NEW AL WUROOD INTERNATIONAL SCHOOL, JEDDAH

(PEEVEES GROUP OF SCHOOLS, K.S.A.)
Affiliated to CBSE – New Delhi.

SUMMATIVE ASSESSMENT- 2 (2016 -2017)

Subject:MATHEMATICS

Date: 01.03.17   Set:A   Time: 2 ½ Hours

Class: 7   Sec: ____   Max. Marks: 90

Name: _____   Roll No.   : _____

Instructions to the Candidates:

- All questions are compulsory
- The question paper consist of 37 questions divided into four sections A, B, C & D, Section A comprises of 10 questions of 1 mark each, Section B comprises of 10 questions of 2 mark each, Section C comprises of 8 questions of 3 mark each and Section D comprises of 9 questions of 4 mark each
- Use of calculator is not permitted

**Section A**   (10 X 1M=10M)

Fill in the blanks

1. Multiplicative inverse of $\frac{-25}{68}$ is ....
2. Fill in the blanks with <, > or =
   a) $\frac{1}{12}$ .... $\frac{1}{2}$
   b) $\frac{4}{10}$ .... $\frac{2}{5}$
3. $5 + \frac{-1}{2} = $ ....
4. The sum of angles of a triangle = ...
5. 'Two times of a number 'y' subtracted from 10' is represented algebraically as ....

Multiple choice questions

6. The perimeter of a square tile is 48cm. Then the measure of each sides of the square tile is
   ....cm

   a) 24 cm   b) 12cm   c) 98 cm   d) 192cm

7.
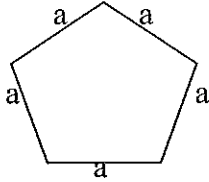
   Perimeter of the figure = ...

   a) $5a^2$ b) 6a   c) 5a   d) a^5

8. Subtract: $-2x^2$ from $4x^2$ = ...

   a)$6x^2$ b) $2x^2$ c) $-6x^2$ d) $-2x^2$

9. 8^2 is same as :

   a) 2^8 b) $(2^6)^2$ c) $(2^3)^2$ d) 8 x 2

10. $3^5 \div 3^4$ = ...

    a) 3^{20} b) 3   c) 3^9 d) 9^{20}

Section B   (10 X 2M = 20M)

11. Write the following rational numbers in standard form.

    a) $\frac{9}{-45}$ b) $\frac{-49}{-28}$

12. Differentiate between rational numbers and fractions with examples.

13. Add. $\frac{-5}{8}$ and $\frac{-1}{24}$

14. Find the product. $\frac{6}{15}$ x $\frac{-10}{18}$

15. Can we construct a triangle with the measures of all its angles given? Give reason for your answer.

16. Find the area of a triangle if its base is 12.6cm and height is 15cm.

17. Draw a factor tree for the given expression and list the factors of the terms and numerical coefficients.
    $-6x^2y + 2xy^2$

18. Classify the polynomial as Monomial / Binomial / Trinomial
    a) 3x + 2y
    b) 5z + 6z + 10z
    c) $2x^2$ -2x + 1
    d) 5abc

19. Express 900 as the product of their prime factors.

20. Simplify.
    a) a^5 x a^4 = ...
    b) $p^9 \div p^6$ = ...

21. Represent the following numbers on a number line.

$$\frac{-1}{6}, \frac{-5}{6}, \frac{2}{3}$$

22. What number should be subtracted from $\frac{-4}{9}$ to get $\frac{-5}{12}$.

23. Ameen reads $\frac{1}{8}$ of a book containing 280 pages in a day. How many days will she needs to finish a book with 700 pages.

24. Construct a right angled triangle with the measure of the hypotenuse is 6.5cm and one of its legs is 5cm.

25. The cost of fencing a square garden at the rate of Rs.5 per meter is Rs.2500. Find the area of the garden.

26. The perimeter of a rectangular plot is 120m. The length of the plot is 40m. Find the breadth and area of the plot.

27. Find the general rule to find the nth term of the series.
    19, 23, 27, 31, 35 ....

28. Subtract : $(x^2 - 3xy - 6y^2 + 5y)$ from $(3x^2 - y^2 + 4xy - 6x)$

Section D (9 X 4M = 36M)

29. Express each of the following as a product of prime factors in exponential form.
    a) 125 x 720   b) 1000 x 360

30. Write true or false and justify your answer.
    a) $100 \times 10^{15} = 10^{17}$
   b) $45^0 = 4500000^0$
    c) $6^2 \times 3 > (6^2)^3$
    d) $(8)^2 = (2)^6$

31. Krishna earns Rs.18000 per month. He spends $\frac{1}{4}$ of his income on food ; $\frac{3}{10}$ of the remainder on house rend and $\frac{5}{21}$ of the remainder on education of children. How much money is still left with him?

32. Construct Δ ABC with the given measures $\angle$ A = 55^0, $\angle$ B = 50^0, BC = 5cm. State which congruency criteria you applied in the construction.

33. A number x multiplied by 4 times with itself and added 3 times another number 'y'. Form an algebraic expression for the statement and find its value if x=4 and y =3.

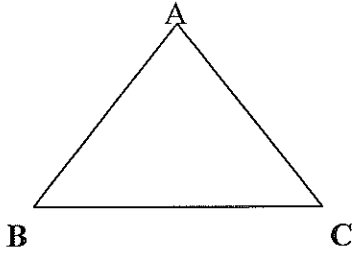34. The length BC =12cm ,AD =3cm, CE =4cm. Find the length of side AB.
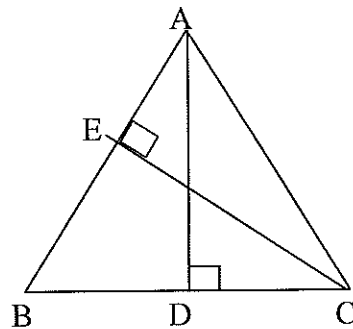
35. Amina's fathers age is 2 more than 4 times of her age. What is the difference between their ages?

36. Simplify :

a) $\dfrac{5^3 a^4 b^8}{5^2 a^3 b^7}$
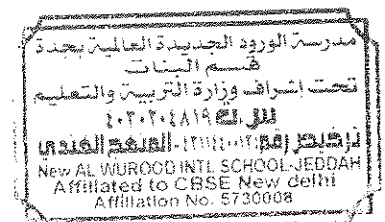
b) $12^0 + 24^0 + 100^0 + 3^3$

37. Find the perimeter of the triangular field.

$AB = 2y^2 + 5y - 8$

$BC = 9y^2 - 7$

$AC = 8y + 8 - y^2$

35 copies