

Model Question

Subject: Mathematics

Time: 2 hours 30 minutes

Total marks: 100

[N.B: Figures in the right side indicate full marks of the questions. Answer any 10 including questions No. 1,2,3,5 and 13]

1. Write down the correct answer in your answer script: 1×10=10
- i. The price of one pencils is 5 taka, what is the price of 6 pencil?
 a) 30 taka b) 40 taka c) 50 taka d) 60 taka
 - ii. Average of five number is 30, what is the total of them.
 a) 6 b) 30 c) 60 d) 150
 - iii. How many factors of 24?
 a) 6 b) 8 c) 10 d) 12
 - iv. Convert into improper fraction $21\frac{3}{4}$?
 a) $\frac{10}{4}$ b) $\frac{3}{8}$ c) $\frac{11}{4}$ d) $\frac{11}{8}$
 - v. $15 \times 3 - a = 30$, Her what is the value of 'a'?
 a) 15 b) 24 c) 36 d) 72
 - vi. Loss or profit depends on which price?
 a) Cost price b) Selling price
 c) Cost & Selling price d) None of them
 - vii. How many quintals in 79600 kg?
 a) 697 quintal b) 796 quintal c) 7960 quintal d) 79600quintal
 - viii. How many days in Chaitra?
 a) 28 days b) 29 days c) 30 days d) 31 days
 - ix. Diameter is how many times of radius?
 a) 1 b) 2 c) 3 d) 4
 - x. Which button you will press to shut down calculator?
 a) b) c) d)

2. Answer in short:

1×10=10

- a) Write down the formula of divisor in case of division without remainder.
- b) In unitary method, you will calculate how many things price at first?
- c) What is the average of 14, 15, 16, 17 and 18?
- d) If there is no common prime factor then what is the G.C.D of two or more numbers?
- e) Write down the formula to find out rate of interest?
- f) 1 Metric ton = How many quintals?
- g) From which year counting of leap year was started?
- h) What do you mean by population density?
- i) Radius is how many parts of diameter?
- j) What do you mean by calculator?

3. One quintal of rice cost 4200 taka.

2×5=10

- a) 1 quintal equals to how many kg?
- b) What is the price of 10 quintal?
- c) What is the price of 1 kg?
- d) What is the price of 5 kg?
- e) What is the difference of the price of 5 kg and 1 kg rice?

4. In a girl's hostel 16 students have food for 25 days. Some new students came in; as a result the food was consumed in 20 days. What is the number of new students?

10

5. The sum of seven numbers is 401. The average of the first three numbers is 56; the average of the last three numbers is 58.

2×5=10

- a) Write down the formula of average.
- b) What is the sum of first three numbers?
- c) What is the sum of last three numbers?
- d) What is the sum of first and last three numbers?
- e) Find out the fourth numbers?

6. 7 added to which smallest number will make the sum exactly divisible by 15, 18, 20, 24 and 32?

10

7. Mr. Sajjad had 2400 taka. He donated $\frac{5}{12}$ portion of his money to an orphanage $\frac{3}{8}$ portion of an educational institution. What amount of money was he left with? 10
8. Everyone of 40 students contributed 12.75 taka. The money thus raised was divided equally among 8 poor persons. What money did each poor person get? 10
9. Rate of interest being 6%, what amount of taka shall earn 180 taka as interest in 5 years? 10
10. The length of one side of a square region is 65 centimetre. What is the area? 10
11. Convert 5 days 8 hours 15 minutes into seconds. 10
12. The distances by road of five cities from Dhaka (in nearest multiples of ten kilometre) are given below .Draw a bar graph based on the data : 10

City	Distance
Chittagong	290
Rangpur	440
Khulna	330
Rajshahi	310
Sylhet	400

13. a) Draw quadrilateral. Measure the length of its four sides and two diagonals. 4
- b) Write the definitions with figure (any two): $3 \times 2 = 6$
 Parallelogram, Diameter, Centre