

**24 AB SC 101**  
**UG PROGRAM (4 YEARS HONOURS) WITH SINGLE MAJOR**  
**AT THE END OF FIRST SEMESTER**  
**SKILL COURSE**  
**ANALYTICAL SKILLS**  
**(w.e.f. Admitted Batch 2024 - 25)**

**Time: 2 Hours**

**Maximum: 50 Marks**

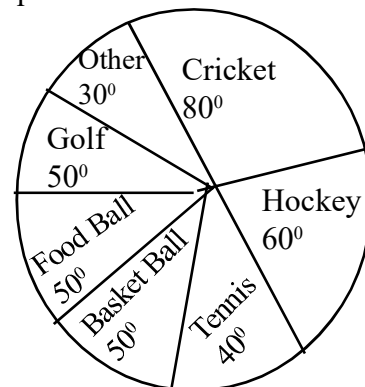
1. Simplify  $2-[3-\{6-(5-4-3)\}]$   
a) 1                                      b) 2                                      c) 7                                      d) 4
2. Simplify  $666 \div 6 \div 3 = ?$   
a) 37                                      b) 33                                      c) 30                                      d) 35
3. What is the value of  $p+(p-q) +q +(q-p)$   
a)  $p+q$                                       b)  $p-q$                                       c)  $p$                                       d)  $q$
4.  $17\frac{1}{3} + 21\frac{1}{2} = 33\frac{1}{3}$  % of ?  
a) 116.5                                      b) 81.5                                      c) 277.5                                      d) 104.5
5. Simplify  $\frac{3}{11}$  of 0.176  
a) 0.48                                      b) 0.048                                      c) 480                                      d) 4800
6.  $1 + \frac{1}{1 + \frac{1}{1 + \frac{1}{2}}} = ?$   
a) 1                                      b)  $\frac{5}{8}$                                       c)  $\frac{8}{5}$                                       d) 10
7. Which of the following options shows ascending order?  
a)  $\frac{3}{4}, \frac{2}{3}, \frac{4}{6}, \frac{5}{6}$                                       b)  $\frac{2}{3}, \frac{3}{4}, \frac{4}{5}, \frac{5}{6}$                                       c)  $\frac{5}{6}, \frac{4}{5}, \frac{3}{4}, \frac{3}{2}$                                       d)  $\frac{2}{3}, \frac{3}{4}, \frac{5}{6}, \frac{4}{5}$
8. What is the value of p when 47P05 is divisible by 3 ?  
a) 1                                      b) 2                                      c) 3                                      d) 0
9. HCF of 12,36 and 48 is  
a) 4                                      b) 6                                      c) 12                                      d) 10
10. Find the lowest common multiple of 24,36, & 40  
a) 120                                      b) 240                                      c) 360                                      d) 480
11. Find the next number in the series  
20 10 10 15 30 75 ?  
a) 150                                      b) 210                                      c) 220                                      d) 225

12. 720 120 24 6 2 1 ?  
a) 0.5                                      b) 1                                      c) 1.5                                      d) 2
13. ACE : BDF :: MOQ : ?  
a) BMW                                      b) NQP                                      c) NPR                                      d) BEF
14. DRIVEN is related to EIDRVN in the same way as BEGUM is related to \_\_\_\_\_  
a) BEMEUE                                      b) BGMUE                                      c) EUBGM                                      d) UEBGM
15. If A is brother of B, B is sister of C, C is father of D, then D is related to A?  
a) Brother                                      b) Nephew                                      c) Niece                                      d) Can't say
16. Introducing a boy, a girl say "he is the son of the only daughter of the father of my maternal uncle"?  
Then how boy is related to that girl ?  
a) Nephew                                      b) Brother                                      c) Uncle                                      d) So-in-law
17. Find the day of the week Dec'14 1996?  
a) Sunday                                      b) Saturday                                      c) Tuesday                                      d) Wednesday
18. If today is Monday then after 23 days what will be the day of the week ?  
a) Monday                                      b) Tuesday                                      c) Wednesday                                      d) Thursday
19. Find the angle between two hands of a clock at right angle in a day?  
a)  $70^\circ$                                       b)  $80^\circ$                                       c)  $90^\circ$                                       d)  $100^\circ$
20. How many times are the hands of a clock at right angle in a day?  
a) 22                                      b) 24                                      c) 44                                      d) 11
21. Find the average of first 100 natural numbers?  
a) 50.5                                      b) 52.5                                      c) 51.5                                      d) 51
22. The average of 4 consecutive even numbers is A, B, C, D is 99 what is the product of B & D?  
a) 9000                                      b) 9800                                      c) 9996                                      d) 9600
23. Find the fourth proportional of 4, 6, 8, ?  
a) 10                                      b) 12                                      c) 14                                      d) 16
24. 3:27::4:?  
a) 16                                      b) 64                                      c) 32                                      d) 28
25. 18:30::36:?  
a) 54                                      b) 62                                      c) 64                                      d) 66
26. The sum of ages of 5 children born of the interval of 3 years each is 50 years. What is the age of the youngest child?  
a) 4 years                                      b) 8 years                                      c) 12 years                                      d) 16 years

27. A is two years older than B, who is twice as old as C. If the total of the ages of A, B & C is 27, then how old is B?  
 a) 7                                      b) 8                                      c) 9                                      d) 10
28. A man complete a journey in 10 hrs. He travels first half of the journey at the rate of 21 kmph and second half at the rate of 24 kmph, then find total journey in km?  
 a) 220 km                                      b) 230 km                                      c) 224 km                                      d) 234 km
29. A runner can complete a 750 n race in two and half minutes, will be able to beat another runner who runs at 16.5 kmph?  
 a) yes                                      b) no                                      c) can't say                                      d) never beat
30. If a alone can complete a work in 20 days. B alone can complete same work in 30 day. If both A & B working together then in how many days the same work would be completed?  
 a) 15 days                                      b) 12 days                                      c) 10 days                                      d) 18 days
31. John salary is 50,000/- he got a 15% increment of his salary. What is the new salary?  
 a) 55,000/-                                      b) 57,500/-                                      c) 60,000/-                                      d) 56,500/-
32. By how much is 80% of 40 greater than  $\frac{4}{5}$  of 25?  
 a) 10                                      b) 15                                      c) 20                                      d) 12
33. A bat is bought for Rs. 75 and sold at a gain of 8%. Find its selling price?  
 a) 81                                      b) 80                                      c) 82                                      d) 85
34. Amit sold an umbrella for Rs. 680, losing 15% then cost price of the umbrella is?  
 a) Rs. 782                                      b) Rs. 800                                      c) Rs. 578                                      d) None
35. Find the S.I on Rs. 5000/- for 5 years at 5% per annum  
 a) Rs. 120                                      b) Rs. 1250                                      c) Rs. 1300                                      d) None
36. How much simple interest will Rs 2000 earn in 18 months at 6% per annum  
 a) Rs. 120                                      b) Rs. 180                                      c) Rs. 216                                      d) Rs. 240
37. Find compound interest on Rs. 6250 at 8% per annum for 2 years  
 a) Rs. 1004                                      b) Rs. 1040                                      c) Rs. 2560                                      d) Rs. 2400
38. Find compound interest on Rs. 5000 at 12% per annum for 1 year compounded half yearly?  
 a) Rs. 618                                      b) Rs. 816                                      c) Rs. 617                                      d) Rs. 716
39. The difference between the SI and CI on Rs. 5000 at 10% per annum for 3 years is  
 a) Rs. 145                                      b) Rs. 150                                      c) Rs. 165                                      d) Rs. None
40. What will be the compound interest on Rs. 25,000/- after 3 years at 12% per annum  
 a) Rs. 9000.30                                      b) Rs. 9720                                      c) Rs. 10123.20                                      d) Rs. 10483.20

Directions (41-45) study the following pie chart carefully to answer the questions.

Amount spent on games during the year 2017 (in degrees)



41. How much percent of the total spending is spent on Tennis?  
a)  $11\frac{1}{9}\%$    b)  $22\frac{2}{9}\%$    c) 25%   d) 20%
42. How much percent more is spent on Hockey than that of Golf?  
a) 27%   b) 35%   c) 20%   d)  $12\frac{1}{9}\%$
43. How much percent less is spent on football than that on cricket?  
a) 28%   b)  $33\frac{1}{3}\%$    c) 36%   d) 37.5 %
44. If the total amount on sports during the year was 3.6 crores the amount spent on cricket and hockey together was  
a) 1,40,00,000/-   b) 1,40,000/-   c) 14,00,000/-   d) 14,00,00,000/-
45. If the amount spent on sports during the year was Rs. 1,80,00,000 the amount as spent on Basketball exceeds that on Tennis by  
a) 2,50,000/-   b) 5,00,000/-   c) 3,75,000/-   d) 2,00,000/-

Study the following table carefully and answer the question given below it (46 - 50)

Number of paddy bags produced by 6 farmers over the years						
Years	Farmers					
	A	B	C	D	E	F
2000	420	360	396	528	492	444
2001	564	492	576	612	576	540
2002	588	612	624	648	576	564
2003	600	660	648	636	612	600
2004	648	708	684	672	660	672
2005	732	744	720	756	708	720

46. What is the average number of paddy bags produced by Farmer D over the years?  
A) 624   B) 642   C) 674   D) 672
47. The number of paddy bags produced by Farmer B in the year 2003 are approximately what percent of the paddy bags produced by Farmer B over the years?  
A) 24   B) 18   C) 21   D) 30
48. What is the respective ratio of the paddy bags produced by Farmer A to the Farmer E in the year 2005?  
A) 60 : 61   B) 61 : 63   C) 60 : 63   D) 61 : 59
49. What is the respective ratio of the paddy bags produced by Farmers A, B and C together in the year 2000 to the paddy bags produced by Farmers D, E and F together in the same year?  
A) 49 : 64   B) 51 : 61   C) 49 : 61   D) 51 : 55
50. What is the difference between the total number of paddy bags produced by all the farmers together in the year 2001 and the year 2004?  
A) 684   B) 648   C) 846   D) 864