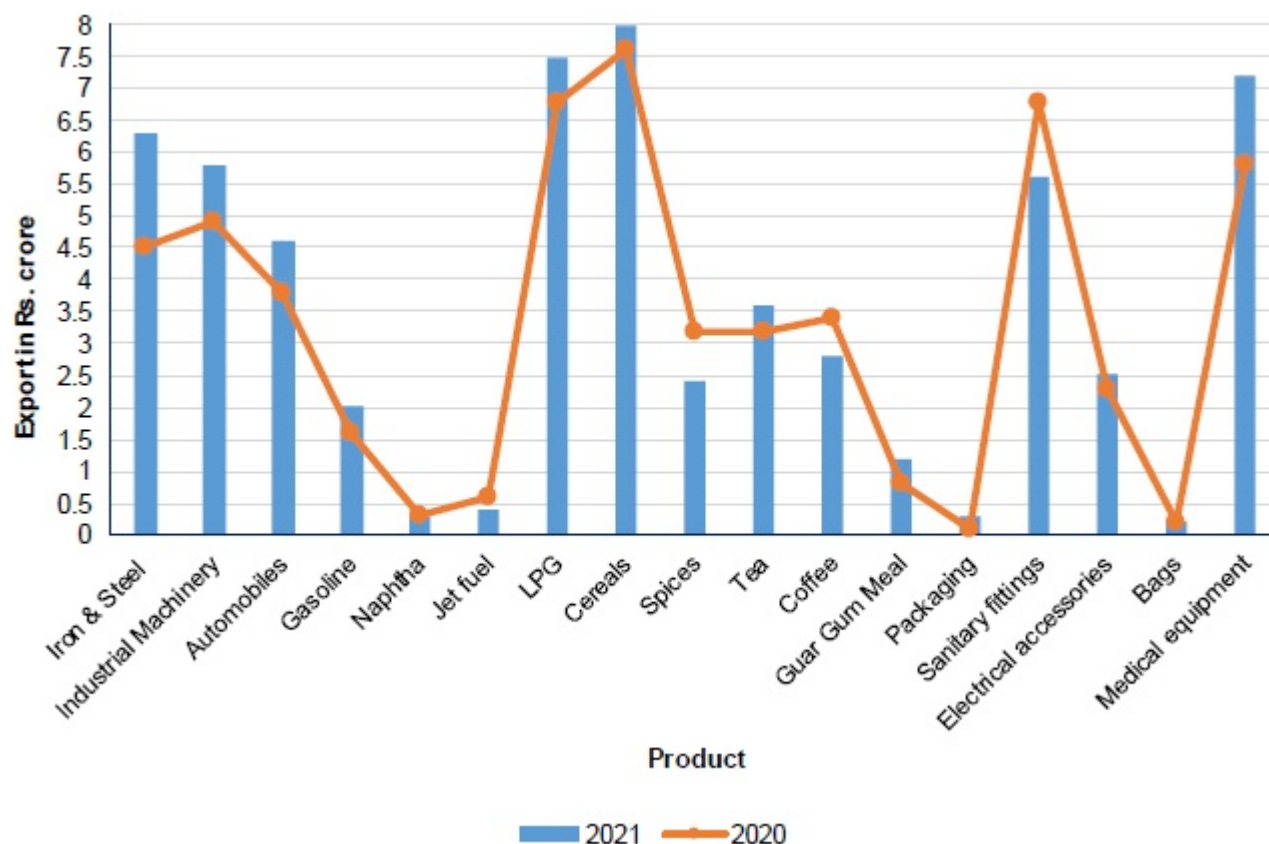


Prime CAT 05 2022 DILR

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

The bar graph given below shows the total revenue (in Rs. crore) from exports of various products by a company ABC Private Limited in 2021. The products are categorized under four different heads. Iron & Steel, Industrial Machinery, Automobiles come under Engineering Products. Gasoline, Naphtha, Jet fuel, LPG come under Petroleum Products. Cereals, Spices, Tea, Coffee, Guar Gum Meal come under Agricultural Products and the remaining five come under Plastic & Linoleum Products. The line graph in the chart shows the revenue (in Rs. crore) from exports of the corresponding products in 2020.



Q 1. The number of products whose exports declined from 2020 to 2021 is

Q 2. Which of the following products shows highest increase in exports from 2020 to 2021?

- 1) Iron & Steel
- 2) Industrial Machinery
- 3) Automobiles
- 4) Medical equipment

Q 3. The revenue (in Rs. crore) from the export of Plastic & Linoleum Products in 2020 is how much more than the revenue from the export of Petroleum Products in the same year?

- 1) 4.9
 - 2) 7.9
 - 3) 9.5
 - 4) 5.9
-

Q 4. What is the approximate percentage growth in the total exports from 2020 to 2021?

- 1) 4.5%
 - 2) 8.5%
 - 3) 16.5%
 - 4) 20.5%
-

Q 5. If Plastic & Linoleum Products, Agricultural Products, Petroleum Products and Engineering Products are represented by category 1, 2, 3 and 4 respectively, then which category shows the highest percentage growth in exports from 2020 to 2021?

Q 6. Among the products that have witnessed an increase in revenue from 2020 to 2021, the percentage increase in revenue from 2020 to 2021 is calculated for those that have increased by less than Rs. 0.5 crore and then they are ranked in order of the percentage increase. Which of the following options shows the correct order of the products on this basis?

- 1) Packaging, Gaur Gum Meal, Gasoline, Tea
 - 2) Gasoline, Tea, Gaur Gum Meal, Packaging
 - 3) Tea, Gasoline, Gaur Gum Meal, Packaging
 - 4) Tea, Gasoline, Packaging, Gaur Gum Meal
-

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

A team of 21 teachers was appointed to teach in 16 villages of a particular district under "Project Buniyad", during a span of 4 months. Out of these 16 villages, 4 villages are "Under-developed", while the remaining are "Developed". Teaching in each Under-developed village was completed in a different month. The teachers are divided into four teams - P1, P2, P3 and P4 - for this purpose and each team covers one village per month. There are 10 Post-Graduate teachers (PD) and the remaining are Graduate teachers (GD). Teams P1, P2, P3, P4 are allotted one Under-developed village each in the first, second, third and fourth month, respectively. Each month, the team allotted the Under-developed village has one more teacher than the remaining teams. In the first month, P1 has one more PD than P2, P2 has one more PD than P3, P3 has one more PD than P4.

Between two successive months, the composition of the teams changes as follows:

- (i) The team allotted the under-developed village gets two PDs from the team which was allotted the Under-developed village in the previous month. In exchange, one GD is shifted from the former team to the latter team.
- (ii) After the above exchange, if P1 has any PDs left and P4 has any GDs left, then one PD is shifted from P1 to P4, and one GD is shifted from P4 to P1. Also, if P2 has any PD and P3 has any GD, then one PD is shifted from P2 to P3, and one GD is shifted from P3 to P2.
- (iii) The total number of students taught in the four months was 270, 274, 273 and 271 in that order. In every month, starting from the

first month, a team with a higher number of PDs taught higher number of students. If for any two teams, the number of PDs were equal, then the team with higher number of GDs taught higher number of students. It was observed that no team taught more than 70 students and less than 66 students.

Q 7. The composition of team P2 in the first month is same as composition of team P_____ in the third month.

Q 8. The number of PD in P1 and P2 for the projects in the fourth month are, respectively:

- 1) (0, 0)
 - 2) (5, 5)
 - 3) (0, 5)
 - 4) (5, 0)
-

Q 9. Total how many students were taught by team P4 in four months?

- 1) 273
 - 2) 270
 - 3) 274
 - 4) Cannot be determined.
-

Q 10. Rohit, a PD teacher under project Buniyaad earned a compensation of Rs. 900 per student he taught in four months. If Rohit was always a part of one team and earned the maximum possible compensation, then he was the part of team P_____.

- 1) 1
 - 2) 2
 - 3) 3
 - 4) 4
-

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

The table given below shows impartial information about the total number of tickets sold at a multiplex for four movie shows - A, B, C and D - at three Screens - I, II and III - during four time slots - 9 AM, 12 Noon, 3 PM and 6 PM - on a particular Sunday. The same movie is not Screened at the same time on any two Screens and every movie is shown at least once on each Screen. There are three types of seats for which tickets are sold - Box, Gold and Silver.

	9:00 AM	12 Noon	3:00 PM	6:00 PM	Total
Screen I	-	D 190	B 210	-	800
Screen II	C 180	-	-	-	840
Screen III	-	A 240	-	B	-
Total	-	-	-	760	

Further, it is also known that:

(i) Equal number of tickets is sold for all the 3 PM slots. The total number of tickets sold for the 9 AM slot was 200 less than that for the 6 PM slot. The total number of tickets sold for movies A and C were equal whereas for D the total was 10 more.

(ii) **For Screen I:** The total number of tickets sold for 9 AM to 6 PM time slots are in AP such that number of ticket sold under each category was also in AP. In the 6 PM slot 105 Gold tickets were sold whereas the Silver tickets sold were 5 more than the Box tickets, which was equal to the Silver tickets sold in the 3 PM slot. The Box tickets sold in the 9 AM slot of Screen I was 15 less than that in the 6 PM slot.

(iii) **For Screen II:** Equal number of tickets were sold in all three categories for the 9 AM as well as the 3 PM slots. The Box tickets for 12 Noon and 6 PM are 60 and 80 whereas the tickets sold in the remaining two categories for the two slots were equal.

(iv) **For Screen III:** The Box tickets sold for each time slot were equal to 60. The Silver tickets sold were in AP such that the number of 9 AM tickets were half the number of 6 PM tickets. The Gold and Silver tickets sold for the 6 PM slot were equal.

Q 11. Which of the following movies was shown on Screen II in the 6 PM slot?

- 1) A
 - 2) D
 - 3) B
 - 4) Either (1) or (2)
-

Q 12. Among all the 12 shows in the three Screens, how many shows had total ticket sales of more than 220?

- 1) Four
 - 2) Five
 - 3) Three
 - 4) Six
-

Q 13. What percentage of the total tickets were sold for the 12 noon show in all three Screens together?

- 1) 20%
 - 2) 25%
 - 3) 30%
 - 4) 18%
-

Q 14. What was the total number of Box tickets sold for movie D?

- 1) 180
- 2) 220
- 3) 190
- 4) 240

Q 15. What is the difference between the Gold tickets sold in Screen I and the Gold tickets sold in Screen III?

Q 16. What is the ratio of the total number of Box tickets and Silver tickets respectively sold in the 12 noon slot in all three Screens together?

- 1) 33 : 43
- 2) 37 : 51
- 3) 43 : 57
- 4) 34 : 43

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

Eight cabinet ministers – A, B, C, D, E, F, G and H are members of at least one of the following three cabinet committees: Economic Affairs, Parliamentary Affairs and Political Affairs. Among them two are members of Economic Affairs but not of Parliamentary Affairs or Political Affairs, another two are members of Parliamentary Affairs but not of Economic Affairs or Political Affairs, and one is a member of Political Affairs but not of Parliamentary Affairs or Economic Affairs. Further, two are members of Economic Affairs and Parliamentary Affairs but not of Political Affairs, and one is a member of Economic Affairs and Political Affairs but not of Parliamentary Affairs.

The following facts are known about these eight cabinet ministers.

- (i) Out of A and B, one belongs to the Committee on Economic Affairs only and the other belongs to the Committee on Parliamentary Affairs only.
- (ii) E is a member of both Economic Affairs and Political Affairs.
- (iii) Neither F nor H is a member of Parliamentary Affairs.
- (iv) Out of C and D, exactly one belongs to the Economic Affairs Committee.

Q 17. How many of the ministers cannot be a possible member of the committee on Economic Affairs?

Q 18. Who among the following is definitely a member of both the Economic Affairs and Parliamentary Affairs Committees?

- 1) C
- 2) G
- 3) D
- 4) F

Q 19. If A, C and F are members of different committees, then which of the following pairs belongs to the same committee?

- 1) C and H
 - 2) B and F
 - 3) B and E
 - 4) B and C
-

Q 20. If D and F cannot work together in a committee, then which of the following statements can be FALSE?

- 1) D and G can be members of both the Economic Affairs and Parliamentary Affairs committees.
 - 2) D and H can be members of the Economic Affairs committee.
 - 3) B, C and H cannot be the members of the same committee.
 - 4) A and F can work together in the same committee.
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