

Directions (Qs. 14 to 18): Read the following information carefully to answer these questions.

In college 'B', in a group of 1200 students boys and girls are in the ratio of 7 : 5 respectively. Students are studying either Computer Science or IT. Each one of them likes one or more type of books out of Novel, Biography or Science Fiction.

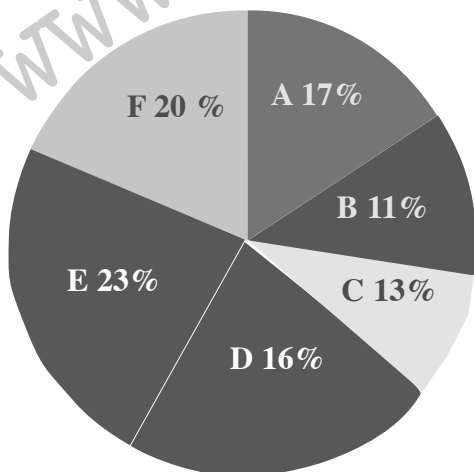
Out of the boys, 48% study Computer Science and remaining study IT. Out of the boys studying Computer Science, $\frac{1}{6}$ th like only Novel, $\frac{1}{4}$ th like only Novel and Biography. $\frac{1}{6}$ th like only Novel and Science Fiction. $\frac{1}{4}$ th like all three types of books. Out of the boys studying IT, $\frac{1}{7}$ th like only Novel, $\frac{1}{4}$ th like only Novel and Biography, $\frac{1}{13}$ th like only Novel and Science Fiction. $\frac{1}{7}$ th like all three types of books.

Out of the girls, 56% study Computer Science and remaining IT. Out of the girls studying Computer Science, $\frac{1}{7}$ th like only Novel, $\frac{1}{8}$ th like only Novel and Biography. $\frac{1}{4}$ th like only Novel and Science Fiction. $\frac{1}{8}$ th like all three types of books. Out of the girls studying IT, $\frac{1}{5}$ th like only Novel, $\frac{1}{11}$ th like only Novel and Biography. $\frac{1}{4}$ th like Biography. $\frac{1}{4}$ th like only Novel and Science Fiction. $\frac{1}{5}$ th like all three types of books.

14. Out of the boys studying Computer Science number of boys who like only Science Fiction is $\frac{1}{7}$ th of the boys who like Novel. What is the total number of boys studying Computer Science who like either only Novel or only Science Fiction?
 a) 90 b) 108 c) 104 d) 96 e) 82
15. Total number of girls who like only Biography is 75% of the total number of girls who like only Novel. Total how many girls like Science Fiction?
 a) 291 b) 298 c) 198 d) 287 e) 185
16. If the total number of boys studying IT who like Science Fiction is 165, how many boys studying IT like only Biography?
 a) 63 b) 47 c) 46 d) 67 e) 56
17. What percent of the total number of studying (boys and girls studying Computer Science and IT) like all three types of books?
 a) $16 \frac{3}{8}$ b) $13 \frac{5}{12}$ c) $15 \frac{1}{3}$ d) $17 \frac{5}{12}$ e) $14 \frac{1}{4}$
18. How many girls studying IT do not like Novel?
 a) 49 b) 51 c) 43 d) 65 e) 57

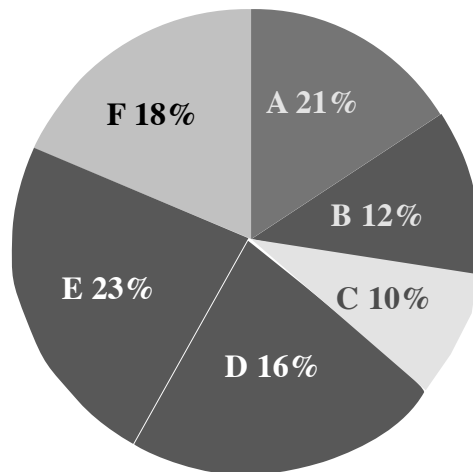
Directions (Qs. 19 to 24): Refer to the pie charts and answer these questions:

Percentage of Academic Book published by seven companies



Total number of Academic Books published by all the companies together is : 19200

Percentage of Non-Academic Books published by seven companies



Total number of Non-Academic Books published by all the companies together is 25600

19. The number of Academic Books published by one Company E is what percent less than the number of Non-Academic Books published by the same company?
a) 25% b) 30% c) 35% d) 22% e) 20%
20. The number of Non-Academic Books published by one Company C is what percent of the total number of Non-Academic Books published by Companies B and D together?
a) 36 b) 40 c) 38 d) 48 e) 32
21. What is the respective ratio between the number of Academic Books published by Company A and the number of Non-Academic Books published by Company E?
a) 5 : 9 b) 9 : 11 c) 7 : 9 d) 4 : 5 e) 3 : 5
22. What is the difference between the number of Academic Books and Non-Academic Books published by Company F?
a) 580 b) 640 c) 512 d) 786 e) 456
23. The number of Non-Academic Books published by Company A is approximately what percent more than the number of Academic Books published by Company E?
a) 26 b) 21 c) 10 d) 18 e) 32
24. How many Non-Academic Books were published by Company D?
a) 3722 b) 4096 c) 3264 d) 3584 e) 2880
25. Rs. 1500 were invested for 5 years in scheme A which offers simple interest at a rate of 14% p.a. The amount received after 5 years and some additional money, is then invested in scheme B, for 2 years, which offer compound interest (compounded annually) at a rate of 20% p.a. IF the compound interest received from scheme B after 2 years is Rs. 1408, what was the additional money invested in scheme B apart from the amount received from scheme A?
a) Rs. 450 b) Rs. 650 c) Rs. 500 d) Rs. 280 e) Rs. 520

Directions (Qs 26 to 30): Each of these questions consist of the question and two statements I and II numbered below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and choose the appropriate option.

26. How much time will train A takes to completely cross train B running in opposite direction (towards each other)
- I. The total length of train A and train B together is 456m.
II. Train B can cross an electric pole in 8 seconds. The respective of speed of train A and train B is 7 : 9.
- a) The data either in statement I alone or in statement II alone or sufficient to answer the question
b) The data in both the statement I and II together are not sufficient to answer the question
c) The data in both the statement I and II together are necessary to answer the question.
d) The data in statement I alone are sufficient to answer the question while the data in statement II alone are not sufficient to answer the question.
e) The data in statement II alone are sufficient to answer the question while the data in statement I alone are not sufficient to answer the question

27. How many labourers are employed to do the piece of work?
- I. If all the employed labourers report to work, the concerned piece of work can be completed in 36 days.
- II. If 15 of the employed labourers are absent (do not report to work), the concerned piece of work can be completed in 56 days.
- a) The data either in statement I alone or in statement II alone are sufficient to answer the question.
- b) The data in both the statements I and II together are not sufficient to answer the question.
- c) The data in both the statements I and II together are necessary to answer the question.
- d) The data in statement I alone are sufficient to answer the question while the data in statement II alone are not sufficient to answer the question.
- e) The data in statement II alone are sufficient to answer the question while the data in statement I alone are not sufficient to answer the question.
28. What is the sum of money (in Rs.)?
- I. the sum when invested in scheme A which offers simple interest @ 8 p.c.p.a. amounts to Rs. 7,752 in two years.
- II. The sum when invested in scheme B, which offers compound interest (compounded annually) amounts to Rs. 8,228 in two years and Rs. 9050.80 in three years.
- a) The data either in statement I alone or in statement II alone are sufficient to answer the question.
- b) The data in both the statements I and II together are not sufficient to answer the question.
- c) The data in both the statements I and II together are necessary to answer the question.
- d) The data in statement I alone are sufficient to answer the question while the data in statement II alone are not sufficient to answer the question.
- e) The data in statement II alone are sufficient to answer the question while the data in statement I alone are not sufficient to answer the question.
29. What was the percentage of discount given while selling the table?
- I. The cost price of the table is Rs. 6,000.
- II. 16% profit was earned by selling the table for Rs. 6,960. If there were no discount the earned profit would have been 24%.
- a) The data either in statement I alone or in statement II alone are sufficient to answer the question.
- b) The data in both the statements I and II together are not sufficient to answer the question.
- c) The data in both the statements I and II together are necessary to answer the question.
- d) The data in statement I alone are sufficient to answer the question while the data in statement II alone are not sufficient to answer the question.
- e) The data in statement II alone are not sufficient to answer the question.
30. What is the volume of the cylinder? (in, m^3)
- I. The height of the cylinder is 6m less than its radius.
- II. The difference between the total surface area and curved surface area of the cylinder is $1232 m^2$.
- a) The data either in statement I alone or in statement II alone are sufficient to answer the question.
- b) The data in both the statements I and II together are not sufficient to answer the question.
- c) The data in both the statements I and II together are necessary to answer the question.
- d) The data in statement I alone are sufficient to answer the question while the data in statement II alone are not sufficient to answer the question.
- e) The data in statement II alone are sufficient to answer the question while the data in statement I alone are not sufficient to answer the question.

Directions (Qs. 31 to 36): Study the following table carefully to answer these questions.

Population Abstract of Counter 'M' (All the numbers are in thousands)

State	Total Poulation	Population between 21-30 years	Employed	Hindi-Speaking population
P	3600	400	3200	2800
Q	4300	460	4100	3600
R	5800	620	5400	5000
S	2100	290	1800	1200
T	4000	480	3600	3350
V	6200	650	5700	6000

31. What percent of the total number of population for States P, R and V together speaks Hindi language?
- a) $87 \frac{8}{13}$ b) $91 \frac{5}{16}$ c) $89 \frac{3}{14}$
- d) $86 \frac{6}{17}$ e) $88 \frac{6}{13}$
32. What is the difference in thousand(s), between total employed population from states R, S and T together and the total unemployed population from these three states together?
- a) 8500 b) 9100 c) 8700
- d) 9300 e) 9700
33. What percent of the population from states Q and V together is in the age group 21-30 years?
- a) $10 \frac{4}{7}$ b) $9 \frac{3}{7}$ c) $8 \frac{2}{5}$
- d) $7 \frac{8}{9}$ e) $6 \frac{3}{5}$
34. If the respective ratio of Urban to Rural population among total population of State S is 4 : 3 and that of state T is 3 : 2, what is the total number of rural population (in thousands) in these two states together?
- a) 2800 b) 2500 c) 3000
- d) 3450 e) 3200
35. Out of the total employed population in all the given states 55% are women and out of them 30% women are married. How many employed women (in thousand) are not married?
- a) 7825 b) 8328 c) 8365
- d) 9669 e) 9163
36. What percent of the total population from states Q and S together is unemployed?
- a) $3 \frac{8}{15}$ b) $5 \frac{6}{13}$ c) $7 \frac{13}{16}$
- d) $6 \frac{7}{17}$ e) $7 \frac{9}{11}$

