

Primary Education Completion Examination, 2013

MATHEMATICS

Time—2 hours 30 minutes

Full marks—100

*[N.B.—The figures in the right margin indicate full marks of the questions.
Answer ten questions including questions No. 1, 2, 3 and 13.]*

Marks

1×10=10

1. Write the correct answer in the answer script :

- (i) What will be the result if you multiply 1112 by 99?
 (a) 118800 (b) 118080
 (c) 110088 (d) 881100
- (ii) What will be the result if you divide 99000 by 10?
 (a) 99 (b) 990
 (c) 9900 (d) 99.0
- (iii) Picking 8 mangoes from each of the three trees, four friends divided them among themselves. Which one of the following will you follow to find—"How many mangoes did each friend get"?
 (a) $3 + 8 \times 4$ (b) $8 \times 3 \div 4$
 (c) $(8 + 3) \times 4$ (d) $(3 \times 8) \div 4$
- (iv) A cricket player received 48, 52, 53 runs in three one-day matches. What is the average run of the player?
 (a) 41 runs (b) 49 runs
 (c) 50 runs (d) 51 runs
- (v) Which of the following is the prime factorization of 60?
 (a) 2×30 (b) 30×2
 (c) $2 \times 3 \times 10$ (d) $2 \times 2 \times 3 \times 5$
- (vi) Which of the following is an open sentence?
 (a) $2 \times X = 16 \times 8$ (b) $2 \times 4 = 16 \times 8$
 (c) $1 + 2 + 3 + 4 = 10$ (d) $100 \div 2 = 50$
- (vii) $1\frac{3}{7} + 1\frac{1}{7} = ?$
 (a) $2\frac{2}{7}$ (b) $1\frac{4}{7}$
 (c) $\frac{6}{7}$ (d) $2\frac{4}{7}$

[Please turn over

(viii) $0.1 \times 0.01 = ?$

(a) 0.001

(b) 0.0001

(c) 0.01

(d) 1.000

(ix) If it is 9:15 pm; what is the international time?

(a) 9 hours 15 minutes

(b) Quarter past nine

(c) 21 hours 15 minutes

(d) 9:15 pm

(x) In which of these shapes below, is every angle a right angle?

(a) Rectangle & rhombus

(b) Rhombus & parallelogram

(c) Square & rectangle

(d) Square & rhombus

2. Answer in short :

1×10=10

(a) If 10 pens cost Tk. 40; what is the cost of 15 pens?

(b) Dividing a roti, Anika has got $\frac{2}{3}$ portion and Ayra has got $\frac{2}{5}$ portion. Who has got more roti?

(c) The cost price of a book is Tk. 100 and the selling price is Tk. 120. What is the percentage of profit?

(d) Express 5 kilometres in centimetre.

(e) A blackboard is rectangular in shape. What type of angles does it have?

(f) $55.36 \div 10 = ?$

(g) Express $\frac{3}{5}$ as percentage.

(h) Is the year 2012 leap year?

(i) What is 'Class Difference'?

(j) How many main components does a computer have?

3. If 100 litchis cost Tk. 200, then—

2×5=10

(a) What is the cost of 1 litchi?

(b) What is the cost of 25 litchis?

(c) What is the cost of 75 litchis?

(d) How many litchis can be bought for Tk. 10?

(e) How many litchis can be bought for Tk. 50?

4. 16 persons need 56 kg. of rice in 1 week. How much rice will be needed for 24 persons in four weeks? 10
5. The average age of three children and their father is 17 years. The average age of these children and their mother is 13 years. Mother's age is 22 years; what is the father's age? 10
6. Which smallest number leaves respectively the remainder 6, 12, 24 when it is divided by 12, 18, 30? 10
7. In the annual examination, Rony and Panna respectively obtained $\frac{3}{4}$ and $\frac{2}{3}$ portion of the total marks. Rony obtained 50 marks more than Panna. What were the total marks and who obtained what marks? 10
8. 0.15 portion of a bamboo is in mud, 0.65 portion is in water. The length of the bamboo above water is 4 metre; what is the length of the bamboo as a whole? 10
9. A pen was bought for 60 taka and sold for 54 taka. What is the percentage of loss? 10
10. A rectangular region is formed by two adjoining and non-overlapping triangular regions of the same size; the length of the rectangle is 16 metres and breadth is 12 metres. What is the area of the rectangular region? What is the area of a triangular region? 10
11. Convert 4 years 3 months 10 days into hours. 10
12. The marks obtained by 20 students in Mathematics are given below. Classify the data— 10
- 75, 63, 75, 75, 71, 75, 63, 72, 72, 69,
72, 70, 61, 75, 60, 71, 69, 63, 65, 69.
13. (a) Draw a quadrilateral. Measure the four angles of the quadrilateral and find the sum of their measures. $1+2+1=4$
- (b) Define the following with diagram (any two): $3 \times 2 = 6$
- Square, rectangle, rhombus.