SUMMATIVE ASSESSMENT -2 (,2015-2016)

CLASS VII

MATHEMATICS

CHAPTER/TOPIC	M C Q (1)	V S A (2)	S A (3)	L A (4)	OTBA	TOTAL
CONGRUENCE OF TRIANGLES	2(2)	1(2)	–	1(4)	–	4(8)
COMPARING QUANTITIES	–	2(4)	1(3)	1(4)	–	4(11)
RATIONAL NUMBER	–	3(6)	1(3)	–	–	4(9)
PERIMETER AND AREA	–	–	2(6)	1(4)	–	3(10)
ALGEBRAIC EXPRESSIONS	2(2)	–	2(6)	–	–	4(8)
SYMMETRY	2(2)	–	–	–	–	2(2)
VISUALISING SOLID SHAPES	2(2)	–	–	–	–	2(2)
OTBA					1(10)	1(10)
TOTAL	8(8)	6(12)	6(18)	3(12)	1(10)	24(60)

SUMMATIVE ASSESSMENT-II, 2015-16

CLASS-VII

MATHEMATICS

TIME -2.30 HRS MAX. MARKS-60

General instruction;

(a) Attempt all questions

(b) The question no.1-8 carry 1mark each.

(c) The question no.9-14 carry 2 marks each

(d) The question no.15-20 carry 3marks each

(e) The question no. 21-23 carry 4 marks each

(f) The question no.24 (OTBA) carry 10 marks

SECTION-A

1. Two line segments are congruent if----------

2. When we write LA=LB we actually mean----------

3. One half of the sum of numbers x and y

4. Sum of numbers a and b subtracted from their product

5. What other name can you give to the line of symmetry of a circle?

6. Name any two figures that have both line symmetry and rotational symmetry.

7. Solid shapes are of----------dimensions

8. The corners of a solid shape are called its----------

SECTION B

9. Show that in an isosceles triangle, angles opposite to equal sides are equal.

10. In a computer lab, there are 3 computers for every 6 students. How many computers will be needed for 24 students?

11. Find the whole quantity if 8%of it is 40 liters

12. Which is greater in the following, 2/3, 5/2?

13. Find the sum $-9/10+22/15$

14. Write the following rational numbers in ascending order $-3/5, -2/5, -1/5$

SECTION-C

15. In a city 30% are females, 40% are males and remaining are children. What percent are children?

16. Find the value of $-1/8 \div 3/4$

17. The perimeter of a rectangular sheet is 100 cm if the length is 35 cm, find its breadth, Also the area of the sheet.

18. If the circumference of a circular sheet is 154 m, find its radius. Also find the area of the sheet (Take $\pi=22/7$)

19. What should be added to x^2+xy+y^2 to obtain $2x^2+3xy$?

20. If $a=2$, $b=-2$ find the value of a^2+ab+b^2.

SECTION - D

21. I buy a T.V for Rs10000 and sell it at a profit of 20%. How much money do I get for it?

22. Find the cost of polishing a circular table top of a diameter 1.6 m if the rate of polishing is Rs15/m^2 (Take $\pi = 3.14$).

23. If $\Delta DEF \equiv \Delta BCA$ write the parts of triangle BCA that correspond to

a) angle E. b) EF. c) angle F . d) DF.

OTBA

THEME - NUTRITION

Answer the following questions on the basis of Abstract and data given:

1. What is modern nutrition? 2
2. How many items on Mc Donald's entire menu containing no sugar? 1
3. Give the daily recommended target intake by the age of children 1-3 years. 1
4. Create a bar graph to represent any five whole grains nutrition facts in the form of protein based on the given chart. 3
5. Mark a bar graph to represent any five fruit nutrition facts in the form of iron percentage based on the given chart. 3

OR

THEME - BMI

Answer the following questions on the basis of Abstract and data given:

1. What is BMI? 2
2. Write the ideal weight of a man and a woman for the height of 165 cm on the facts based on the given chart. 2
3. Given the BMI ranges for adults of weight status :-
   Under weight, overweight, normal or healthy weight and obese 3
4. What are 6 main health consequences of obesity for adults? 3

MARKING SCHEME

S.A 2(2015-16)

CLASS-VII

MATHEMATICS

1. They have the same length **1**

2. m<A=m<B **1**

3. 1/2(x+y) **1**

4. ab-(a+b) **1**

5. Diameter **1**

6. Equilateral triangle, Circle **1**

7. Three **1**

8. Vertices **1**

9. Construction Draw the bisector AD of <A meeting BC in D **½**

AB = AC (given)

<BAD = <CAD (by cons)

AD = AD (common) **1**

From S.A.S ΔABD≡ΔACD

<B=<C **½**

10. Numbers of computers for 6 students=3

,, ,, ,, ,, ,, ,,, ,, ,,1 ,, ,, ,, ,,=3/6 **1**

,, ,, ,, ,, ,, ,, ,, ,, 24 ,, ,, ,, ,,=3/6×24=12 computers 1

11. Let the quantity be x

8% of x=40 1

8/100×x=40

X=40×100/8=500 litres

12. L.C.M of 3 and 2 is 6

2/3=2×2/3×2=4/6

5/2=5×3/2×3=15/6 1

5/2is greater 1

13. L.C.M of 10 and 15 is 30

=-27+44/30 1

=17/30 1

14. Since (-3)<(-2)<(-1) 1

-3/5<-2/5<-1/5 1

15. Remaining part of population=100 %- (30+40)% 2

100%-70%=30% 1

16. -1/8×4/3 1.5

-4/24=-1/6 1.5

17. Perimeter of rectangular sheet=2(L+B) 1

100=2(35+B)

50=35+B 2

B=50-35=15

Area of rectangular sheet =L×B =35×15 =525 $c.m^2$ 1

18. Circumference of circle =154

$2\pi r$ =154 1

2×22/7×r=154

r =49/2 1

Area of a circle $=\pi r^2$

=22/7×49/2×49/2 =3773/2 =1886.5 $c.m^2$

19. Required expression $=(2x^2+3xy)-(x^2+xy+y^2)$ 1

$=2x^2+3xy-x^2-xy-y^2$ 1

$=x^2-y^2+2xy$ 1

20. $(2)^2+2\times -2+(-2)^2$ 1

=4 -4 +4 1

=8 -4 =4 1

21. C.P of the T.V =Rs 10000

Profit =20% of 10000 1

=2000 1.5

S.P = C.P + Profit

10000 +2000 =12000 **1.5**

22. Radius =D/2

Area of circular table top $=\pi r^2$ **1**

$=3.14 \times(1.6/2)^2$ **1**

$=1.57\times0.8\times1.6\ m^2$ **1**

Cost of polishing =15× 1.57×0.8×1.6

=Rs30.144 **1**

23. a) <E=<C b) EF =AC C)<F =<A d)DF =AB

24. Theme – Nutrition

1. Modern nutrition research has moved on to concepts of functional foods, molecular nutrition and nutritional based health. 2
2. 7 items 1
3. 24 gms 1
4. Create a bar graph by taking 5 fruits on horizontal axis and percentage of protein facts present in that fruits on vertical axis. 3
5. Make a bar graph by taking any 5 whole grains on x-axis and percentage of iron facts on y-axIS 3

OR

Theme – BMI

1. BMI is a person's weight in kilograms divided by the square of height in metres.
2. Man's weight = 59 – 72 kg and woman's weight = 53 – 70 kg
3. Following is the BMI of adults of various weight status :

Underweight	Below 18.5
Overweight	18.5-24.9
Normal/healthy weight	25.0-29.9

4. 6 man consequences are : -
   a. High blood pressure
   b. Type 2 diabetes

c. Coronary heart disease
d. Stroke
e. Gallbladder disease
f. osteoarthritis