NEW AL WUROOD INTERNATIONAL SCHOOL, JEDDAH

(PEEVEES GROUP OF SCHOOLS, K.S.A.)
Affiliated to CBSE – New Delhi.
SUMMATIVE ASSESSMENT-II(2016 -2017)

Subject: Mathematics

Date: 07.03.2017 **Set:A** **Time: 2 Hours 30 Min**

Class: 8 **Sec: ____** **Max. Marks:90**

Name: _____ **Roll No. : _____**

Instructions to the Candidates:

- *All Questions are compulsory.*
- *The question paper consists of **39** questions divided into four sections A,B,C and D. **Section-A** comprises of **10** questions of **1 mark** each, **Section-B** comprises of **12** questions of **2 marks** each, **Section-C** comprises of **12** questions of **3 marks** each and **Section-D** comprises of **5** questions of **4 marks** each.*
- *There is no overall choice.*

SECTION-A

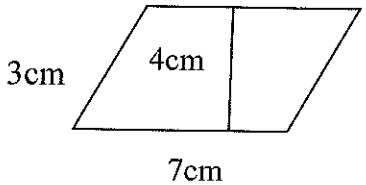
1. Which is a factor of $4x^2y + xy$ from the following?

   A) $4x^2y$ B) xy C) 4 D)2xy

2. If 'a' and 'b' are the lengths of opposite parallel sides of a trapezium and 'h' is the distance between the parallel lines, then its area is .....

   A) ½ (a+b) B) ½ ab C) ½ (a+b)h D) ½ h(a-b)

3. What is the area of the following parallelogram?



   A) $14cm^2$ B) $28cm^2$ C) $21cm^2$ D)$12cm^2$

4. What is the lateral surface area of a cube of side 'a'cm?

   A) $2a^2$ cm^2 B) $6a^2$ cm^2 C) $4a^2$ cm^2 D) a^2 cm^2

5. If the base area of a cylinder is 35 m^2 and its height is 6m, then its volume is …m^2

   A) 100 B) 200 C) 230 D)210

6. What is the side of a cube with volume 125 cm^2?

   A) 4cm B) 5cm C) 6cm D) 7cm

7. The value of $(2^0 + 3^0)^0$ is ……..

   A)2 B) 1 C) 0 D)5

8. The standard form of 230000000 is ……..

   A) $23x10^8$ B) $2.3x10^8$ C) $23x10^7$ D) $2.3x10^7$

9. If 'x' is directly proportional to 'y', then x= …….(consider 'k'as constant) .

   A) ky B) xy C)k/y D) y/k

10. The coordinates of the origin in a coordinate plane are….

    A)(0,0) B) (1,0) C) (0,1) D) (-1,0)

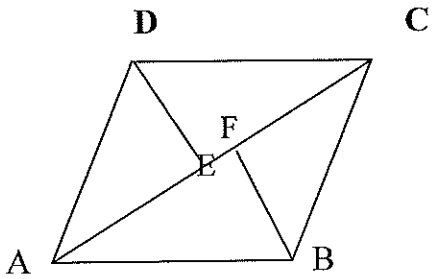
SECTION-B

11. Factorise: $x^2 + 7x + 12$

12. Factorise : $x^2 - 81$

13. What is the area of a rhombus whose diagonals are of lengths 12cm and 8.5cm?

14. Find the area of the quadrilateral ABCD. AC= 12cm, DE= 5cm, BF= 4, DE⊥AC and BF⊥AC.



15. A drum has a diameter of 70cm and depth 210 cm. Find the surface area of the drum.

16. Find the volume of a rectangular prism with height 12cm , length 9.5 cm and breadth 5cm.

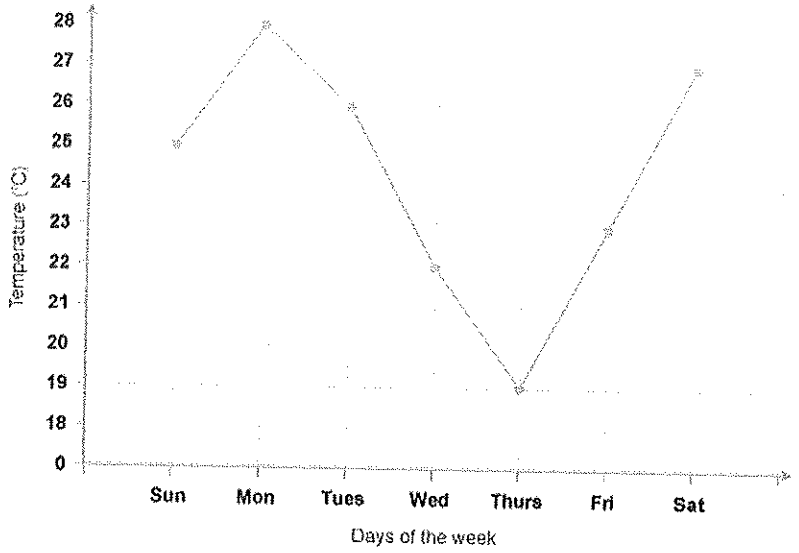
17. Find the volume of a cylinder of radius 2.1m and height 35cm.

18. Simplify: $(\frac{1}{4})^{-3} \times (\frac{1}{2})^{-2} - 3^3$

19. Rampochi spends Rs.2640 in 6 days, how much he will spend in the month of April?

20. A Truck travels 800 km in 10 hours . If the truck travels at the same speed , what distance will it cover in 13 hours?

21. The line graph represents the temperature of days in a week.



A) When is the hottest the day of the week?

B) What is the temperature on Wednesday?

22. Plot the following points on a graph sheet.

A(-2,5) and B(2,-7)

SECTION-C

23. Factorise the expression.

$x^2 + x - 56$

24. Using appropriate identities to factorise:

$x^2 + 14x + 49$

25. A park of radius 70 cm has a circular fountain of radius 17.5 cm . Calculate the total walking area available to people visiting the park.

26. The area of a trapezium is 240 cm^2 and the length of one of the parallel side is 18 cm and the height is 20 cm. Find the length of other parallel side.

27. A company is deciding which box to use for their merchandise. Box A measures 8cm x 7cm x 5cm. Box B measures 9cm x 6cm x 5cm. Which box requires more material to make?

28. Find the height of the cylinder if its volume is 1848 m^3 and the radius of its base is 7m.

29. Express the following in usual form.

A) 3.45×10^4 B) 2.4×10^{-6}

30. Find the value of 'x'.

$2^{2x} \times 8 = 128$

31. 120 men had food provision for 180 days.30 men die due to an epidemic. How long will the foods last?

32. A road map with a scale of 1 cm representing 36 km. When you drive on a road for 144 km. What would be the distance covered by you in the map?

33. Plot the following points on a graph paper and find the area of the enclosed figure.

A(1,1) B(5,1)C(5,6) and D(1,6)

34. Write the quadrant/axis of the following points lie.

A. (1,6) B. (0,5) C. (-2,-4) D. (2,0) E. (6,-2) F. (-2,3)

SECTION-D

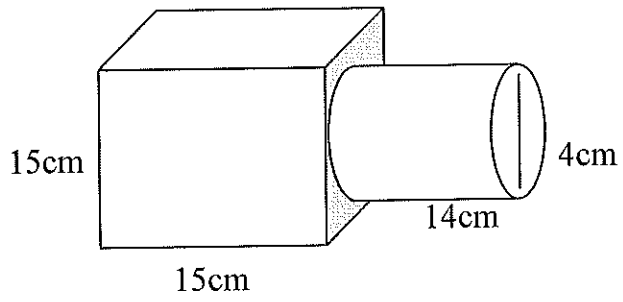
35. Factorise:

A)$(a- 2b)^2 + a- 2b$

B) $y^2 + 3xy + 3y + 9x$

36. Milk powder comes in a cylindrical container whose height is 20cm and base has a diameter of 14cm. the company places a label around the lateral surface of the container. If the label placed leaving a margin of 2cm from the top and bottom what is the area of the label. Find also volume of the a milk powder container.

37. Find the volume of the given shape.



38.Shan wants to deposit Rs 20000 in a bank at the rate of 10% per annum. Draw a linear graph showing the time and simple interest relationship.

39.Represent the following on a graph sheet.

x	1	2	3	4	5
y	1	4	9	16	25

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