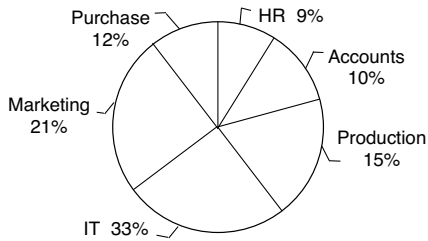


**Directions (Q.1-5):** Study the following pie-chart and table and answer the questions given under that.

The following pie-chart and table give the number of employees working in various departments of an organisation and the ratio of men and women in the same.

Total Number of Employees is 6600.



Ratio of Men and Women		
DEPARTMENT	MEN	WOMEN
Accounts	3	2
HR	2	1
IT	1	2
Marketing	2	1
Purchase	5	1
Production	3	2

- What is the total number of employees working in Marketing and Production departments together?  
1) 2706 2) 2582 3) 2396  
4) 2506 5) None of these
- What is the respective ratio of the total number of men to the total number of women working in all the departments together?  
1) 153:113 2) 97:71 3) 303:247  
4) 241:237 5) None of these
- The number of women in IT department is what percent of the total number of employees in the organization?  
1) 33% 2) 14% 3) 21%  
4) 22% 5) None of these
- What is the respective ratio of number of men in the Production department to the number of men in the Purchase department?  
1) 8:7 2) 9:10 3) 11:7  
4) 10:9 5) None of these
- The number of women in Accounts department is what percent of the number of women working in Marketing department?

Quantitative aptitude measures the numerical ability and accuracy in mathematical calculations. The questions range from purely numeric calculations to problems from arithmetic, graph and table reading, percentage analysis, categorization and quantitative analysis. Maths must get your maximum attention both in preparation and during test taking.



# If three balls are drawn..

- 62.31%
- 54.72%
- 57.14%
- 45.10%
- None of these

**Directions (Q.6-10):** What should come in place of question mark (?) in the following questions?

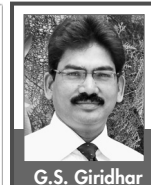
- $13125 \div 35 \times (0.2)^2 = ?$   
1) 11.25 2) 125 3) 25.5  
4) 135.15 5) None of these
- $(65 \times 690) \div (18 \times 190) = ?$   
1) 18.67 2) 12.74 3) 13.11  
4) 16.32 5) 14.78
- $635 + 31^2 \times 12 = ?^3$   
1) 32 2) 17 3) 27 4) 23 5) None
- $315 \div 9 + ?\% \text{ of } 680 = 205$   
1) 25 2) 12 3) 15 4) 12.5 5) 7.5
- $\left(\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2}\right) \div \frac{1}{4} = ?$   
1)  $\frac{8}{5}$  2) 4 3) 5 4) 3 5) None of these

**Directions(Q.11-13):** Study the information and answer the questions that follow.

A box contains 3 Red, 2 Black and 5 Green balls.

- If 2 balls are drawn at random what is the probability that they are Green balls?  
1)  $\frac{1}{3}$  2)  $\frac{1}{5}$  3)  $\frac{2}{9}$  4)  $\frac{2}{3}$  5) None of these
- If four balls are drawn at random what is the probability that at least one is black?  
1)  $\frac{1}{3}$  2)  $\frac{4}{5}$  3)  $\frac{3}{7}$  4)  $\frac{2}{3}$  5) None of these

**SBI**  
Specialist Officers  
Quantitative Aptitude



- If three balls are drawn at random what is the probability that none is green ball?  
1)  $\frac{1}{2}$  2)  $\frac{1}{12}$  3)  $\frac{2}{3}$  4)  $\frac{4}{5}$  5) None of these
- A can do a piece of work in 12 days. B is 60% more efficient than A. In how many days B alone finish the work?  
1)  $7\frac{1}{5}$  days 2)  $7\frac{1}{2}$  days 3)  $19\frac{1}{5}$  days  
4) 16 days 5) None of these
- A sum was put at simple interest at a certain rate for 2 years. Had it been put at 3% higher rate, it would have fetched Rs.72 more. What is that sum?  
1) Rs.1200 2) Rs.1600 3) Rs.2400  
4) Rs.1500 5) None of these

**Directions (Q.16-20):** Study the following tables and answer the questions given under that.

Number of Males and Females staying in various colonies		
Colonies	Males	Females
A	200	250
B	400	500
C	300	350
D	600	400
E	500	450
F	250	350

Percentage of Children (Males and Females) in the Colonies			
Colonies	Children	Male Children	Female Children
A	30%	40%	60%
B	35%	60%	40%
C	40%	35%	65%
D	25%	50%	50%
E	30%	20%	80%
F	20%	25%	75%

- What is the total number of members staying in all the colonies together?  
1) 1000 2) 2500 3) 3575 4) 4550 5) None
- What is the total number of male children staying in all the colonies together?  
1) 719 2) 546 3) 819 4) 389 5) None
- What is the respective ratio of the total number of adult males in the colonies A and B together to the total number of adult males in D and E together?  
1) 1:7 2) 12:17 3) 7:18 4) 11:7 5) None
- What is the difference between the number of male children in colony B and the number of female children in colony E?  
1) 98 2) 65 3) 67 4) 31 5) 39
- What is the respective ratio of the total number of adult females to the total number of adult males staying in all the colonies together?  
1) 12:53 2) 91:250 3) 15:91  
4) 71:341 5) None of these

ANSWERS				
1-5	5-3	9-1	13-2	17-2
2-3	6-5	10-2	14-2	18-3
3-4	7-3	11-3	15-1	19-5
4-2	8-4	12-4	16-4	20-5.

## EXPLANATIONS

- $(21\% + 15\%) \text{ of } 6600 = 36\% \text{ of } 6600 = 2376$
- Total number of women in Accounts  
 $= \frac{2}{5} \times 10\% \text{ of } 6600 = 264$   
Total number of women in HR  
 $= \frac{1}{3} \times 9\% \text{ of } 6600 = 198$   
Total number of women in IT  
 $= \frac{2}{3} \times 33\% \text{ of } 6600 = 1452$   
Total number of women in Marketing  
 $= \frac{1}{3} \times 21\% \text{ of } 6600 = 462$   
Total number of women in Purchase  
 $= \frac{1}{6} \times 12\% \text{ of } 6600 = 192$   
Total number of women in Production  
 $= \frac{2}{5} \times 15\% \text{ of } 6600 = 396$   
Total number of women in all departments  
 $= 264 + 198 + 1452 + 462 + 192 + 396 = 2964$   
Total number of men =  $6600 - 2964 = 3636$   
 $\therefore$  Required ratio =  $3636 : 2964 = 303 : 247$
- $\frac{1452}{6600} \times 100 = 22\%$
- $\frac{3}{5} \times 15\% \text{ of } 6600 : \frac{5}{6} \times 12\% \text{ of } 6600 = 9 : 10$
- Required percent =  $\frac{264}{462} \times 100 = 57.14\%$
- $13125 \div 35 \times (0.2)^2$   
 $\Rightarrow \frac{13125}{35} \times 0.2 \times 0.2 = 15$

- $(65 \times 690) \div (18 \times 190)$   
 $\Rightarrow \frac{65 \times 690}{18 \times 190} = 13.114$
- $635 + 31^2 \times 12 = ?^3$   
 $\Rightarrow ?^3 = 635 + (961 \times 12) = 635 + 11532 = 12167$   
 $\Rightarrow ?^3 = 23^3 \Rightarrow ? = 23$
- $315 \div 9 + ?\% \text{ of } 680 = 205$   
 $\Rightarrow ?\% \text{ of } 680 = 205 - 35$   
 $\Rightarrow ? = 170 \times \frac{100}{680} = 25$
- $\left(\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2}\right) \div \frac{1}{4}$   
 $\frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4}$   
 $\frac{2 \times 4}{1} = \frac{8}{1+1} = 4$
- $\frac{5 \times 4}{2 \times 1} = \frac{5 \times 2}{1 \times 1} = 2$   
 $\frac{5C_2}{10C_2} = \frac{10 \times 9}{2 \times 1} = \frac{9}{9}$
- Probability for no one is Black  
 $\frac{8C_4}{10C_4} = \frac{1}{3}$   
 $\therefore$  Probability for atleast one is Black  
 $= 1 - \frac{1}{3} = \frac{2}{3}$

- $\frac{{}^5C_3}{{}^{10}C_3} = \frac{1}{12}$
- B is 60% more efficient means A takes 60% more time.  
If A takes 160 days B takes 100 days  
If A takes 12 days then B takes  $\frac{12}{160} \times 100$   
 $= 7\frac{1}{2}$  days
- Interest for 2 years is Rs.72. For one year it is Rs.36  
If 3% interest money is Rs.36,  
then 100% money =  $\frac{100}{3} \times 36 = \text{Rs.}1200$   
Sum is Rs.1200
- 16 - 20:  

Colonies	Children		Total	Children	Male	Female
	Male	Female				
A	200	250	450	135	54	81
B	400	500	900	315	189	126
C	300	350	650	260	91	169
D	600	400	1000	250	125	125
E	500	450	950	285	57	228
F	250	350	600	120	30	90
<b>Total</b>	<b>2250</b>	<b>2300</b>	<b>4550</b>	<b>1365</b>	<b>546</b>	<b>819</b>
- Adult males in A =  $200 - 54 = 146$   
Adult males in B =  $400 - 189 = 211$   
Total Adult males in A&B = 357  
Adult males in D =  $600 - 125 = 475$   
Adult males in E =  $500 - 57 = 443$   
Total Adult males in D&E = 918

$\therefore$  Required ratio =  $357 : 918 = 7 : 18$

19. Male children in colony B = 189  
Female children in colony E = 228  
 $\therefore$  The difference =  $228 - 189 = 39$

20. Adult Females =  $2300 - 819 = 1481$   
Adult Males =  $2250 - 546 = 1704$   
Required ratio =  $1481:1704$

(Writer - Director, RACE Institute, Hyderabad)

## ప్రవేశాలు

**ఏయూసీట్ - 2014**

విశాఖపట్టణంలోని ఆంధ్రా యూనివర్సిటీ, శ్రీకాకుళంలోని డా॥ బి.ఆర్. అంబేద్కర్ యూనివర్సిటీల్లో వివిధ పీజీ, ఇంటిగ్రేటెడ్, డ్యూయల్ డిగ్రీ కోర్సుల్లో ప్రవేశానికి నిర్వహించే ఏయూసీట్ - 2014 నోటిఫికేషన్ వెలువడింది.

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★ ఇంటిగ్రేటెడ్ కోర్సులు (అయిదేళ్లు): ఎం.ఎస్సీ జియాలజీ, ఎం.ఎ. ఎకనమిక్స్.

★ డ్యూయల్ డిగ్రీ: బీటెక్ తోపాటు ఎం.టెక్ / ఎంబీఎ. (సీఎస్ఎస్ఈ, ఈఈఈ, ఈసీఈ, కెమికల్, ఇన్స్టు మెంటేషన్ టెక్నాలజీ, సివిల్, మెకానికల్ ఇంజనీరింగ్ తదితర స్పెషలైజేషన్లలో)

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వివరితేది: 15 ఏప్రిల్

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