the number of students playing foot ball by 25, then what is the number of students that play badminton ?

- (A) 70
- (B) 60
- (C) 65
- (D) 85



98. Which of the following statements is incorrect while preparing a histogram ?

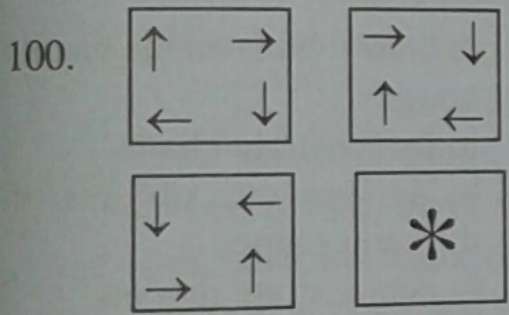
- (A) The width of a column depends upon the concerned class interval.
- (B) Height of a column depends on the frequency of the concerned class.
- (C) The successive columns are drawn adjacent to each other.
- (D) The first column of a histogram is always drawn adjacent to the y-axis.

99. ଗୋଟିଏ ତଥ୍ୟାବଳୀର ସ୍ୱତନ୍ତ୍ରତା ଲବ୍ଧ୍ୟାଙ୍କ 8 ଓ ବୃହତ୍ତମ ଲବ୍ଧ୍ୟାଙ୍କ 70 । ଏହି ତଥ୍ୟାବଳୀ ଲାଗି ଏକ ଭାଗ ବିଭକ୍ତ ବାରମ୍ବାରତା ସାରଣୀ ପ୍ରସ୍ତୁତି କରାଯିବ । ଯଦି ସମସ୍ତ ସଂଭାଗ ସମାନ ବିସ୍ତାର ବିଶିଷ୍ଟ ହୋଇଥାଏ ଏବଂ ପ୍ରଥମ ଦୁଇଟି ସଂଭାଗ 5-10, 10-15 ହୁଏ, ତେବେ ପ୍ରସ୍ତୁତ ହୋଇଥିବା ସାରଣୀରେ ସଂଭାଗ ସଂଖ୍ୟା କେତେ ହେବ ?

- (A) 11
- (B) 12
- (C) 13
- (D) 14

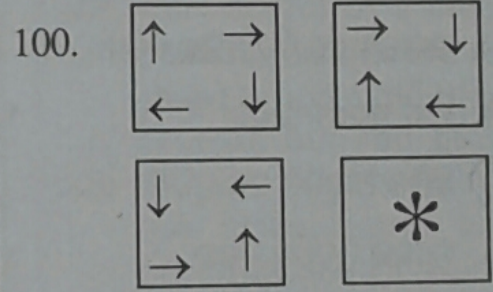
99. The lowest and highest scores in a data are 8 and 70 respectively and a frequency distribution with class intervals is to be prepared for the data. If all the classes are of equal intervals and the first two classes are 5-10 and 10-15, what will be number of classes in the distribution ?

- (A) 11
- (B) 12
- (C) 13
- (D) 14



ଉପରିଲିଖିତ ସଂରଚନାରେ ଚାରୋଟି (*) ଚିହ୍ନିତ ସ୍ଥାନରେ ନିମ୍ନଲିଖିତ କେଉଁ ଚିତ୍ରଟି ରହିବ ?

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



In the above pattern, there is a box with a star (*) mark. What will be the suitable figure for the star marked place ?

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

(Turn over)

101. ପ୍ରାଥମିକ ସ୍ତରରେ ଜ୍ୟାମିତି ପଢ଼ାଇବା ପାଇଁ କେଉଁ ପଦ୍ଧତି ମୁଖ୍ୟତଃ ବ୍ୟବହାର କରାଯାଏ ?
- (A) ବିଶ୍ଳେଷଣ ଓ ସଂଶ୍ଳେଷଣ
 (B) ଆରୋହ ଓ ଅବରୋହ
 (C) ବିଶ୍ଳେଷଣ ଓ ଆରୋହ
 (D) ସଂଶ୍ଳେଷଣ ଓ ଅବରୋହ
102. ନିମ୍ନ ପ୍ରାଥମିକ ସ୍ତରରେ ବିଭିନ୍ନ ଜ୍ୟାମିତିକ ଆକୃତିର ବାସ୍ତବ ଧାରଣା ଦେବାପାଇଁ ମୁଖ୍ୟତଃ କେଉଁଟି କରାଯିବା ଉଚିତ୍ ?
- (A) କଳାପଟାରେ ଚିତ୍ର ଅଙ୍କନ କରିବା
 (B) ଚାର୍ଟ ପ୍ରଦର୍ଶନ କରିବା
 (C) ବିଭିନ୍ନ ଆକୃତିର ବସ୍ତୁ ପ୍ରଦର୍ଶନ କରିବା
 (D) ମଡେଲ୍ ପ୍ରଦର୍ଶନ କରିବା
103. ଗୋଟିଏ ଶିଶୁ ଗୁଣନ ପ୍ରକ୍ରିୟାରେ ବାରମ୍ବାର ଭୁଲ୍ କରୁଛି । ଏହି ଭୁଲର କାରଣ ଜାଣିବା ପାଇଁ କେଉଁ ପ୍ରକାର ପରୀକ୍ଷଣ ଆବଶ୍ୟକ ?
- (A) ନିଦାନାତ୍ମକ
 (B) ସମାପ୍ତିସୂଚକ
 (C) ଗଠନମୂଳକ
 (D) ଏ ସମସ୍ତ
104. — କୁ — ଦ୍ଵାରା ଭାଗ କଲେ — ମିଳେ । ଏହା କି ପ୍ରକାର ପ୍ରଶ୍ନ ?
- (A) ମୁକ୍ତ ଉତ୍ତରମୂଳକ
 (B) ନିର୍ଦ୍ଦିଷ୍ଟ ଉତ୍ତରମୂଳକ
 (C) ନିର୍ବାଚନ ମୂଳକ
 (D) ବହୁ ବିକଳ୍ପ
101. What method is mostly followed for teaching Geometry at the primary stage ?
- (A) Analysis and Synthesis
 (B) Inductive and Deductive
 (C) Analysis and Inductive
 (D) Synthesis and Deductive
102. What should be done to develop the concept of different geometrical shapes at the lower primary stage ?
- (A) to draw figures on the black-board
 (B) to demonstrate charts
 (C) to demonstrate objects of different shapes
 (D) to demonstrate models
103. A child is always making mistake in multiplication. What type of test should be done to know the cause of this ?
- (A) Diagnostic
 (B) Summative
 (C) Formative
 (D) All of these
104. —, when divided by — gives — . What type of question is it ?
- (A) Free response
 (B) Fixed response
 (C) Recognition
 (D) Multiple choice

105. ଗଣିତର ସହପାଠ୍ୟକ୍ରମ ଦୃଷ୍ଟିକୋଣରୁ କେଉଁଟି ଅନ୍ୟ ତିନୋଟି ଠାରୁ ଭିନ୍ନ ?

(A) ଗଣିତ ମେଳା

(B) ଗଣିତ ପ୍ରକଳ୍ପ

(C) ଗଣିତ କ୍ଲବ୍

(D) ଗଣିତ କୁଇଜ୍

106. ଗୋଟିଏ ଆୟତଘନ ଆକୃତି ବିଶିଷ୍ଟ ପାତ୍ରର ଦୈର୍ଘ୍ୟ, ପ୍ରସ୍ଥ ଓ ଉଚ୍ଚତା ଯଥାକ୍ରମେ 8 ମି. 6 ମି. ଓ 4 ମି.। 192 କି.ଗ୍ରା. ଓଜନର ଏକ ତରଳ ପଦାର୍ଥ ଦ୍ୱାରା ପାତ୍ରଟି ପୂର୍ଣ୍ଣ ହୁଏ । ତେବେ 5 ମି. ଦୀର୍ଘ୍ୟ ବାହୁ ବିଶିଷ୍ଟ ସମଘନ ଆକୃତିର ପାତ୍ରକୁ ସେହି ତରଳପଦାର୍ଥ ଦ୍ୱାରା ପୂରଣ କରିବା ପାଇଁ କେତେ କି.ଗ୍ରା. ତରଳ ପଦାର୍ଥ ଆବଶ୍ୟକ ?
(ପାତ୍ରଦ୍ୱୟର ଦର ମାପ ହେଉଛି ପାତ୍ରଦ୍ୱୟର ଭିତରର ମାପ)

(A) 25

(B) 35

(C) 125

(D) 135

107. ଗୋଟିଏ ବାଲ୍‌ଟି, 3.52 କିଲୋଲିଟର ଜଳରେ ପୂର୍ଣ୍ଣ ହୁଏ । ବାଲ୍‌ଟିର ଜଳଧାରଣ କ୍ଷମତା ମିଲିଲିଟରରେ କେତେ ହେବ ?

(A) 3.52×10^4

(B) 3.52×10^5

(C) 3.52×10^6

(D) ଏମାନଙ୍କ ମଧ୍ୟରୁ କୌଣସିଟି ନୁହେଁ

105. Which one is **different** from the other three from Co-scholastic aspect of Mathematics ?

(A) Mathematics fair

(B) Mathematics project

(C) Mathematics club

(D) Mathematics quiz

106. The weight of a certain liquid material that fills in a vessel in the shape of a cuboid of length 8m, breadth 6m and height 4m is 192 kg. What weight, in kg, of the same liquid material is necessary to fill in a cubical vessel of side 5m ?
(All measurements given for the vessels are their inner measurements)

(A) 25

(B) 35

(C) 125

(D) 135

107. A bucket can be completely filled with 3.52 kilolitre of water. What is the capacity of bucket in millilitre?

(A) 3.52×10^4

(B) 3.52×10^5

(C) 3.52×10^6

(D) None of these

108. ଯଦି ଗୋଟିଏ ସମଘନର ଆୟତନ 0.000064 ଘନମିଟର ହୁଏ, ତେବେ ଏହାର ବାହୁର ଦୈର୍ଘ୍ୟ କେତେ ମିଟର ?

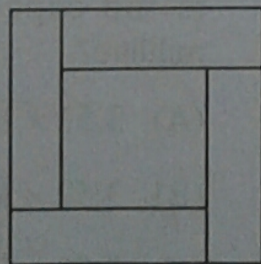
- (A) 0.4
- (B) 0.04
- (C) 0.004
- (D) 0.0004

109. ଏକ ବର୍ଗଆକୃତି ବିଶିଷ୍ଟ କ୍ଷେତ୍ରର କ୍ଷେତ୍ରଫଳ 400 ହେକ୍ଟୋୟାର । ଏହାର ପରିସୀମା କେତେ ମିଟର ?

- (A) 400
- (B) 800
- (C) 4000
- (D) 8000

110. ଚାରୋଟି ସର୍ବସମ ଆୟତଆକୃତିର କାଗଜ ଖଣ୍ଡକୁ ଦତ୍ତ ଚିତ୍ରରେ ଏପରି ସଜାଇ ରଖାଯାଇଛି ଯେପରି ସେଗୁଡ଼ିକର ବାହାର ଧାର ଓ ଭିତର ଧାର ପ୍ରତ୍ୟେକ ଗୋଟିଏ ଗୋଟିଏ ବର୍ଗଚିତ୍ର ଗଠନ କରିଛି । ପ୍ରତ୍ୟେକ ଆୟତଚିତ୍ରର ପରିସୀମା 40 ସେ.ମି. ହେଲେ, ବଡ଼ ବର୍ଗକ୍ଷେତ୍ରର କ୍ଷେତ୍ରଫଳ କେତେ ବର୍ଗ ସେ.ମି. ?

- (A) 200
- (B) 400
- (C) 800
- (D) 1600



108. If the volume of a cube is 0.000064 cu.m, then what is the length of its side in metre ?

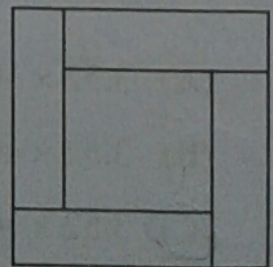
- (A) 0.4
- (B) 0.04
- (C) 0.004
- (D) 0.0004

109. The area of a square field is 400 hectares. What is its perimeter in metres ?

- (A) 400
- (B) 800
- (C) 4000
- (D) 8000

110. Four congruent rectangular sheets of paper are arranged to form the given figure in which the outer edges form a square and the inner edges also form a square. If the perimeter of each rectangular sheet is 40 cm, then what is the area of the big square in cm ?

- (A) 200
- (B) 400
- (C) 800
- (D) 1600



111. ନିମ୍ନ କେଉଁଟି $\frac{2}{3}$ ଓ $\frac{3}{4}$ ର ମଧ୍ୟବର୍ତ୍ତୀ ଏକ ପରିମେୟ ସଂଖ୍ୟା ଅଟେ ?

(A) $\frac{7}{12}$

(B) $\frac{8}{15}$

(C) $\frac{13}{24}$

(D) $\frac{25}{36}$

112. $12\frac{1}{2} - \left[8\frac{1}{2} + \{ 9 - (5 - \overline{3 - 2}) \} \right]$ ର

ସରଳୀକୃତ ମାନ କେତେ ?

(A) -2

(B) -1

(C) 1

(D) 2

113. ନିମ୍ନ କେଉଁଟି $0.2\bar{3}$ ର ପରିମେୟ ରୂପ ଅଟେ ?

(A) $\frac{7}{30}$

(B) $\frac{23}{90}$

(C) $\frac{21}{100}$

(D) $\frac{23}{100}$

111. Which of the following is a rational number that lies between

$\frac{2}{3}$ and $\frac{3}{4}$?

(A) $\frac{7}{12}$

(B) $\frac{8}{15}$

(C) $\frac{13}{24}$

(D) $\frac{25}{36}$

112. What is the simplified value of

$12\frac{1}{2} - \left[8\frac{1}{2} + \{ 9 - (5 - \overline{3 - 2}) \} \right] ?$

(A) -2

(B) -1

(C) 1

(D) 2

113. Which of the following is the rational form of $0.2\bar{3}$?

(A) $\frac{7}{30}$

(B) $\frac{23}{90}$

(C) $\frac{21}{100}$

(D) $\frac{23}{100}$

$0.2\bar{3} =$

$\frac{23}{90}$

(Turn over)

$$\frac{25}{2} - \left[\frac{17}{2} + \{ 9 - 4 \} \right] = \frac{25}{2} - \left[\frac{17}{2} + 5 \right] = \frac{25}{2} - \frac{27}{2}$$

$$\frac{25}{2} - \frac{27}{2} = -1$$

114. କେଉଁ ସଂଖ୍ୟାଟି $3\frac{1}{3}$ ର ଅଧାରୁ ଯେତିକି କମ,

$2\frac{1}{3}$ ରୁ $3\frac{1}{2}$ ସେତିକି ଅଧିକ ?

(A) $\frac{1}{6}$

(B) $\frac{1}{4}$

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

(D) $\frac{1}{2}$

115. ଦୁଇଟି କ୍ରମିକ ଗଣନ ସଂଖ୍ୟାର ଗୁଣଫଳ 30800 ହେଲେ, ପ୍ରଥମ ସଂଖ୍ୟାଟି କେତେ ?

(A) 165

(B) 166

(C) 174

(D) 175

116. ΔABC ର C ଶୀର୍ଷରେ ଥିବା ବହିଃଋ କୋଣର ପରିପୂରକ କୋଣ $\angle A$ ହେଲେ, ନିମ୍ନଲିଖିତ କେଉଁଟି ସତ୍ୟ ?

(A) $2m\angle A + m\angle B = 180^\circ$

(B) $m\angle A = m\angle B$

(C) $m\angle A + 2m\angle B = 180^\circ$

(D) $m\angle A + m\angle B = 90^\circ$

117. ଗୋଟିଏ ରେଖାଖଣ୍ଡ \overline{AB} କୁ ଏକ ବ୍ୟାସାର୍ଦ୍ଧ ରୂପେ ନେଇ ଅଙ୍କନ କରାଯାଇପାରୁଥିବା ବୃତ୍ତ ସଂଖ୍ୟା କେତେ ?

(A) 1

(B) 2

(C) ଅସଂଖ୍ୟ

(D) ବୃତ୍ତ ଅଙ୍କନ ସମ୍ଭବ ନୁହେଁ

114. Which number is less than half of $3\frac{1}{3}$ by as much as $3\frac{1}{2}$ is more than $2\frac{1}{3}$?

(A) $\frac{1}{6}$

(B) $\frac{1}{4}$

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

(D) $\frac{1}{2}$

115. If the product of two consecutive natural numbers is 30800, then what is the 1st number ?

(A) 165

(B) 166

(C) 174

(D) 175

116. If the supplementary angle of the exterior angle at the vertex C of ΔABC is $\angle A$, then which of the following is true ?

(A) $2m\angle A + m\angle B = 180^\circ$

(B) $m\angle A = m\angle B$

(C) $m\angle A + 2m\angle B = 180^\circ$

(D) $m\angle A + m\angle B = 90^\circ$

117. How many circles can be drawn with a given line segment \overline{AB} taken as a radius ?

(A) 1

(B) 2

(C) Infinitely many

(D) Not possible to draw such circle

118. ଏକ ସମତଳରେ $\angle ABC$ ଅଙ୍କିତ ହୋଇଛି । ଉକ୍ତ କୋଣ ଅଙ୍କନ କରିବାଦ୍ୱାରା ସମତଳଟି କେତୋଟି ଅଣଛେଦାସେତ୍ରେ ବିଭକ୍ତ ହୁଏ ?

- (A) 1
(B) 2
(C) 3
(D) 4

119. ନିମ୍ନ ଲିଖିତ କେଉଁ ଦୁଇପ୍ରକାର ଚତୁର୍ଭୁଜ ମଧ୍ୟରୁ ପ୍ରତ୍ୟେକର କେବଳ ଦୁଇଟି ପ୍ରତିସମ ଅକ୍ଷ ଥାଏ ?

- (A) ସାମନ୍ତରିକ ଚିତ୍ର ଓ ଆୟତଚିତ୍ର
(B) ଆୟତଚିତ୍ର ଓ ରମ୍ଭସ
(C) ଆୟତଚିତ୍ର ଓ ବର୍ଗଚିତ୍ର
(D) ବର୍ଗଚିତ୍ର ଓ ରମ୍ଭସ

120. ଖଣ୍ଡେ ବର୍ଗ ଆକୃତି ବିଶିଷ୍ଟ କାଗଜର ପ୍ରତ୍ୟେକ ଯୋଡ଼ା କ୍ରମିକ ଧାରର ମଧ୍ୟବିନ୍ଦୁଦ୍ୱୟର ସଂଯୋଜକ ରେଖାଖଣ୍ଡ ଠାରେ କାଗଜକୁ ଭାଙ୍ଗି ଦିଆଗଲା । ଏହା ଫଳରେ ଉତ୍ପନ୍ନ ହୋଇଥିବା ବର୍ଗକ୍ଷେତ୍ରର କ୍ଷେତ୍ରଫଳ ଓ ପୂର୍ବବର୍ତ୍ତୀ ବର୍ଗକ୍ଷେତ୍ରର କ୍ଷେତ୍ରଫଳ ମଧ୍ୟରେ ଅନୁପାତ କେତେ ?

- (A) 2 : 1
(B) 1 : 2
(C) 4 : 1
(D) 1 : 4

118. $\angle ABC$ is drawn in a plane. Into how many nonintersecting sets is the plane divided by drawing $\angle ABC$?

- (A) 1
(B) 2
(C) 3
(D) 4

119. Each of which of the following two kinds of quadrilaterals has two lines of symmetry only ?

- (A) A parallelogram and a rectangle
(B) A rectangle and a rhombus
(C) A rectangle and a square
(D) A square and a rhombus

120. A square shaped piece of paper was folded along the line segments joining the mid points of each pair of consecutive sides and thereby another square shape is developed. What is the ratio between the areas of the newly formed square shape and the original square shape ?

- (A) 2 : 1
(B) 1 : 2
(C) 4 : 1
(D) 1 : 4