- 16. (a) Convert 500 cm into 'm'.
 - (b) Convert 4 km 475 m into 'm'.
 - (c) Convert 3 feet to centimeter.
 - (d) Convert 37°C to Fahrenheit.
- 17. The population of a town is 8,000. it increases by 10% during first year and by 20% during second year. Find the population after 2 years.
- 18. Restaurant ABC's sales for the Month Jan 2016 is Rs. 5,50,000/-. The opening stock value on 1st Jan 16 is Rs. 50,000/-. The restaurant made a purchase of Rs. 1,25,000/- for the month. The value of closing stock is Rs. 25,000/-. Calculate the food cost percentage for the month.
- 19. (a) Find the simple interest on Rs. 68,000 at $16\frac{2}{3}\%$ per annum for 9 months.
 - (b) At what rate percent will be Rs. 625 amount to Rs. 700 in 4 years.
- 20. Draw a pie diagram for the following data.

 Items: Rent Light Clothing Tax Fuel
 Expenditure 70.8 41.2 28.5 7.6 4.8

 (in Rs.)

S.No. 1925

12UHMS01

(For the candidates admitted from 2012-2013 onwards)

B.Sc. DEGREE EXAMINATION, NOVEMBER 2017.

Third Semester

Hotel Management and Catering Science

SBEC - HOSPITALITY MATHEMATICS

Time: Three hours Maximum: 75 marks

PART A — $(10 \times 2 = 20 \text{ marks})$

Answer ALL questions.

- 1. Convert
 - (a) 22 m 50 cm into cm
 - (b) 3000 ml into litre.
- 2. The sum of two numbers is 3527, if one of the number is 2685. Find the other number?
- 3. Find 28% of 450.
- 4. Define cost sheet.

- 5. If a:b=3:4 and b:c=5:6 Find a:c.
- 6. Define food cost and food cost percentage.
- 7. Find the area of a rectangle whose length is 8 cm and breadth 5 cm.
- 8. Find area of a square one of whose diagonal is 2.6 cm.
- 9. Explain Bar diagram.
- 10. Explain Pie diagram.

PART B —
$$(5 \times 5 = 25 \text{ marks})$$

Answer ALL questions, choosing either (a) or (b).

- 11. (a) (i) Find the sum of two number 28760 and 38530.
 - (ii) Find 1424 ÷ 4.
 - (iii) Find the value $\frac{5}{7} \times \frac{2}{3}$.

Or

- (b) (i) Convert 5 1 50 ml into millilitres.
 - (ii) Convert 4kg 350 gram into gram.

12. (a) Write the preparation of cost sheet for receipes.

Or

- (b) 1100 boys and 700 girls are examined in a test. 42% of the boys and 30% of the girls pass. Find the total no. students passed.
- 13. (a) Explain (i) Labour cost (ii) Food cost (iii) overhead cost.

Or

- (b) Two number are in the ratio 3: 4. If 6 be added to each term of the ratio then the new ratio will be 4:5. Find the numbers.
- 14. (a) Find simple interest on Rs. 9,000 at 5% per annum for 4 years.

Or

- (b) Find the compound interest on Rs. 7,200 for 2 years at 4½% per annum.
- 15. (a) Write difference between graphs and diagrams.

Or

(b) Draw a bar diagram for the following data.

Year: 2002 2003 2004 2005 2006

Profit: 15,000 18,000 20,000 16,000 13,000