Note: Answer all the questions on the answer sheets.

PART - B

1) Find the value of `w' if $\frac{3}{-5} = \frac{w}{15}$ (2)

2) Convert $\frac{13}{6}$ into decimal and state whether it is terminating or non-terminating decimal? (2)

3) Find the product of $0.04 \times 0.7 \times 2.2$ (2)

4) The sum of two rational numbers is $\frac{-3}{8}$. If one of them is $\frac{3}{16}$, find the other rational number. (2)

5) Express $\frac{-8}{125}$ in power notation form. (2)

6) Simplify: (2x2)

a. $(\frac{-2}{3})^3 \times (\frac{-3}{8})^3$ b. $(\frac{11}{13})^3 \div (\frac{11}{13})^5$

7) Find the product of $\frac{16}{-5} \times \frac{3}{8} \times \frac{10}{3}$ (2)

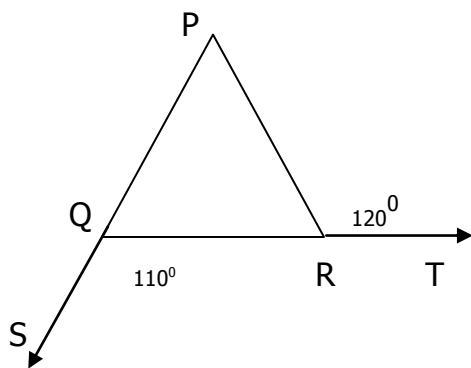8) Simplify

a. $[5^{-1} \times 2^{-1}]^2$

b. $\dfrac{(-4)^5 \times (-3)^4}{(-4)^3 \times (-4)^2}$ (3×3)

9) Find 'a' if $8 \times 2^{a+2} = 2^5$ (3)

10) A shirt requires 2.7m of cloth. How many such shirts can be made from a piece of cloth of 48.6m length? (3)

11) Calculate the magnitude of the angles marked as x and y. Give reasons also. $(3\frac{1}{2})$


12) Simplify

a. $\left(\frac{8}{5} \times \frac{-3}{2}\right) - \left(\frac{3}{10} \times \frac{-11}{6}\right)$

b. $3\frac{1}{7} + \frac{5}{14} + \frac{-5}{21}$ $(3\frac{1}{2} \times 3\frac{1}{2})$

13) A ladder of length 10m is placed against the window on the wall in such a way that its foot is at a distance of 8m away from the wall. Find the height of the wall from the top of the ladder and the ground. $(3\frac{1}{2})$

14) Two poles of height 9m and 14m stand upright on a plane ground. If the distance between their feet is 12m, find the distance between their tops. $(3\frac{1}{2})$

15) In the figure given below x: y =3:5 and ∠ACD = 160°. Find the value of x, y and z. $(3\frac{1}{2})$
Give reasons also.

A

160⁰

B   C   D
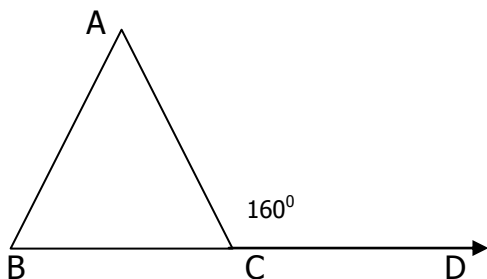
16) Find the Mean, Median and Range of the following group.

5, 6, 7, 6, 2, 6, 4, 2, 8, 4 (2+2+1=5)

17) Read the graph and answer the following questions. (6)
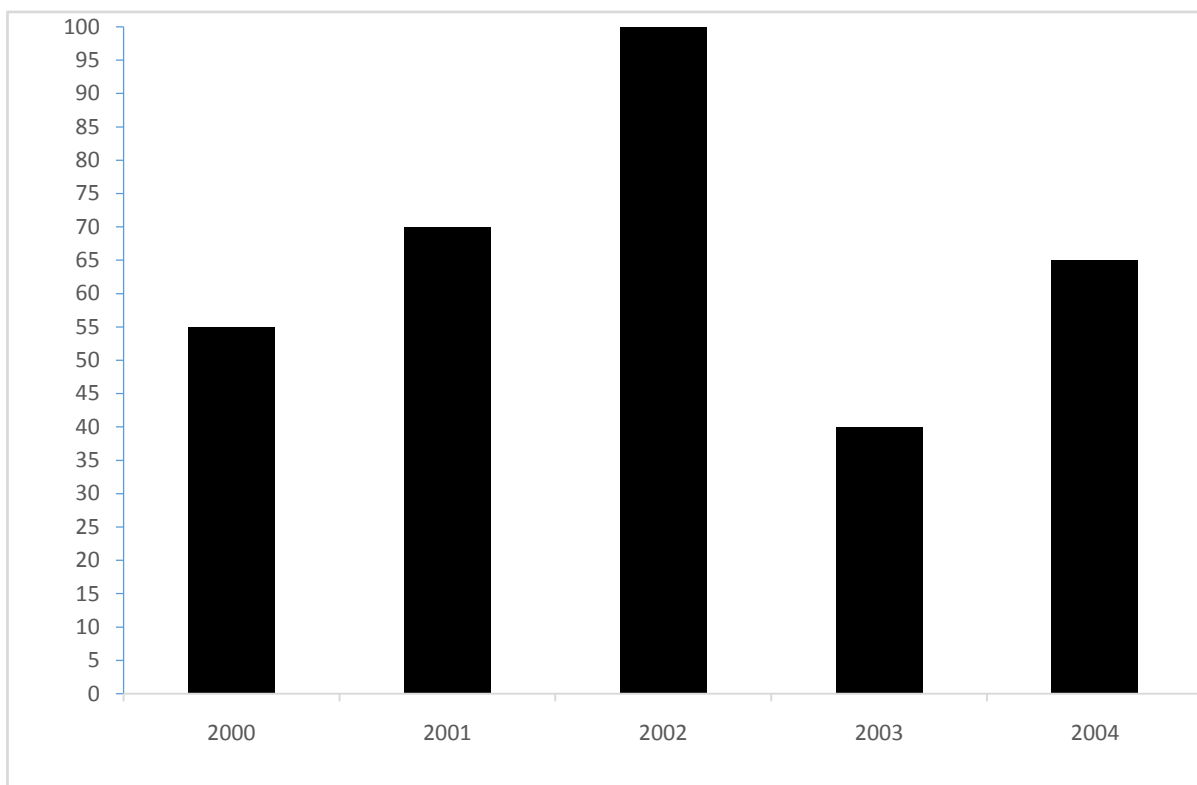
1. Give a suitable title to the bar graph.
2. In which year was the production maximum?
3. In which year was the production minimum?
4. Find the total production of food grains in 2001, 2002and 2003.
5. How many years of production (of food grains) is shown in the bar graph?
6. How much is the production of food grains (in million tonnes) in 2001?

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ST. XAVIER'S SENIOR SECONDARY SCHOOL, DELHI-54

Class - 7   SUMMATIVE ASSESSMENT 1   Marks: 20

Date : 12.9.14   MATHS   Time – 20 mins.

Name _____Cl. & Sec._____ Roll No. _____

Note: All the answers should be done on the question paper itself.

MCQ paper will be collected after 30 minutes.

MULTIPLE CHOICE QUESTIONS

PART - A

Tick the correct answers

1. The standard form of $\dfrac{75}{-225}$ is_____.

     a) $\dfrac{-1}{3}$ b) $\dfrac{1}{-3}$ c) $\dfrac{-15}{45}$

2. $\dfrac{-7}{5} - \dfrac{3}{10} =$ _____

     a) $\dfrac{-11}{10}$ b) -1 c) $\dfrac{-17}{10}$

3. Multiplicative inverse of $\dfrac{-3}{7}$ is_____

     a) $\dfrac{3}{7}$ b) $\dfrac{7}{3}$ c) $\dfrac{7}{-3}$

4. 2.13 × 0.6 =_____

     a) 1.278   b) 12.78   c) 127.8

5. 8754.5 ÷ 1000 =_____

     a) 0.87545   b) 8754500   c) 8.754

6. The value of $(-1)^{121}$ is _____

     a) 1   b) 0   c) –1

7. $\dfrac{-8}{15} \times \dfrac{-3}{4} =$ _____

     a) $\dfrac{2}{11}$ b) $\dfrac{2}{5}$ c) $\dfrac{-2}{5}$

8. Express $\dfrac{-2}{7}$ as a rational number with denominator (−35)_____

     a) $\dfrac{-10}{35}$ b) $\dfrac{10}{-35}$ c) $\dfrac{-10}{-35}$

9. In a right angled triangle, one acute angle is $30°$, then the other acute angle is _____

    a) 70°   b) 60°   c) 50°

10. $\dfrac{-9}{11} \div \dfrac{3}{22} =$ _____

    a) – 6   b) $\dfrac{-27}{246}$ c) $\dfrac{12}{22}$

11. $(3° + 4°) \times 7° =$ _____

    a) 2   b) 1   c) 0

12. In an isosceles triangle, the angles opposite to equal sides are _____.

    a) Obtuse   b) acute   c) equal

13. The mode of the given data : 11, 12, 16,17, 12, 19, 12 is _____.

    a) 12   b) 17   c) 7

14. The value $\left[\left\{\left(\dfrac{3}{2}\right)^2\right\}^3\right]^5 =$ _____

    a) $\left(\dfrac{3}{2}\right)^{30}$ b) $\left(\dfrac{3}{2}\right)^{6+5}$ c) $\left(\dfrac{2}{3}\right)^{30}$

15. The sum of the lengths of two sides of a triangle is _____ than its third side.

    a) smaller   b) greater   c) equal

16. If one of the exterior angle of a triangles is $90°$ and the two interior opposite angles are equal to each other than the measure of each of these angles are _____.

    a) 45°,45°   b) 60°, 30°   c) 40°, 50°

17. A triangle in which all the sides are unequal in length is called a / an _____.

    a) Equilateral triangle   b) Isosceles triangle   c) Scalene triangle

18. $\left(\dfrac{-5}{9}\right)^3 \times \left(\dfrac{-5}{9}\right)^8 =$ _____

    a) $\left(\dfrac{-5}{9}\right)^{11}$ b) $\left(\dfrac{-5}{9}\right)^5$ c) $\left(\dfrac{-5}{9}\right)^{-5}$

19. Pythagoras theorem is applied in _____.

    a) acute angled triangle   b) obtuse angled triangle   c) right angled triangle

20. $\left|\dfrac{-2}{5}\right| =$ _____

    a) $\dfrac{2}{5}$ b) $\dfrac{-2}{5}$ c) $\dfrac{5}{2}$

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