Directions for questions 1 to 6: Answer the questions on the basis of the information given below.

Nine persons, A, B, C, D, E, F, G, H and I, live in the same building. Each of the nine persons has a different height, not necessarily in that order. Among the nine persons 6 are siblings and other three are the spouses of three of the siblings. None of the nine persons have any siblings other than those living in the building.

The following is the additional information known about them:

(i) The tallest person, I, who is one of the 6 siblings, is the husband of the shortest person, H among the nine persons.

(ii) C is shorter than E and C has at least one brother who is shorter than C, while B has at least 2 siblings who are taller than B. B has at least 2 sisters.

(iii) G's wife is shorter than A; but she is not the sibling of A, while A is shorter than his sibling B.

(iv) There are exactly 4 persons who are taller than D and D's brother-in-law is taller than C. Neither D nor C is married.

(v) There are exactly 5 persons who are shorter than the spouse of one of the 6 siblings.

(vi) None of the 3 spouses of the 3 siblings out of the 6 siblings have any sibling.

Q 1. Which of the following persons is unmarried?

1) A

2) B

3) E

4) F

Q 2. Who is the second tallest person among the nine persons?

1) E

2) G

3) A

4) F

Q 3. How many sisters does A has?

1) 1

2) 2

3) 3

4) 4

Q 4. How many females are shorter than B?

1) 2

2) 3

3) 4

4) 5

Q 5. Which of the following statements is true?

1) C is shorter than 3 persons among the 9 persons.

2) B is taller than his/her spouse.

3) E is the wife of G.

4) F is taller than his/her spouse.

Q 6. Which of the following statements is/are correct?
I. F is one of the 6 siblings.
II. If the heights of 9 persons are in integer cm, then the difference between the height of A and B can be 3 cm.

1) I only

2) II only

3) Both I & II

4) Neither I nor II

Directions for questions 7 to 10: Answer the questions on the basis of the information given below.

Each student of a class took an examination of 100 marks. 70 marks were for Written Examination (WE) and 30 marks were for Internal Assessment (IA). Each student obtained marks in whole numbers in both WE and IA. A student is passed in the examination if he/she has obtained more than 40 marks out of 100 such that he/she must have obtained more than 25 marks in WE.
• There is a system of awarding some grace marks to marginal failing students. i.e., if a student has scored more than 20 marks but less than or equal to 25 in WE and more than 40 marks in aggregate, then teachers award 1 to 5 grace marks to pass the student.
• If a student has scored more than 25 marks in WE and more than 35 marks but less than or equal to 40 marks in aggregate, then teachers award 1 to 5 grace marks to the student to pass.
Software has been developed to determine the marginal failed students and assign them the required grace marks.
For example: Nisha gets 22 marks in WE and 20 marks in IA, then the software will identify Nisha as a marginal failure student and award her 4 grace marks.
Note: If a student fails to score more than 25 marks in WE and also fails to score more than 40 marks in aggregate, then the student has definitely failed in the exam.

Q 7. If Reena got 3 grace marks, then how many combinations of marks she got in (WE, IA) are possible?

Q 8. Aman, and Beena got 1 and 5 grace marks respectively, then what is the maximum possible absolute difference between the marks obtained by Aman and Beena in IA without grace marks?

1) 14

2) 29

3) 30

4) 19

Q 9. Five students – P, Q, R, S and T have scored marks in increasing order in WE in the given order only and distinct scores in IA such that only Q and T got grace marks but P, R and S failed. What could be the interval where maximum possible total marks scored by all of them lies in?

1) from 200 to 250

2) from 250 to 300

3) from 300 to 350

4) from 275 to 325

Q 10. If 5 students obtained an average of 70% marks in the examination, then what is the maximum number of students who could have failed marginally but passed by obtaining distinct grace marks in the examination?

Directions for questions 11 to 16: Answer the questions on the basis of the information given below.

Dev joined an Ed-tech company. After 6-month probation period, 4 of his senior employee's - Aman, Babita, Chitra and Dhruv - rate Dev on each of four determining factors – **Communication, Knowledge, Productivity, and Co-ordination,** on a scale from 1 to 9 (in integers). Total raise in salary of Dev is determined by the total rating points he receives from each of the senior employees. The table given below shows the partial information about the rating points and increment percentage obtained by Dev.

Total rating points of a senior employee	≥ 25	< 25
Salary Raise percentage	9%	3% or 5%

	Aman	Babita	Chitra	Dhruv	Total
Communication					
Knowledge					29
Productivity					26
Co-ordination					21
Salary raise percentage					26%

The following additional facts are also known.
(i) In Co-ordination, three of the senior employees gave Dev the same rating points. Aman gave higher rating points than Babita and Chitra in this factor.
(ii) Dev received distinct rating points in Knowledge from the four senior employees. Similarly, Dev received distinct rating points in Productivity from the four senior employees.
(iii) Chitra gave the same rating points for Knowledge and Productivity.
(iv) Among the four senior employees, Babita gave the highest rating points in Knowledge, and Chitra gave the highest rating points in Productivity.
(v) Everyone rated Dev from 5 to 7 in Communication. Unique maximum and minimum ratings in this factor were given by Aman and Dhruv respectively.
(vi) If the senior employees are ranked based on ratings given by them in individual factors, then Aman's rank based on Knowledge is the same as that based on Productivity. This is also true for Dhruv.

Q 11. What was the maximum total rating points that Dev received from any senior employee?

Q 12. The COMPLETE list of senior employees who gave the minimum total rating points to Dev is

1) Dhruv & Chitra

2) Aman & Dhruv

3) Babita

4) Aman

Q 13. What rating points did Chitra give on Productivity to Dev?

Q 14. What BEST can be concluded about the raise percentage approved by the Aman for Dev?

1) Either 3% or 5%

2) 3%

3) 5%

4) 9%

Q 15. In which factor did Dhruv give the maximum rating points to Dev?

1) Communication

2) Knowledge

3) Productivity

4) Co-ordination

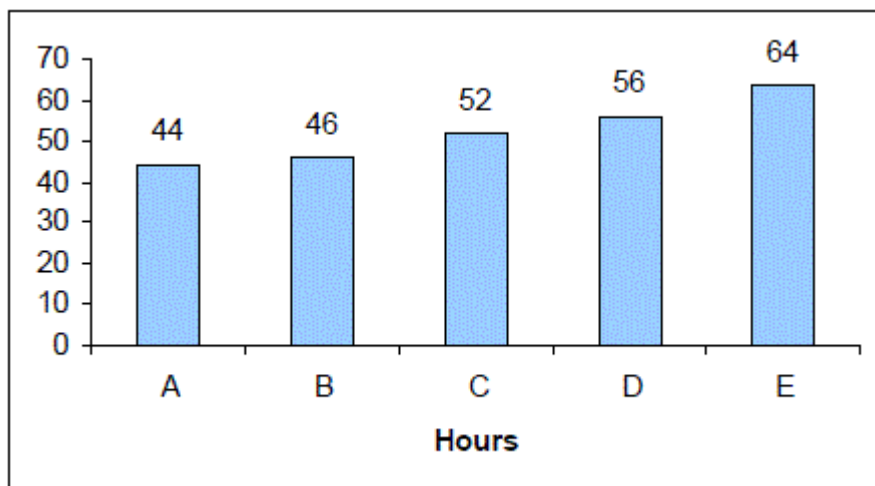**Q 16.** What rating points did Babita give on Co-ordination to Dev?

1) 8

2) 5

3) 6

4) 7

Directions for questions 17 to 20: Answer the questions on the basis of the information given below.

Jitender, a freelance consultant, worked on five different projects - A, B, C, D and E - such that the wages per hour for each project was different, from among (Rs. 100 x) 25, 30, 40, 45 and 50, in no particular order. For each project, the amount that he was paid was

calculated by multiplying the wages per hour of that project and the number of hours that he worked on that project. The total amount paid for no two projects was the same. The bar graph given below shows the number of hours that he worked on these five projects.

Further, it is known that:
(i) The total amount that he was paid for B was more than the amount that was paid for exactly two other projects.
(ii) The rate per hour that he was paid for A was more than that paid for B while the total amount that he was paid for E was not the highest.
(iii) The difference between the amounts that he was paid for projects C and D was Rs.40,000.

Q 17. What is the number of hours that Jitender worked on the project, with the 2nd highest per hour rate?

1) 44

2) 46

3) 52

4) 64

Q 18. What was the average amount (in Rs.) paid to Jitender per project in all five projects combined?

Q 19. Which of the following statements is/are definitely true?
I. Jitender received the maximum amount for the project that involved the minimum time.
II. Jitender received the minimum amount for the project that involved the maximum time.
III. The difference between the maximum and minimum amounts received by Jitender was Rs.80,000.

1) I only

2) II & III only

3) I & II only

4) All I, II & III

Q 20. For how many projects did Jitender receive more than Rs.2 lakh?

1) None

2) One

3) Two

4) Three