ANGEL'S PUBLIC SCHOOL

SAMPLE PAPER
FINAL EXAMINATION SESSION 2019 – 20
CLASS – VII

TIME: 3 HRS **SUBJECT: MATHEMATICS** **M.M:80**

Name _____ **Roll no. _____**

GENERAL INSTRUCTIONS: –

(a) The question paper is divided into 4 sections: A,B,C and D.

(b) Section A comprises 10 questions of 1 mark each.

(c) Section B comprises 10 questions of 2 marks each.

(d) Section C comprises 6 questions of 4 marks each. Attempt only 5.

(e) Section D comprises 8 questions of 5 marks. Attempt only 6.

SECTION–A

1. The probability of a certain event is ____.

(a) 0 (b) 1 (c) $\frac{1}{2}$

2. The solution of the equation 5m+7=17 is m _____.

(a) 2 (b) 3 (c) 4

3. The perimeter of a regular hexagon is _____.

(a) 6 x side (b) 3 x side (c) 2 x side

4. The reciprocal of -5 is ____.

(a) 5 (b) 1 (c) $-\frac{1}{5}$

5. The formula to find the circumference of a circle is _____.

(a) πd (b) πr (c) πr

6. The standard form of 5,00,000 is ____.

(a) 5×10^6 (b) 5×10^5 (c) 5×10^7

7. The expression $z^2 + z$ is a ____.

(a) binomial (b) monomial (c) trinomial

8. The algebraic expression for one fourth of the product of numbers p and q is ____.

(a) $\frac{p}{4q}$ (b) $\frac{pq}{4}$ (c) $\frac{q}{4p}$

9. The number of faces of a triangular prism is ____.

(a) 6 (b) 5 (c) 8

10. If 10p=100 the value of p is _____.

(a) 6 (b) 10 (c) 7

SECTION–B

11. Write the following equations in the statement form.

(a) p+4=12 (b) $\frac{3m}{5}$

12. Show the terms and factors of the given equation with a tree diagram: $-ab+2b^2-3a^2$

13. If m=2, find the value of $\frac{5m}{2} - 4$.

14. Express 343 using exponential notation.

15. Simplify: $(6^2 \times 6^3) \times 6$

16. What is the circumference of a circular disc of radius 14 cm? ($\pi = \frac{22}{7}$)

17. Find the mode and median of the given data: 13,16,12,14,19,12,14,13,14.

18. Ashish studies for 4 hours,5 hours and 3 hours respectively on three consecutive days.

How many hours does he study on an average?

19. Subtract (a-b) from (a+b).

20. Solve the following equation by trial and error method.

5p+3=28

SECTION–C (ATTEMPT ANY FIVE)

21. A verandah of width 2.25 m is constructed all along outside a room which is 5.5 m long and 4 m wide.

Find the area of the verandah.

22. If z=10, find the value of z^3-3(z-10).

23. Simplify the given expression and find the value if x=2, x+7+4(x–5).

24. Check whether the value given in the brackets is a solution of the given equation or not.

4P-3=13(P=0)

25. Set up an equation and solve to find the unknown number.

Anwar thinks of a number. If he takes away 7 from $\frac{5}{2}$ of the number, the result is 23.

26. A path 5m wide runs along inside a square park of side 100 m. Find the area of the path. Also, find the cost of cementing it at the rate of Rs 250 per 10 m^2.

SECTION–D (ATTEMPT ANY SIX)

27. Through a rectangular field of length 90 m and breadth 60 m, two roads are constructed which are parallel to the sides and cut each other at right angles, through the centre of the fields. If the width of each road is 3 m, find the area covered by the roads.

28. There are 6 marbles in a box with numbers from 1 to 6 marked on each of them.

(a) What is the probability of drawing a marble with number 2?

(b) What is the probability of drawing a marble with number 5?

29. The enrolment in a school during six consecutive years was as follows.

1555,1765, 5434, 7765, 2109, 1111

Find the mean enrolment of the school for this period.

30. Solve the following: Ram says that he has 7 marbles more than five times the marbles Parmit has.

Ram has 37 marbles. How many marbles does Parmit have?

31. (a) Subtract $2a+5b^2$ $-2b$ from $2ab-10b$.

(b) Simplify, combining the like terms: $21a-5b+21a-10b$.

32. From the sum of $3x-y+11$ and $-y-11$, subtract $3x-y-11$.

33. Solve for 'x': (a) $3x+(-7x+3)-(5x-8)=21$ (b) $2y+8=32$

34. The circumference of a circle is 31.4 cm. Find the radius and area of a circle.