



ITL Public School

Summative Assessment 1(2015-16)

Date: 16.09.15

Class: VIII

Mathematics – Set A

Time: 3 hrs

M. M: 90

General Instructions:

1. Read the question paper carefully and answer legibly.
2. All questions are compulsory.
3. The question paper consist of 31 questions divided into four sections A,B,C and D
4. Section A comprises of 4 question of 1 mark each, section B comprises of 6 questions of 2 marks each, Section C comprises of 10 questions of 3 marks each and Section D comprises of 11 questions of 4 marks each
5. Use of calculators is not permitted.

Section – A

- Q1. Using properties, find the sum of: $1 + 3 + 5 + 7 + 9 + 11 + 13$. 1
- Q2. Solve $7x + 4 = 18$ 1
- Q3. A die is rolled once. Find the probability of getting a prime number. 1
- Q4. Draw a concave polygon. 1

Section – B

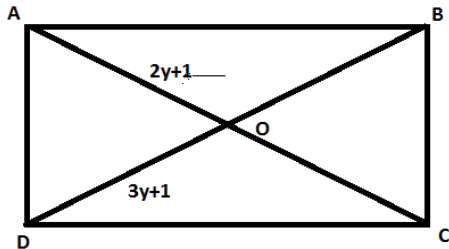
- Q5. Construct a square EFGH of side 6 cm. 2
- Q6. If x and y vary directly then complete the given table: 2

X	1	2	?	4	?	6
Y	5	10	15	?	25	?

- Q7. Check whether $y=3$ is a solution of the given equation or not. 2
$$\frac{6y-4}{9y+1} = \frac{1}{2}$$
- Q8. Find the number of sides of a regular polygon whose each exterior angle measure 45° . 2
- Q9. Add the additive inverse of $\frac{-5}{6}$ and the multiplicative inverse of $\frac{2}{3}$ 2
- Q10. Find the square root of 18225. 2

Section – C

- Q11. There are 25 blue balls, 20 green balls and 15 red balls. Find the probability of getting 3
1) A blue ball
2) A ball which is not red
3) A green ball
- Q12. Construct a Quadrilateral MNOP where $MN = 6.2$ cm, $NO = 5.6$ cm, $MP = 8$ cm, $\angle M = 85^\circ$ and $\angle N = 120^\circ$. 3
- Q13. A bus fare for 112 km is Rs. 728. How much will be the fare for 240 km? 3

- Q14. a) The smallest member of a Pythagorean triplet is 16. Find the other two members. 2
- b) How many numbers lie between the square of 25 and 26. 1
- Q15. By which smallest number should we divide 1188 to make it a perfect cube? Find the cube root of number so obtained. 3
- Q16. Construct a rhombus whose diagonals are 5.5 cm and 7.8 cm. 3
- Q17. Solve for m 3
- $$\frac{6}{2m-(3-4m)} = \frac{2}{3}$$
- Q18. In the given rectangle ABCD AC and BD are diagonals. If $AO = 2y+3$ and $DO = 3y+1$. Find the length of the diagonal. 3
- 
- Q19. Using properties solve 3
- 1) $\frac{16}{21} \times \frac{14}{23} + \frac{16}{21} \times \frac{9}{23}$
- 2) $\frac{2}{3} \times \frac{-3}{12} - \frac{5}{6} + \frac{5}{12} \times \frac{2}{3}$
- Q20. The following table shows the pulse rate of a group of 50 people 3
- | Pulse Rate
(Beats per min) | Number of people
(frequency) |
|--------------------------------|---------------------------------|
| 60-65 | 4 |
| 65-70 | 12 |
| 70-75 | 20 |
| 75-80 | 10 |
| 80-85 | 4 |
- Represent this information in the form of a Histogram.
- Section – D**
- Q21. Find the cube root of 4
- i) 15625
- ii) 110592
- Q22. Father's present age is 4 times Soham's age. After 5 years, Father's age will be three times Soham's age. Find their present ages. 4
- Q23. Find the smallest square number that is divisible by each of the numbers 8, 15 and 20. 4

- Q24. Construct a Quadrilateral PQRS where $PQ = 6.8 \text{ cm}$, $QR = 7 \text{ cm}$, $\angle P = 110^\circ$
 $\angle Q = 70^\circ$ and $\angle R = 130^\circ$ 4

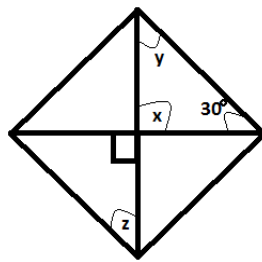
- Q25. The table shows the choice of food of a group of people 4

Favorite food	North Indian	South Indian	Chinese	others	Total
No. Of People	30	40	25	25	120

Represent the above information with the help of a Pie chart.

- Q26. The students of class VIII collected some money for an orphanage. Each member gave as many rupees as there were members. If the total collection was Rs. 1764, how many members were there in the class? 4

- Q27. The given figure shows a parallelogram. Find the value of x , y and z : 4



- Q28. The measures of the two adjacent angles of a parallelogram are in the ratio 3:2. Find the measure of each of the angles of a parallelogram. 4

- Q29. Construct a rectangle whose opposite sides are 7.5 cm and 4.5 cm. Mention all the properties used in construction. 4

- Q30. Reema has a total of Rs. 590 as currency notes in the denominations of Rs. 50, Rs. 20 and Rs. 10. The ratio of the number of Rs. 50 notes and Rs. 20 notes is 3:5. If she has a total of 25 notes, how many notes of each denominations she has? 4

- Q31. A group of 7 people had enough food for a month. A few more people joined them and the food lasted for only 21 days. How many people joined them? 4
 Suggest any one way in which we can help a person in need.