Directions (1- 5): Read the following information carefully and answer the questions that follow.
An exam was conducted in the 'Vidhi Institute' which consists of three papers 'Physics', 'Chemistry' and 'Maths'. 100 students appeared in each paper. Out of the 100 students who appeared in Physics paper, none of them scored zero marks. 82 students scored 20 and above marks, 60 students scored 40 and above marks, 47 scored 60 and above marks and 20 students scored 80 and above marks. 100 number of students appeared in the Chemistry paper and 85 of them scored 20 and above marks. 69 of them scored 40 and above marks, 48 of them scored 60 and above marks and 25 of them had scored 80 and above marks. Out of all the students who appeared in the Maths paper, 72 of them scored 20 and above, 52 had scored 40 and above marks, 33 of them had scored 60 and above marks while 16 students had scored 80 and above marks.

1. Find the total no. of students who scored marks in the range of 20-39.
(a) 82   (b) 58   (c) 70   (d) 66

2. The no. of students who scored less than 20 marks in Maths is what percent of the no. of students who scored more than 40 marks in Physics?
(a) 46.66%   (b) 45.45%   (c) 44.44%   (d) 41.11%

3. What is the ratio of no. of students who scored marks in the range of 20-39 in Chemistry to the no. of students who scored more than 80 marks in Maths?
(a) 16:16   (b) 16:15   (c) 16:17   (d) 15:16

4. Find the total no. of students who scored marks in the range of 20-79 in Physics and Chemistry papers.
(a) 178   (b) 94   (c) 106   (d) 122

5. What is the total no. of students who scored more than 60 marks?
(a) 61   (b) 128   (c) 91   (d) 132

Answers & Explanations

1. Ans. b
Sol. COMMON EXPLANATION
We are provided with the following information

	PHYSICS	CHEMISTRY	MATHS
0 and above	100	100	100
20 and above	82	85	72
40 and above	60	69	52
60 and above	47	48	33
80 and above	20	25	16

Convert this data into another format.

	PHYSICS	CHEMISTRY	MATHS
0-19	18	15	28
20-39	22	16	20
40-59	13	21	19
60-79	27	23	17
80-100	20	25	16

Total no. of students who scored in the range 20-39 = 22+16+20 = 58
Hence, option (b) is correct.

2. Ans. a
Sol. Following the COMMON EXPLANATION
The no. of students who scored less than 20 marks in Maths = 28
The no. of students who scored more than 40 marks in Physics = 60
Required % = 28/60 = 7/15 = 46.66%
Hence, option (a) is correct.

3. Ans. a
Sol. Following the COMMON EXPLANATION
No. of students who scored marks in the range of 20-39 in Chemistry = 16
The no. of students who scored more than 80 marks in Maths = 16
Hence, option (a) is correct.

4. Ans. d
Sol. Following the COMMON EXPLANATION
Total no. of students who scored marks in the range of 20-79 in
Physics = 22+13+27 = 62
Chemistry = 60
Total = 62+60 = 122
Hence, option (d) is correct.

5. Ans. b
Sol. Following the COMMON EXPLANATION
Total no. of students who scored more than 60 marks = 27+23+17+20+25+16 = 128
Hence, option (b) is correct.