

**ଗଣିତ ଏବଂ ବିଜ୍ଞାନ**

**MATHEMATICS & SCIENCE**

91. ଗୋଟିଏ ସଂଖ୍ୟାକୁ ସେହି ସଂଖ୍ୟାରେ 17 ଥର ଯୋଗକଲେ ଯୋଗଫଳ 162 ହୁଏ । ତେବେ ସଂଖ୍ୟାଟି କେତେ ?

- |       |        |
|-------|--------|
| (A) 7 | (B) 8  |
| (C) 9 | (D) 10 |

The number which when added to itself 17 times gives 162. What is the number ?

- |       |        |
|-------|--------|
| (A) 7 | (B) 8  |
| (C) 9 | (D) 10 |

92. 30 ରୁ 60 ମଧ୍ୟବର୍ଜୀ ଯୌଗିକ ସଂଖ୍ୟାମାନଙ୍କର ସଂଖ୍ୟା ଓ ମୌଳିକ ସଂଖ୍ୟାମାନଙ୍କର ସଂଖ୍ୟା ଅପେକ୍ଷା କେତେ ବେଶୀ ?

- |        |        |
|--------|--------|
| (A) 15 | (B) 16 |
| (C) 17 | (D) 18 |

What is the difference in number of compound and prime numbers between 30 and 60 ?

- |        |        |
|--------|--------|
| (A) 15 | (B) 16 |
| (C) 17 | (D) 18 |

93.  $6x^3 - 2x + 3 = (2x + 5)(3x^2 - 2x + 3)$  ସମୀକରଣଟିର ଘାତ କେତେ ?

- |       |       |
|-------|-------|
| (A) 1 | (B) 2 |
| (C) 3 | (D) 5 |

What is the degree of the equation  $6x^3 - 2x + 3 = (2x + 5)(3x^2 - 2x + 3)$  ?

- |       |       |
|-------|-------|
| (A) 1 | (B) 2 |
| (C) 3 | (D) 5 |

94.  $5x - 12 = 8$  ର କେତୋଟି ମୂଳ ଅଛି ?

- |       |       |
|-------|-------|
| (A) 1 | (B) 2 |
| (C) 4 | (D) 0 |

How many roots has  $5x - 12 = 8$  ?

- |       |       |
|-------|-------|
| (A) 1 | (B) 2 |
| (C) 4 | (D) 0 |

95.  $4 + 3x + 2x^2 + x^3$  සු -  $x^3 + 2x^2 + 3x + 4$  බිජෝග කළ තේ නො නො නො නො නො ?

- |            |             |
|------------|-------------|
| (A) $6x$   | (B) $4x^2$  |
| (C) $2x^3$ | (D) $-2x^2$ |

What is the value when  $-x^3 + 2x^2 + 3x + 4$  is subtracted from  $4 + 3x + 2x^2 + x^3$  ?

- |            |             |
|------------|-------------|
| (A) $6x$   | (B) $4x^2$  |
| (C) $2x^3$ | (D) $-2x^2$ |

96.  $a^4 = \frac{81}{625}$  නො ?

- |                       |                   |
|-----------------------|-------------------|
| (A) $\pm \frac{3}{5}$ | (B) $\frac{3}{5}$ |
| (C) $-\frac{3}{5}$    | (D) $5$           |

If  $a^4 = \frac{81}{625}$ , then what is the value of 'a' ?

- |                       |                   |
|-----------------------|-------------------|
| (A) $\pm \frac{3}{5}$ | (B) $\frac{3}{5}$ |
| (C) $-\frac{3}{5}$    | (D) $5$           |

97. 'x' රුග්‍රාමීක බිලොමිර යොගාමීක බිලොමි නො නො නො නො ?

- |          |                    |
|----------|--------------------|
| (A) $-x$ | (B) $\frac{1}{x}$  |
| (C) $1$  | (D) $-\frac{1}{x}$ |

What is the additive inverse of the multiplicative inverse of x ?

- |          |                    |
|----------|--------------------|
| (A) $-x$ | (B) $\frac{1}{x}$  |
| (C) $1$  | (D) $-\frac{1}{x}$ |

98.  $50 - 30 \div 10 + 8 - (5 + \overline{2 - 1})$  නො ?

- |                  |              |
|------------------|--------------|
| (A) $30 \div 10$ | (B) $3 + 8$  |
| (C) $5 + 1$      | (D) $50 - 5$ |

What is the 2nd step of simplication of

- |                  |              |
|------------------|--------------|
| (A) $30 \div 10$ | (B) $3 + 8$  |
| (C) $5 + 1$      | (D) $50 - 5$ |

99. ଭାଜ୍ୟ = ଭାଜକ  $\times$  ଭାଗପଳ + ଭାଗଶେଷ, ଏଇଟିକୁ କେଉଁ ପଦ୍ଧତି କୁହାଯାଏ ?

- |                      |                     |
|----------------------|---------------------|
| (A) ନେପିରୀୟ ପଦ୍ଧତି   | (B) ଅଏଲର ପଦ୍ଧତି     |
| (C) ଇଉକ୍ଲିଡୀୟ ପଦ୍ଧତି | (D) ରାମାନୁଜନ ପଦ୍ଧତି |

Divisor = Dividend  $\times$  Quotient + Reminder, which method is it called ?

- |                      |                      |
|----------------------|----------------------|
| (A) Napier's Method  | (B) Euler Method     |
| (C) Euclidean Method | (D) Ramanujan Method |

100. ଗୋଟିଏ ଦ୍ରବ୍ୟର ଲିଖିତ ମୂଲ୍ୟ ଉପରେ ରିହାତି ଦେଲାପରେ ବିକ୍ରିମୂଲ୍ୟ 96 ଟଙ୍କା ହୁଏ । ଦ୍ରବ୍ୟଟିର ଲିଖିତ ମୂଲ୍ୟ କେତେ ଟଙ୍କା ?

- |         |                         |
|---------|-------------------------|
| (A) 133 | (B) 144                 |
| (C) 117 | (D) ଏଥୁରୁ କୌଣସିଟି ନୁହେଁ |

After giving  $33\frac{1}{3}\%$  of discount on the marked price, the selling price becomes Rs. 96.  

$$59\frac{1}{3}\% \div 10 + 8 - (5 + 2 - 1)$$
  
 What is the marked price of the article ?

- |         |                   |
|---------|-------------------|
| (A) 133 | (B) 144           |
| (C) 117 | (D) None of these |

101. ରାମ 3 ଟଙ୍କାରେ 7 ଟି ଲେମ୍ବୁ ଓ ଗୋପାଳ 41 ଟି ଲେମ୍ବୁକୁ 19 ଟଙ୍କାରେ କିଣିଲେ, ନିମ୍ନଲିଖିତ ଉଚ୍ଚିତ୍ତକ ମଧ୍ୟରୁ କେଉଁଠି ପ୍ରୟୁକ୍ଷ ?

- |                          |                              |
|--------------------------|------------------------------|
| (A) ରାମ ଶଷ୍ଟାରେ କିଣିଲା   | (B) ଗୋପାଳ ଶଷ୍ଟାରେ କିଣିଲା     |
| (C) ଉଭୟ ସମାନ ଦରରେ କିଣିଲେ | (D) ଏଥୁ ମଧ୍ୟରୁ କୌଣସିଟି ନୁହେଁ |

Ram bought 7 lemon in Rs. 3 and Gopal 41 lemons in Rs. 19, which of the following statement is true ?

- |                                     |                                |
|-------------------------------------|--------------------------------|
| (A) Rama bought in cheaf rate       | (B) Gopal bought in cheaf rate |
| (C) Both purchased at the same rate | (D) None of these              |

102. ଯदି  $3A = 5B$  ଏବଂ  $4B = 6C$  ହେଉଥାଏ । ତେବେ  $A : C =$  କେତେ ?



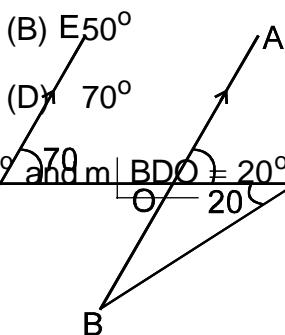
If  $3A = 5B$  and  $4B = 6C$ , then  $A : C$  is ?



103. දැන තුළෙ  $EC \parallel AB$ ,  $m\angle ECD = 70^\circ$  සහ  $m\angle BDO = 20^\circ$  නේදී  $m\angle OBD =$  කෙතේ ?

- (A)  $20^\circ$   
(C)  $60^\circ$

In the given figure, if  $EC \parallel AB$ ,  $m\angle ECD = 70^\circ$  and  $m\angle BDO = 20^\circ$ , then  $m\angle OBD = ?$



- (A)  $20^\circ$       (B)  $50^\circ$   
 (C)  $60^\circ$       (D)  $70^\circ$

104. ଗୋଟିଏ ତ୍ରିଭୁଜ ବହିସ୍କଳେଣ ସଂଖ୍ୟା କେତେ :

- |       |       |
|-------|-------|
| (A) 3 | (B) 4 |
| (C) 5 | (D) 6 |

The number of Exterior angle of a triangle is :

- |       |       |
|-------|-------|
| (A) 3 | (B) 4 |
| (C) 5 | (D) 6 |

105. ଦୁଇଟି ବା ତହିଁରୁ ଅଧିକ ତ୍ରିଭୁଜର ଭୂମିମାନେ ଏକ ସରଳ ରେଖାରେ ରହିଲେ ଏବଂ ସେମାନଙ୍କର ଶୀର୍ଷ ବିନ୍ଦୁ ଅଭିନ୍ନ ହେଲେ,  
ତ୍ରିଭୁଜଗୁଡ଼ିକ :

- |                            |                            |
|----------------------------|----------------------------|
| (A) ସମଭୂମି ବିଶିଷ୍ଟ ହେବେ    | (B) ସମକ୍ଷେତ୍ର ବିଶିଷ୍ଟ ହେବେ |
| (C) ସମ ଉଚ୍ଚତା ବିଶିଷ୍ଟ ହେବେ | (D) ସମ ମଧ୍ୟମା ବିଶିଷ୍ଟ ହେବେ |

When the bases of two or more than two triangles lie in a straight line and their vertex is one, then the triangles are :

- |                      |                      |
|----------------------|----------------------|
| (A) With same base   | (B) With same area   |
| (C) With same height | (D) With same median |

106. ଦୁଇଟି ସନ୍ଧିତ କୋଣର କେତୋଟି ସାଧାରଣ ବାହୁ ଥାଏ ?

- |       |              |
|-------|--------------|
| (A) 1 | (B) 2        |
| (C) 3 | (D) ଆବୋ ନଥାଏ |

How many common sides of two adjacent angle ?

- |       |                   |
|-------|-------------------|
| (A) 1 | (B) 2             |
| (C) 3 | (D) None of these |

107. ଗୋଟିଏ ବୃତ୍ତର ଜ୍ୟା ଓ ତା'ର ସଂପୂର୍ଣ୍ଣ ଚାପ ଦ୍ୱାରା ଗଠିତ ଚିତ୍ରକୁ କ'ଣ କୁହାୟାଏ ?

- |                  |                 |
|------------------|-----------------|
| (A) ବୃତ୍ତକଳା     | (B) ବୃତ୍ତଖଣ୍ଡ   |
| (C) ବୃତ୍ତର ପରିଧି | (D) ଅର୍ଦ୍ଦବୃତ୍ତ |

What is the shape formed by the chord and its arc of a circle ?

- |                                 |                 |
|---------------------------------|-----------------|
| (A) Sector                      | (B) Segment     |
| (C) Circumference of the circle | (D) Half circle |

108. ABCD ପ୍ରାପିକିଯମରେ ଯଦି  $AB \parallel CD$  ହୁଏ, ତେବେ  $AC^2 + BD^2 = ?$

- |                                  |                                  |
|----------------------------------|----------------------------------|
| (A) $BC^2 + AD^2 + 2BC \cdot AD$ | (B) $AB^2 + CD^2 + 2AB \cdot CD$ |
| (C) $AB^2 + CD^2 + 2AD \cdot BC$ | (D) $BC^2 + AD^2 + 2AB \cdot CD$ |

In a trapezium if  $AB \parallel CD$ , then  $AC^2 + BD^2 = ?$

- |                                  |                                  |
|----------------------------------|----------------------------------|
| (A) $BC^2 + AD^2 + 2BC \cdot AD$ | (B) $AB^2 + CD^2 + 2AB \cdot CD$ |
| (C) $AB^2 + CD^2 + 2AD \cdot BC$ | (D) $BC^2 + AD^2 + 2AB \cdot CD$ |

109. ପାଞ୍ଚଟି ଅସମାନ୍ତର ସରଳରେଖା ପରଷ୍ପରକୁ ସର୍ବାଧୂକ କେତୋଟି ବିନ୍ଦୁରେ ଛେଦ କରି ପାରିବେ ?

- |       |       |       |        |
|-------|-------|-------|--------|
| (A) 1 | (B) 4 | (C) 5 | (D) 10 |
|-------|-------|-------|--------|

The maximum number of points in which five non parallel lineed will intersect each other ?

- |       |       |       |        |
|-------|-------|-------|--------|
| (A) 1 | (B) 4 | (C) 5 | (D) 10 |
|-------|-------|-------|--------|

110. ନିମ୍ନଲିଖିତ ଚିତ୍ରଗୁଡ଼ିକ ମଧ୍ୟରୁ କେଉଁଠିର ପ୍ରତିସମ ଅକ୍ଷ ନାହିଁ ?

- |                      |               |
|----------------------|---------------|
| (A) ବିଷମବାହୁ ତ୍ରିଭୂଜ | (B) ଆୟତ ଚିତ୍ର |
| (C) ସାମନ୍ତରିକ ଚିତ୍ର  | (D) ବୃତ୍ତ     |

From the following figure, which have no symetrical axis ?

- |                       |                |
|-----------------------|----------------|
| (A) Scalene Triangles | (B) Rectangles |
| (C) Parallelogram     | (D) Circle     |

111. ନିମ୍ନୋକ୍ତ ମଧ୍ୟରୁ କେଉଁଠି ଗଣିତ ପାଠ୍ୟପୁସ୍ତକ ପ୍ରକଳ୍ପିତ ନାହିଁ ଉପରେ ଆଧାରିତ ନୁହେଁ ?

- |                                  |                                    |
|----------------------------------|------------------------------------|
| (A) ବିଦ୍ୟାର୍ଥୀ କୈନ୍ତ୍ରିକ         | (B) ନମନୀୟ ଓ ଦୈନିକିନ ଜୀବନ ସମ୍ବନ୍ଧିତ |
| (C) ଅନ୍ୟାନ୍ୟ ପାଠ୍ୟ ବିଷୟ ସହ ସମନ୍ୟ | (D) ଅନମନୀୟ ପାଠ୍ୟ ବଷ୍ଟୁ             |

Which one of the following is not associated with the principles of preparing mathematics text books ?

- |  |
|--|
| (A) Learner centred                            |
| (B) Flexible and related to day-to-day life    |
| (C) Correlation with other curricular subjects |
| (D) Inflexible contents                        |

112. “এক পরীক্ষণ যেଉ উচ্চেশ্বরে প্রস্তুত হোଇথাএ, তাহা এহি উচ্চেশ্বর পরিমাপ করে।” এহা পরামর্শ কেଉ গুণকু সূচাল থাএ ?

- |                  |                  |
|------------------|------------------|
| (A) উপযোগিতা     | (B) বস্তুনিষ্ঠতা |
| (C) বিশ্বসনিয়তা | (D) বেঁধতা       |

“A test measures that it intends to measure.” Which quality of the Test does it indicate ?

- |                 |                 |
|-----------------|-----------------|
| (A) Usability   | (B) Objectivity |
| (C) Reliability | (D) Validity    |

113. প্রাথমিক বিদ্যালয়ের গণিত শিক্ষাদানের প্রারম্ভিক অবস্থারে শিক্ষার্থীর কেଉ দক্ষতা উপরে গুরুত্ব দেবা আবশ্যিক ?

- |                           |                              |
|---------------------------|------------------------------|
| (A) সংখ্যা পরিচিতি ও গণন  | (B) সংখ্যা গুণন ও ভাগক্রিয়া |
| (C) গণিতিক সংকেতৰ প্রয়োগ | (D) উচ্চতা ও ওজনের পরিমাপ    |

Priority is to be given on which ability during the initial stages of teaching Mathematics in the primary schools ?

- |   |  |
|---|--|
| (A) Number identification and counting  | (B) Multiplication and Division of numbers |
| (C) Application of Mathematical symbols | (D) Measurement of height and weight       |

114. নিম্নোক্ত মন্তব্য কেଉটি এর্বোকৃষ্ণ গাণিতিক দক্ষতার সূচক ?

- |   |
|---|
| (A) গাণিতিক লিখন  |
| (B) গাণিতিক সমস্যার বিশ্লেষণ                            |
| (C) গাণিতিক ভাষাকু সাঙ্কেতিক ভাষারে রূপান্তরণ           |
| (D) গাণিতিক সমাধান প্রক্রিয়ারে ত্রুটি নির্ণয় ও সংশোধন |

Which one of the following is the indicator of the top-most mathematical ability ?

- |  |
|--|
| (A) Writing mathematical definitions   |
| (B) Analysing mathematical problems  |
| (C) Translation of mathematical language into symbolic representation          |
| (D) Identifying errors in mathematical solutions and incorporating corrections |

115. ଅନ୍ତର୍ନିହିତ ସଂରଚନା ଦୃଷ୍ଟି କୋଣରୁ କେଉଁଟି ଗଣିତ ଶିକ୍ଷାଦାନର ବୈଶିଷ୍ଟ୍ୟ ?

- (A) ଶୁଙ୍ଖଳିତ ପ୍ରକାଶ ଭଙ୍ଗୀ
- (B) ବିଷୟବସ୍ତୁର ଶୁଙ୍ଖଳିତ ଓ କ୍ରମାନୁସାର ସଜୀକରଣ
- (C) ବିଷୟବସ୍ତୁଗୁଡ଼ିକର ପାରସ୍ପରିକ ସମ୍ବନ୍ଧ
- (D) ଉପରୋକ୍ତ ସମସ୍ତ

Which characteristic indicates the organisation of Mathematics curriculum ?

- (A) Systematic Presentation
- (B) Systematic and sequential arrangement of contents
- (C) Inter-relation of topics
- (D) All of the above

116. ଜଣେ ଛାତ୍ର ଉର୍ଦ୍ଦ୍ଦ କ୍ରମରେ ସଂଖ୍ୟାଗୁଡ଼ିକୁ ସଜାଇ ଲେଖି ପାରୁଛି । ଏହା ବିଦ୍ୟାର୍ଥୀର କେଉଁ ଦକ୍ଷତାକୁ ସୁଚାରୁଛି ?

- (A) ବଡ଼ ଓ ସାନ ସଂଖ୍ୟା ଚିହ୍ନିପାରୁଛି
- (B) ବଡ଼ ଓ ସାନ ସଂଖ୍ୟା ପୃଥକ କରିପାରୁଛି
- (C) ବଡ଼ ଓ ସାନ ସଂଖ୍ୟାର କ୍ରମ ବୁଝିପାରୁଛି
- (D) ବଡ଼ ଓ ସାନ ସଂଖ୍ୟା ଲେଖିପାରୁଛି

A learner arranges the numbers in ascending order. Which ability of the learner is indicated by it ?

- (A) Identifies big and small numbers
- (B) Distinguishes big and small numbers
- (C) Understands the sequence of big and small numbers
- (D) Writes big and small numbers

117. ଜଣେ ଛାତ୍ର ଭିନ୍ନ ଭିନ୍ନ ଆକାରରେ ଭିନ୍ନ ଭିନ୍ନ ବୃତ୍ତ ଅଙ୍କନ କରି ଦେଖିଲେ ଯେ, ପ୍ରତ୍ୟେକ ବୃତ୍ତର ବ୍ୟାସ କେନ୍ଦ୍ର ବିଦ୍ୟୁକୁ ସର୍ଗ କରୁଛି ଏବଂ ବୃତ୍ତର ବ୍ୟାସ ବ୍ୟାସାର୍ଥର ଦୁଇଗୁଣ । ଏହା ଗଣିତର କେଉଁ ପଢ଼ିକୁ ସୁଚାରୁଛି ?

- (A) ଆରୋହ
- (B) ଅବରୋହ
- (C) ବିଶ୍ଲେଷଣ
- (D) ସଂଶୋଧଣ

While drawing different circles of different size, a student observed that the diameter touches the centre and the diameter of the circle is twice its radius. Which methods of teaching mathematics does it indicate ?

- (A) Inductive
- (B) Deductive
- (C) Analysis
- (D) Synthesis

118. ଉଚ୍ଚଶ୍ରେଣୀରେ ଜ୍ୟାମିତିକ ଯୁକ୍ତିମୂଳକ ପ୍ରମାଣ ନିମନ୍ତେ କେଉଁ ପଦ୍ଧତି ଉପଯୋଗ କରାଯାଇଛି ?

- |              |                   |
|--------------|-------------------|
| (A) ଆରୋହ     | (B) ଅବରୋହ         |
| (C) ବିଶ୍ଲେଷଣ | (D) ସମସ୍ୟା ସମାଧାନ |

Which methods of mathematics follows in solving geometrical logical problems :

- |               |                     |
|---------------|---------------------|
| (A) Inductive | (B) Deductive       |
| (C) Analysis  | (D) Problem solving |

119. ନିମ୍ନୋକ୍ତ ମଧ୍ୟରୁ କେଉଁଟି ଆରୋହ ପଦ୍ଧତିର ତ୍ରୁଟି ଅଟେ ?

- |   |                        |
|---|------------------------|
| (A) ସମସ୍ତ ଗଣିତିକ ସମାଧାନ ପାଇଁ ଅନୁପ୍ରୁକ୍ତ | (B) ସମୟ ସାପେକ୍ଷ ପଦ୍ଧତି |
| (C) ଭ୍ରମାନ୍ତ ସିଦ୍ଧାନ୍ତ ସମ୍ବନ୍ଧରେ        | (D) ଉପରୋକ୍ତ ସମସ୍ତ      |

Which of the following is a disadvantages of Inductive method ?

- |   |
|---|
| (A) Not useful to solve all mathematical problems |
| (B) Time consuming method                         |
| (C) Possibility in error in findings              |
| (D) All of the above                              |

120. ଗଣେଶ ପୂଜା ପାଳନ ନିମନ୍ତେ ଶିକ୍ଷକ ଛାତ୍ରମାନଙ୍କ ପାଇଁ କେତେକ ପ୍ରକଳ୍ପ କାର୍ଯ୍ୟ ଧାର୍ଯ୍ୟ କଲେ । ନିମ୍ନୋକ୍ତ ମଧ୍ୟରୁ କେଉଁଟି ପ୍ରକଳ୍ପ କାର୍ଯ୍ୟ ସମ୍ପର୍କିତ ନୁହେଁ ?

- |                         |                                  |
|-------------------------|----------------------------------|
| (A) ସାଜ ସଜ୍ଜା କରିବା     | (B) ଚାନ୍ଦା ଆଦାୟ କରିବା            |
| (C) ପୂଜା ସାମଗ୍ରୀ କିଣିବା | (D) ଗଣେଶ ପୂଜା ବିଷୟରେ ରଚନା ଲେଖିବା |

A project work was assigned to a group of student for celebration of Ganesh Puja in a school, which of the following is not related to the project ?

- |                                       |                                  |
|---------------------------------------|----------------------------------|
| (A) Making decoration and arrangement | (B) Collecting fees              |
| (C) Purchasing Puja materials         | (D) Writing essay on Ganesh Puja |

121. (a) ସମନ୍ଦିତ ପଦ୍ଧତିରେ ବିଜ୍ଞାନ ପାଠ୍ୟକ୍ରମ ପ୍ରସ୍ତୁତି ଥିଲା ଭିଡ଼ିକ ପଦ୍ଧତି ଅଟେ ।

(b) ସମନ୍ଦିତ ପଦ୍ଧତିରେ ପ୍ରସ୍ତୁତ ବିଜ୍ଞାନ ପାଠ୍ୟକ୍ରମ ଉଚ୍ଚ ପ୍ରାଥମିକ ଶ୍ରରର / ଶ୍ରେଣୀର ବିଦ୍ୟାର୍ଥୀଙ୍କ ପାଇଁ ଉପଯୁକ୍ତ ଅଟେ ।

(c) ସମନ୍ଦିତ ପଦ୍ଧତିରେ ପ୍ରସ୍ତୁତ ବିଜ୍ଞାନ ପାଠ୍ୟକ୍ରମ ଉଚ୍ଚପ୍ରାଥମିକ ଶ୍ରେଣୀର ବିଦ୍ୟାର୍ଥୀଙ୍କ ପାଇଁ ଉପଯୁକ୍ତ ନୁହେଁ ।

(d) ବିଜ୍ଞାନ ବିଷୟବସ୍ତୁର ସମସ୍ତ ବିଭାଗକୁ ନେଇ ସମନ୍ଦିତ ପାଠ୍ୟକ୍ରମ ପ୍ରସ୍ତୁତି ସମ୍ବପନ ନୁହେଁ ।

- |                                      |                                      |
|--------------------------------------|--------------------------------------|
| (A) (a) ଓ (b) ଠିକ୍ ଏବଂ (c) ଓ (d) ଭୁଲ | (B) (c) ଓ (d) ଠିକ୍ ଏବଂ (a) ଓ (b) ଭୁଲ |
| (C) (a) ଓ (c) ଠିକ୍ ଏବଂ (b) ଓ (d) ଭୁଲ | (D) (b) ଓ (d) ଠିକ୍ ଏବଂ (a) ଓ (c) ଭୁଲ |

- (a) Integrated approach of curriculum construction in science is a theme-based approach.
  - (b) Integrated science curriculum is quite suitable for the learners of upper primary classes.
  - (c) Integrated science curriculum is not suitable for the learners of upper primary classes.
  - (d) It is not possible to prepare integrated curriculum taking all branches of science.
- (A) (a) and (b) are correct and (c) and (d) are wrong
  - (B) (c) and (d) are correct and (a) and (b) are wrong
  - (C) (a) and (c) are correct and (b) and (d) are wrong
  - (D) (b) and (d) are correct and (a) and (c) are wrong

122. କେଉଁଟି ଅନ୍ୟ ତିମୋଟି ଠାରୁ ଭିନ୍ନ ?

- |            |              |
|------------|--------------|
| (A) ଚୂନ    | (B) ଶମିତ ଚୂନ |
| (C) କଲିଚୂନ | (D) ଚୂନ ପଥର  |

Which one is different from the other three ?

- |                |                 |
|----------------|-----------------|
| (A) Lime       | (B) Slaked lime |
| (C) Quick lime | (D) Lime stone  |

123. କେଉଁ କେଉଁ ଦର୍ପଣରେ ସମାନ ଆକାର ଓ ଆକୃତି ବିଶିଷ୍ଟ ଆଭାସୀ ପ୍ରତିବିମ୍ବ ଗଠିତ ହୋଇଥାଏ ?

- |                            |                                      |
|----------------------------|--------------------------------------|
| (A) କେବଳ ସମତଳ ଦର୍ପଣରେ      | (B) ଉଭୟ ସମତଳ ଓ ଅବତଳ ଦର୍ପଣରେ          |
| (C) ଉଭୟ ସମତଳ ଓ ଉଭଳ ଦର୍ପଣରେ | (D) ସମତଳ, ଅବତଳ ଓ ଉଭଳ-ୱ ସମସ୍ତ ଦର୍ପଣରେ |

In which mirrors virtual image of the same size and shape is formed ?

- (A) Only in plane mirror
- (B) Both in plane and concave mirrors
- (C) Both in plane and convex mirrors
- (D) Plane, concave and convex — in all these mirrors

124. ଫଳପ୍ରଦ ବିଜ୍ଞାନ ଶିକ୍ଷାଦାନ ଓ ଶିକ୍ଷଣ ନିମିତ୍ତ :

- (a) ଆବଶ୍ୟକୀୟ ଉପକରଣ ଥିବା ବିଜ୍ଞାନାଗାର ଆବଶ୍ୟକ ।
- (b) ଉପାୟବନ୍ଧ (ଯନ୍ତ୍ରୀଳ) ଶିକ୍ଷକ ଆବଶ୍ୟକ ।
- (c) ଶିକ୍ଷକ ଓ ବିଦ୍ୟାର୍ଥୀ ଅନୁପାତ କମ୍ ହେବା ଆବଶ୍ୟକ ।
- (d) ଯଥେଷ୍ଟ ସଂଖ୍ୟକ ସହାୟକ ପୁସ୍ତକ ଥିବା ଆବଶ୍ୟକ ।

ଉପରୋକ୍ତ ପ୍ରତ୍ୟେକର ଗୁରୁତ୍ବକୁ ବିଚାର କରି ନିମ୍ନୋକ୍ତ ମଧ୍ୟରୁ କେଉଁ କ୍ରମଟି ଠିକ୍ ?

- |          |          |
|----------|----------|
| (A) abcd | (B) bcad |
| (C) badc | (D) acdb |

For effective teaching and learning of science :

- (a) Well-equipped laboratory is required
- (b) Resourceful teachers are required
- (c) Low Teacher-pupil ratio is required
- (d) A good number of reference books should be available

Considering the importance of each of the above which one of the following sequences is correct ?

- |          |          |
|----------|----------|
| (A) abcd | (B) bcad |
| (C) badc | (D) acdb |

125. କ୍ୟୁପିକ ନାଇଟ୍ରେଟର ଦୂଳଟି ଅଣୁରେ ମୋଟ ଯେଉଁ ସଂଖ୍ୟକ ପରମାଣୁ ଅଛି, ନିମ୍ନୋକ୍ତ କେଉଁଟିରେ ମୋଟ ସେହି ସଂଖ୍ୟକ ପରମାଣୁ ଅଛି ?

- |                                      |                                    |
|--------------------------------------|------------------------------------|
| (A) ଏମୋନିୟମ ସଲଫେଟର ଗୋଟିଏ ଅଣୁ         | (B) ଏଲୁମିନିୟମ କାର୍ବୋନେଟର ଗୋଟିଏ ଅଣୁ |
| (C) ସୋଡ଼ିୟମ ବାଇକାର୍ବୋନେଟର ତିନୋଟି ଅଣୁ | (D) ପୋଟାସିୟମ କ୍ଲୋରେଟର ତାରୋଟି ଅଣୁ   |

Which one of the following contain(s) the same number of total atoms as that in two molecules of cupric nitrate ?

- (A) One molecule of ammonium sulphate
- (B) One molecules of aluminium carbonate
- (C) Three molecules of sodium bicarbonate
- (D) Four molecules of potassium chlorate

126. ଗୋଟିଏ ଘରେ ପ୍ରତ୍ୟେକ 40W ର ଦୂଳଟି ବିଦ୍ୟୁତ ବଲବ ଓ ପ୍ରତ୍ୟେକ 60W ର ଦୂଳଟି ବିଦ୍ୟୁତ ପଞ୍ଚା ଦିନକୁ 5 ଘଣ୍ଟା ଲେଖାଏଁ ଏକକାଳୀନ ବ୍ୟବହାର ହେଲେ ଏପ୍ରିଲ ମାସରେ କେତେ ଯୁନିଟ ବିଦ୍ୟୁତ ଶକ୍ତି ବ୍ୟୟିତ ହେବ ?

- |        |        |        |        |
|--------|--------|--------|--------|
| (A) 15 | (B) 20 | (C) 30 | (D) 40 |
|--------|--------|--------|--------|

If two electric bulbs of 40W each and two electric fans of 60W each are used simultaneously for 5 hours a day, how many units of electrical energy shall be consumed in the month of April ?

- |        |        |        |        |
|--------|--------|--------|--------|
| (A) 15 | (B) 20 | (C) 30 | (D) 40 |
|--------|--------|--------|--------|

127. ବିଜ୍ଞାନ ସମ୍ବନ୍ଧୀୟ ଅନୁଧାନ କ୍ଷେତ୍ରରେ :

- (a) ନିଜେ ଲିପିବଦ୍ଧ କରିଥିବା ତଥ୍ୟକୁ ଭିତ୍ତି କରି ସିଦ୍ଧାନ୍ତ ନେଇ ହେବ ।
- (b) ନିଜର ବନ୍ଧୁମାନେ ଲିପିବଦ୍ଧ କରିଥିବା ତଥ୍ୟକୁ ଭିତ୍ତି କରି ସିଦ୍ଧାନ୍ତ ନେଇ ହେବ ।
- (c) ବିଶେଷଜ୍ଞମାନଙ୍କ ଦ୍ୱାରା ଲିପିବଦ୍ଧ ତଥ୍ୟକୁ ଭିତ୍ତିକରି ସିଦ୍ଧାନ୍ତ ନେଇ ହେବ ।

ନିମ୍ନୋକ୍ତ ମଧ୍ୟରୁ କେଉଁଟି ଉଚିତ ପଦକ୍ଷେପ ହେବ ?

- |                     |                     |
|---------------------|---------------------|
| (A) କେବଳ (a)        | (B) କେବଳ (c)        |
| (C) ଉତ୍ତମ (a) ଓ (c) | (D) ଉତ୍ତମ (a) ଓ (b) |

In science related studies :

- (a) Inference can be drawn from the tabulated data made by self.
- (b) Inference can be drawn from the data tabulated by own friends.
- (c) Inference can be drawn from the data tabulated by a group of experts.

Which one of the following would be the right step ?

- |                      |                      |
|----------------------|----------------------|
| (A) (a) only         | (B) (c) only         |
| (C) Both (a) and (c) | (D) Both (a) and (b) |

128. କେଉଁଟି ଠିକ୍ ନୁହେଁ ?

- |                                     |                                      |
|-------------------------------------|--------------------------------------|
| (A) ନ୍ୟଷ୍ଟି – ଗୁଣସୂତ୍ର – ଜିନ୍       | (B) ଜୀବକୋଷ – ପ୍ରୋଟୋପ୍ଲାଜମ୍ – ନ୍ୟଷ୍ଟି |
| (C) ଜୀବକୋଷ – କୋଷଟିଲ୍ – ସାଇଟୋପ୍ଲାଜମ୍ | (D) ଜୀବକୋଷ – ସାଇଟୋପ୍ଲାଜମ୍ – ନ୍ୟଷ୍ଟି  |

Which one is not correct ?

- |                                      |                                 |
|--------------------------------------|---------------------------------|
| (A) Nucleus – Chromosome – Gene      | (B) Cell – Protoplasm – Nucleus |
| (C) Cell – Cell membrane – Cytoplasm | (D) Cell – Cytoplasm – Nucleus  |

129. (a) ପ୍ରତୀକ, କେବଳ ମୌଳିକ ପାଇଁ ପ୍ରୟୁଜ୍ୟ ।

(b) ସଂକେତ, କେବଳ ଯୌଗିକ ପାଇଁ ପ୍ରୟୁଜ୍ୟ ।

(A) (a) ଠିକ୍ ଏବଂ (b) ଛୁଲ

(C) ଉତ୍ତମ (a) ଓ (b) ଠିକ୍

(a) Symbol is applicable to elements only.

(b) Formula is applicable to compounds only.

(A) (a) is correct and (b) is wrong

(B) (b) is correct and (a) is wrong

(C) Both (a) and (b) are correct

(D) Both (a) and (b) are wrong

130. କେଉଁ ମାନର ବଚକରାଟି ଦୋକାନଗୁଡ଼ିକରେ ଉପଲବ୍ଧ ନୁହେଁ ?

- |               |               |
|---------------|---------------|
| (a) 100 ଗ୍ରା. | (b) 200 ଗ୍ରା. |
| (c) 250 ଗ୍ରା. | (d) 500 ଗ୍ରା. |

ଏହା ଏକ —

- |                          |                         |
|--------------------------|-------------------------|
| (A) ଜ୍ଞାନଭିତ୍ତିକ ପ୍ରଶ୍ନ  | (B) ବୋଧଭିତ୍ତିକ ପ୍ରଶ୍ନ   |
| (C) ପ୍ରୟୋଗଭିତ୍ତିକ ପ୍ରଶ୍ନ | (D) କୌଣସିଭିତ୍ତିକ ପ୍ରଶ୍ନ |

Weight of which denomination is not available in the shops ?

- |           |           |
|-----------|-----------|
| (a) 100 g | (b) 200 g |
| (c) 250 g | (d) 500 g |

This is a/an :

- |                                |                                  |
|--------------------------------|----------------------------------|
| (A) Knowledge-based question   | (B) Understanding-based question |
| (C) Application-based question | (D) Skill-based question         |

131. ନିମ୍ନୋକ୍ତ କେଉଁ କ୍ଷେତ୍ରରେ ଏକ ଭିନ୍ନ ଧରଣର ପରିବର୍ତ୍ତନ ଘଟେ ?

- |                                      |                                   |
|--------------------------------------|-----------------------------------|
| (A) ଜଳରେ ତୁନ ମିଶାଇଲେ                 | (B) ଜଳରେ ସୋଡ଼ିୟମ କ୍ଲୋରାଇଡ ମିଶାଇଲେ |
| (C) ଜଳରେ ଘନ ସଲଫ୍ଟ୍‌ରିକ୍ ଅମ୍ଲ ମିଶାଇଲେ | (D) ଜଳରେ ଗୁରୁତ୍ବକାରୀ ମିଶାଇଲେ      |

In which one of the following cases a different kind of change occurs ?

- |   |
|---|
| (A) Adding lime to water                        |
| (B) Adding sodium chloride to water             |
| (C) Adding concentrated sulphuric acid to water |
| (D) Adding glucose to water                     |

132. ନିମ୍ନୋକ୍ତ କେଉଁ କ୍ଷେତ୍ରରେ ଅବତଳ ଦର୍ପଣରେ ସଲଖ ପ୍ରତିବିମ୍ବ ଗଠିତ ହୋଇଥାଏ ?

ଯେତେବେଳେ ବନ୍ଦୁ :

- |              |                      |
|--------------|----------------------|
| (A) C ରେ ଥାଏ | (B) C ଓ F ମଧ୍ୟରେ ଥାଏ |
| (C) F ରେ ଥାଏ | (D) F ଓ P ମଧ୍ୟରେ     |

In which one of the following cases an erect image is formed in a concave mirror ?

When the object is :

- |          |                     |
|----------|---------------------|
| (A) At C | (B) Between C and F |
| (C) At F | (D) Between F and P |

133. (a) ପ୍ରତ୍ୟାଶିତ ଶିକ୍ଷଣ ଫଳାଫଳ

(b) ପ୍ରତ୍ୟାଶିତ ଆଚରଣଗତ ପରିବର୍ତ୍ତନ

(c) ନିର୍ଦ୍ଦିଷ୍ଟ ଶିକ୍ଷାଦାନ ଲକ୍ଷ୍ୟ

(A) (a) ଓ (b) ଏକା ଅଟେ ଏବଂ (c) ଭିନ୍ନ ଅଟେ

(B) (a), (b) ଓ (c) ପରମ୍ପରା ଠାରୁ ଭିନ୍ନ

(C) (a), (b) ଓ (c) ଏକା ଅଟନ୍ତି

(D) (a) ଓ (c) ଏକା ଅଟେ ଏବଂ (b) ଭିନ୍ନ ଅଟେ

(a) Expected Learning Outcomes

(b) Expected Behavioral Changes

(c) Specific Instructional Objectives

(A) (a) and (b) are the same and (c) is different

(B) (a), (b) and (c) are different from each other

(C) (a), (b) and (c) are the same

(D) (a) and (c) are the same and (b) is different

134. କେଉଁଟି ଅନ୍ୟ ତିନୋଟି ଠାରୁ ଭିନ୍ନ ?

(A) ଲାଲ ଗ୍ରାହି

(B) ପିତୁୟଟାରି ଗ୍ରାହି

(C) ସ୍ୱେଦ ଗ୍ରାହି

(D) ତେଲ ଗ୍ରାହି

Which one is different from the other three ?

(A) Salivary gland

(B) Pituitary gland

(C) Sweat gland

(D) Oil gland

135. ରାସାୟନିକ ସମୀକରଣ ଗୁଡ଼ିକରେ ନିମ୍ନମୁଖୀ ତୀର ଚିହ୍ନ ଏବଂ ଉର୍ଧ୍ଵମୁଖୀ ତୀର ଚିହ୍ନ :

(a) କେବଳ ପ୍ରତିକାରକଗୁଡ଼ିକର କଡ଼ରେ ଲେଖାଯାଏ ।

(b) କେବଳ ଉପାଦଗୁଡ଼ିକର କଡ଼ରେ ଲେଖାଯାଏ ।

(c) ଉତ୍ତର ପ୍ରତିକାରକ ଓ ଉପାଦଗୁଡ଼ିକର କଡ଼ରେ ଲେଖାଯାଏ ।

(A) (a) ଠିକ୍ ଏବଂ (b) ଓ (c) ଛୁଲ

(B) (b) ଠିକ୍ ଏବଂ (a) ଓ (c) ଛୁଲ

(C) (c) ଠିକ୍ ଏବଂ (a) ଓ (b) ଛୁଲ

(D) ଉପରୋକ୍ତ (a), (b) ଓ (c) ଉଲି କୌଣସି ନିଷ୍ପତ୍ତି ନାହିଁ

In chemical equations downward arrow and upward arrow are written :

- (a) By the sides of the reactants only
- (b) By the sides of the products only
- (c) By the sides of both the reactants and products
- (A) (a) is correct and (b) and (c) are wrong
- (B) (b) is correct and (a) and (c) are wrong
- (C) (c) is correct and (a) and (b) are wrong
- (D) There are no rules as stated in (a), (b) and (c) above

136. (a) ଗଠନକ୍ଷମ (ଗଠନାମୂଳିକ) ମୂଲ୍ୟାଯନ ଶିକ୍ଷାଦାନର ଦୁର୍ବଳ ବିଦ୍ୱାଗୁଡ଼ିକୁ ଚିହ୍ନଟ କରିଥାଏ ।
- (b) ଗଠନକ୍ଷମ ମୂଲ୍ୟାଯନ ଶିକ୍ଷଣର ଦୁର୍ବଳ ବିଦ୍ୱାଗୁଡ଼ିକୁ ଚିହ୍ନଟ କରିଥାଏ ।
- (c) ଗଠନକ୍ଷମ ମୂଲ୍ୟାଯନ ଦ୍ୱାରା ସମୟର ଅଧିକାର ଅପରାଧ ହୋଇଥାଏ ।
- (d) ସାମଗ୍ରିକ ମୂଲ୍ୟାଯନ ବ୍ୟବସ୍ଥା ଥିବା ବେଳେ ଗଠନକ୍ଷମ ମୂଲ୍ୟାଯନର କୌଣସି ଆବଶ୍ୟକତା ନାହିଁ ।
- |                                      |                                      |
|--------------------------------------|--------------------------------------|
| (A) (a) ଓ (b) ଠିକ୍ ଏବଂ (c) ଓ (d) ଭୁଲ | (B) (c) ଓ (d) ଠିକ୍ ଏବଂ (a) ଓ (b) ଭୁଲ |
| (C) (d) ଠିକ୍ ଏବଂ (a), (b) ଓ (c) ଭୁଲ  | (D) (b) ଠିକ୍ ଏବଂ (a), (c) ଓ (d) ଭୁଲ  |
- (a) Formative evaluation diagnoses the weak spots of teaching.
  - (b) Formative evaluation diagnoses the weak spots of learning.
  - (c) Time is unnecessarily wasted by formative evaluation.
  - (d) There is no need of formative evaluation when there is provision for summative evaluation.
- (A) (a) and (b) is correct and (c) and (d) are wrong
  - (B) (c) and (d) is correct and (a) and (b) are wrong
  - (C) (d) is correct and (a), (b) and (c) are wrong
  - (D) (b) is correct and (a), (c) and (d) are wrong

137. ଗୋଟିଏ ମନ୍ତରକାରର ପ୍ରାରମ୍ଭିକ ପରିବେଗ  $25 \text{ ms}^{-1}$  ଥିଲା । ବ୍ରେକ୍ ପ୍ରୟୋଗ କରିବାରୁ କାରଟି 2 ସେକେଣ୍ଟରେ ଛିରାବସାନ୍ତ ଆସିଲା । କାରଟିର ଭୁରଣ କେତେ ଥିଲା ?
- |                            |                             |
|----------------------------|-----------------------------|
| (A) $12.5 \text{ ms}^{-2}$ | (B) $-12.5 \text{ ms}^{-2}$ |
| (C) $25 \text{ ms}^{-2}$   | (D) $-25 \text{ ms}^{-2}$   |

The initial velocity of a motor car was  $25 \text{ ms}^{-1}$ . On applying brake it came to rest in 5 seconds. What was the acceleration of the car ?

- (A)  $12.5 \text{ ms}^{-2}$       (B)  $-12.5 \text{ ms}^{-2}$   
(C)  $25 \text{ ms}^{-2}$       (D)  $-25 \text{ ms}^{-2}$

138.  $\text{XY}_2$  එක යෝගිකර සංකේත අත්‍ය, යෙඹුත්තේ X එක දාතු අව්‍ය යි අධාතු අත්‍ය | Y වී X ර යොජයා යි යාකමේ :



$XY_2$  is the formula of a compound in which X is a metal and Y is a non-metal. The valencies of Y and X respectively may be :



139. କେଉଁ ପଞ୍ଚତିରେ ବିଦ୍ୟାର୍ଥୀଙ୍କ ନୃତ୍ୟ ଜ୍ଞାନ ଆବିଷ୍ଳାର ଓ ଗଠନ କରିବା ପାଇଁ ଅଧୁକ ସ୍ମୟୋଗ ଉପଲବ୍ଧ ହୋଇଥାଏ ?



In which method ample opportunities are available to the learner to discover and construct new knowledge :



140. ରୋଗର କାରକକ ଭିଡ଼ି କରି କେଉଁଟି ଅନ୍ୟ ତିନୋଟି ଠାର ଭିନ୍ନ ?

Basing on the causative factor of the disease which one is different from the other three?

- |                 |                 |
|-----------------|-----------------|
| (A) Polio       | (B) Dysentery   |
| (C) Chicken pox | (D) Hepatitis-B |

141. କେଉଁର ଏକକ ଅନ୍ୟ ତିନୋଟିର ଏକକ ଠାରୁ ଭିନ୍ନ ?

- |           |           |
|-----------|-----------|
| (A) ଚାପ   | (B) ବଳ    |
| (C) ସଂଘାତ | (D) ଘୂରତା |

The unit of which one is different from that of the other three ?

- |              |              |
|--------------|--------------|
| (A) Pressure | (B) Force    |
| (C) Thrust   | (D) Buoyancy |

142. ବିଜ୍ଞାନ ମତ ଅନୁଯାୟୀ ନିରାପଦ ପାନୀୟ ଜଳ ପାଇବା ପାଇଁ ନିମ୍ନୋକ୍ତ ମଧ୍ୟରୁ କେଉଁ ପଢ଼ିବି ଉଚ୍ଚୁଷ୍ଟ ଭାବରେ ଉପରେ ଥିଲା ?

- (a) ଜଳକୁ ଫୁଟାଇ ସାରି ଛାଣିବା
- (b) ଜଳକୁ ଛାଣି ସାରି ଫୁଟାଇବା
- (c) ଜଳକୁ ଛାଣି ସାରି ଫୁଟାଇବା ପରେ ପୁଣି ଛାଣିବା
- (d) ଜଳରେ କ୍ଲୋରିନ୍ ବଟିକା ପକାଇ ପିଇପାରିବ

ଏହା ଏକ :

- |                          |                        |
|--------------------------|------------------------|
| (A) ଜ୍ଞାନଭିତ୍ତିକ ପ୍ରଶ୍ନ  | (B) ବୋଧଭିତ୍ତିକ ପ୍ରଶ୍ନ  |
| (C) ପ୍ରୟୋଗଭିତ୍ତିକ ପ୍ରଶ୍ନ | (D) କୌଶଳଭିତ୍ତିକ ପ୍ରଶ୍ନ |

According to science, which one of the following method is better to make water safe for drinking ?

- (a) Filter the water after boiling
- (b) Boil the water after filtering
- (c) Filter, then boil and again filter the water
- (d) One can drink after putting chorine tablet in water

This is a/an :

- (A) Knowledge-based question
- (B) Understanding-based question
- (C) Application-based question
- (D) Skill-based question

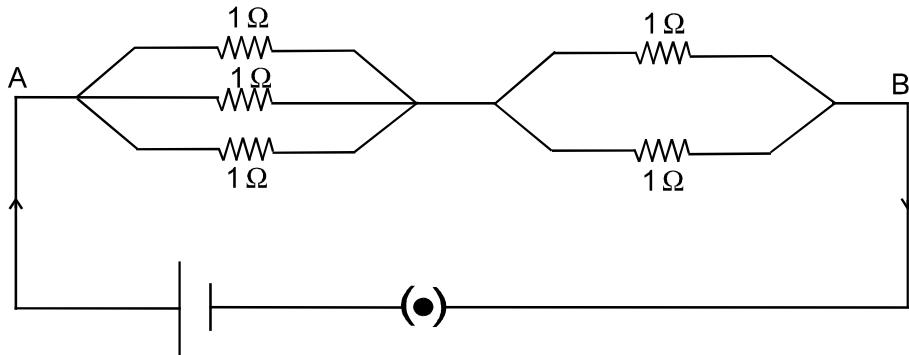
143. ସବଳକ୍ଷାର ଓ ଦୁର୍ବଳ ଅମ୍ଲର ଯୋଡ଼ା କେଉଁଟି ?

- |                            |                              |
|----------------------------|------------------------------|
| (A) NaOH and HCl           | (B) KOH and $H_2SO_4$        |
| (C) $NH_4OH$ and $H_2CO_3$ | (D) $Ca(OH)_2$ and $H_2SO_3$ |

Which one is the pair of strong base and weak acid ?

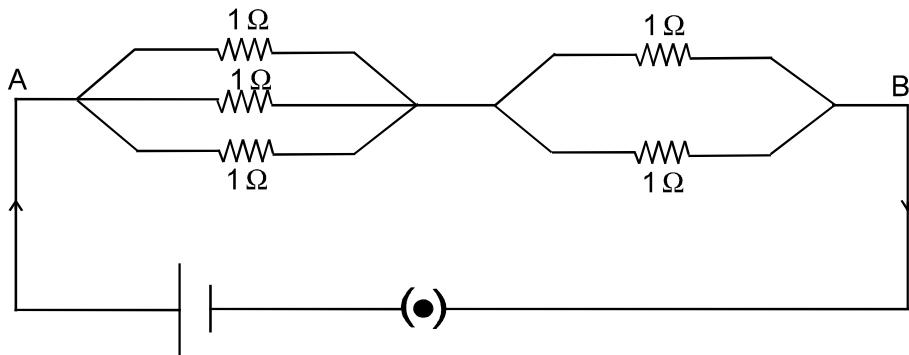
- |                            |                              |
|----------------------------|------------------------------|
| (A) NaOH and HCl           | (B) KOH and $H_2SO_4$        |
| (C) $NH_4OH$ and $H_2CO_3$ | (D) $Ca(OH)_2$ and $H_2SO_3$ |

144. ତଳେ ଦିଆଯାଇଥିବା ପରିପଥରେ A ଓ B ବିନ୍ଦୁ ମଧ୍ୟରେ ସମ୍ମୂହ (ପରିଶାମୀ) ପ୍ରତିରୋଧ କେତେ ହେବ ?



- |                       |                       |
|-----------------------|-----------------------|
| (A) $\frac{1}{6}$ ଓମ୍ | (B) $\frac{5}{6}$ ଓମ୍ |
| (C) 2 ଓମ୍             | (D) 3 ଓମ୍             |

What will be the equivalent resistance between the points A and B in the circuit given below ?



- |                       |                       |           |           |
|-----------------------|-----------------------|-----------|-----------|
| (A) $\frac{1}{6}$ Ohm | (B) $\frac{5}{6}$ Ohm | (C) 2 Ohm | (D) 3 Ohm |
|-----------------------|-----------------------|-----------|-----------|

145. ଭାରତର ସାଧାରଣ ବିଦ୍ୟାକୟଗୁଡ଼ିକର ଉଚ୍ଚ ପ୍ରାଥମିକ ଶ୍ରେଣୀଗୁଡ଼ିକରେ ବିଜ୍ଞାନ ଶିକ୍ଷାଦାନ ନିମିତ୍ତ ନିମ୍ନୋକ୍ତ ମଧ୍ୟରୁ ଶିକ୍ଷାଦାନ ପଢ଼ିଟି ବାଞ୍ଚନୀୟ ?

- |                      |                            |
|----------------------|----------------------------|
| (A) ବିଜ୍ଞାନାଗାର ପଢ଼ି | (B) ପ୍ରଦର୍ଶନ ପଢ଼ି          |
| (C) ପ୍ରୋଜେକ୍ଟ ପଢ଼ି   | (D) ସମସ୍ୟା ସମାଧାନମୂଳକ ପଢ଼ି |

Which one of the following methods is desirable for teaching science in the upper primary classes of the general schools in India ?

- |                       |                            |
|-----------------------|----------------------------|
| (A) Laboratory Method | (B) Demonstration Method   |
| (C) Project Method    | (D) Problem solving Method |

146. କେଉଁଗୁଡ଼ିକ ଭିନ୍ନ ଶ୍ରେଣୀ ହୁଅ ?

- |                                  |                     |
|----------------------------------|---------------------|
| (A) ହୃଦ, ଶୁକ୍ର, ପୃଥିବୀ, ମର୍ଚ୍ଚିଲ | (B) ଗ୍ୟାସ ଜିଆଣୁସମୂହ |
| (C) ଅନ୍ତଃ ଗ୍ରହ ସମୂହ              | (D) ପାର୍ଥବଗ୍ରହ ସମୂହ |

Which group belongs to a different class ?

- |                                 |                         |
|---------------------------------|-------------------------|
| (A) Mercury, venus, Earth, Mars | (B) Gas giants          |
| (C) Inner Planets               | (D) Terrestrial planets |

147. ପାର୍ଶ୍ଵ ବିଷାପନର ମାତ୍ରା :

- |  |
|--|
| (A) କେବଳ ଆପତନ କୋଣ ଉପରେ ନିର୍ଭର ଶାଲ                          |
| (B) କେବଳ ମାଧ୍ୟମଗୁଡ଼ିକର ପ୍ରକୃତି ଉପରେ ନିର୍ଭରଶୀଳ              |
| (C) ଉତ୍ସ ଆପତନ କୋଣ ଏବଂ ମାଧ୍ୟମଗୁଡ଼ିକର ପ୍ରକୃତି ଉପରେ ନିର୍ଭରଶୀଳ |
| (D) ଉପରୋକ୍ତ କୌଣସିଟି ଉପରେ ନିର୍ଭରଶୀଳ ନୁହେଁ                   |

The degree of lateral displacement :

- |  |
|--|
| (A) Is dependent only on the angle of incidence                              |
| (B) Is dependent only on the natures of the media                            |
| (C) Is dependent on both the angle of incidence and the natures of the media |
| (D) Is not dependent on any of the above                                     |

