VCD 7|5|22 **F.Y.B.A. CA / SEM II / CULINARY MATHS / 2 ½ HRS / 75 MARKS**

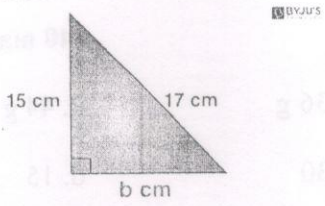
Note: 1) All questions are compulsory.
2) Use of non-programmable calculator is allowed.

Q1. Choose the correct option **(40 marks)**

1. 1 ounce equals how many metric equivalent
   a. 20 g b. 28 g c. 36 g d. 44 g
2. ___% of 45 is 9
   a. 10 b. 20 c. 30 d. 15
3. If $42 \div 2 + k \times 3 - 22 = 8$, then k =
   a. 1 b. 2 c. 3 d. 4
4. Recipe conversion factor = _____/_____
   a. Desired yield / Original yield b. Original Yield / Desired yield
   c. Raw material / Product d. Cooked / Uncooked
5. The sides of a triangle are 5,12 & 13 units. Check if it has a right angle or not.
   a. Yes b. No c. May be d. Can't say
6. A rectangular yard has length equals to 10 cm and perimeter equals to 60 cm. Find its width.
   a. 10 b. 15 c. 20 d. 25
7. If the current recipe being used yield 45 - 200gm portions and what is needed is 125 - 350gm portion it is necessary to find multiplier
   a. 5 g b. 10 g c. 15 g d. 20 g
8. 100°C = ____°F
   a. 208 b. 210 c. 212 d. 216
9. 1 gallon equals how many metric equivalent
   a. 2.8 L b. 3.8 L c. 4.8 L d. 5 L
10. $10 \div [(5 + 5) \times \{(4 \times 2) - (5 - 2)\}]$
    a. 0.5 b. - 0.5 c. 0.2 d. – 0.2
11. In rounding off numbers, the last figure kept should be _____if the first figure dropped is less than 5.
    a. Increased b. Decreased c. Changed d. Unchanged
12. 24% of___ is 36
    a. 125 b. 130 c. 145 d. 150
13. $3 \times (4 \times 5^2) \div 6 + 7 - 8 = ?$
    a. 94 b. 49 c. 45 d. 34.28
14. 1-pound equals how many ounces
    a. 12 b. 13 c. 16 d. 18
15. For all-purpose flour how much is 1 cup in grams?
    a. 100 g b. 120 g c. 140 g d. 160 g
16. 5/4 = ____ in decimal
    a. 0.25 b. 0.5 c. 1.25 d. 1.5
17. The perimeter of a rectangular pool is 56 meters. If the length of the pool is 16 meters, then find its width.
    a. 10 b. 11 c. 12 d. 13
18. If the radius of a circle is 21cm. Find its area and circumference.
    a. 130 b. 131 c. 132 d. 133
19. How much is 1 gas mark in Fahrenheit
    a. 250°F b. 275°F c. 300°F d. 325°F
20. Find the perimeter of a given rectangle which has length = 15 cm and width = 20 cm.
    a. 60 b. 65 c. 70 d. 75

Q2. Attempt any three of the following **(15 marks)**

1. The two sides of a right-angled triangle are given as shown in the figure. Find the third side.



2. Find the Area and the perimeter of a rectangle whose length and width is 5 cm and 10 cm, respectively.
3. If the radius of a circle is 21cm. Find its area and circumference.
4. If the length of the side of a square is 15 cm. Then find its area and also find the total length of its boundary.
5. The perimeter of an equilateral triangle is 25 cm. Find its area.

Q3. Attempt any three of the following **(15 marks)**

1. Simplify the following
   a. 2 of 3 × (5 + 2).
   b. 1800 ÷ [10{(12−6)+(24−12)}]
2. Calculate the cost percentage round the answer to the nearest tenth of present
   a. Cost= $ 300 Sales= $ 450
   b. Cost = $1500 Sales= $ 2560
3. Calculate food cost percentage by the formula if Beginning Inventory = $ 15,000 Purchases = $ 4,000 Ending Inventory =$ 16,000 Food Sales= $ 10,000
4. Chirag wants to make choux pastry and has a recipe that require 4 eggs, he has 5 eggs and want to use all of it.

Choux pastry with 4 eggs	
125 ml	milk
125 gm	sugar
5 gm	salt
100 gm	unsaturated butter
150 gm	all purposed flour
4	large eggs

5. Adjust a standard formulation designed to produce 75 biscuits to have a new yield of 150 biscuits

Ingredient	**Amount**
Flour	1.75 kg
Baking Powder	50 gm
Salt	25 gm
Shortening	450 gm
Milk	1.25 L

Q4. Write a short note (any 1) **(5 marks)**

1. a. As Purchased Quantity (APQ)
   b. Edible Portion Quantity (EPQ)
2. Write 7 steps of calculating as purchased cost
3. Write a short for finding the Total Cost