

IBPS RRB PO

Mains 2022

Memory-based

Question PDF(1st Oct)

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Direction: Study the following information carefully and answer the following questions.

Seven people i.e., A, B, C, D, E, F, and G are going to a party on seven different days of week starting from Monday to Sunday. They all belong to different cities i.e., Indore, Agra, Cuttack, Gwalior, Mumbai, Pune, Jaipur. All the information is not necessarily in the same order. Three people go between E and the one who belongs to Cuttack. E goes just before F after Thursday. Number of people go before F is same as after A. Two people go between A and the one who belongs to Agra. G belongs to Indore and goes before the one who belongs to Agra. Two people go between G and the one who belongs to Gwalior. F does not belong to Gwalior. B goes before the one who belongs to Pune but after C. F neither belongs to Jaipur nor Pune.

1. Who amongst the following belong to Mumbai?

- A. D
- B. F
- C. E
- D. B
- E. None of these

2. How many people go between D and the one who belongs to Indore?

- A. Three
- B. One
- C. Two
- D. None
- E. Four

Direction: Study the following information carefully and answer the following questions.

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3. A belongs to which city?

- A. Jaipur
- B. Cuttack
- C. Agra
- D. Mumbai
- E. None of these

Direction: Study the following information carefully and answer the following questions.

Seven people i.e., A, B, C, D, E, F, and G are going to a party on seven different days of week starting from Monday to Sunday. They all belong to different cities i.e., Indore, Agra, Cuttack, Gwalior, Mumbai, Pune, Jaipur. All the information is not necessarily in the same order. Three people go between E and the one who belongs to Cuttack. E goes just before F after Thursday. Number of people go before F is same as after A. Two people go between A and the one who belongs to Agra. G belongs to Indore and goes before the one who belongs to Agra. Two people go between G and the one who belongs to Gwalior. F does not belong to Gwalior. B goes before the one who belongs to Pune but after C. F neither belongs to Jaipur nor Pune.

4. How many people go before the one who belongs to Pune?

- A. Three

- B. One
- C. Two
- D. Four
- E. None

5. Which statement is correct?

- I. D belongs to Pune
- II. Three people go between D and A
- III. C belongs to Jaipur

- A. Only II
- B. Only I and II
- C. Only II and III
- D. None
- E. All follows

Direction: (6-9) In these questions, four statements followed by the five conclusions are given, one of which definitely does not logically follow from the given statements. That conclusion is your answer



6. Statement:

Only a few Box is Mail

No Mail is Bag

All Bag is Table

- A. No Box is Bag
- B. Some Table is Box
- C. No Mail is Table
- D. Some Table is not Mail
- E. All Box is Table

7. Statement:

All White is Red

Some Red is Colour

Some Colour is Gap

- A. Some Colour being Red is a possibility
- B. No Gap is Red
- C. All White can be Red
- D. All Gap can be Red
- E. No White is Gap

8. Statement:

Some Rob is Den

Only a few Den is Edit

No Edit is Ink

- A. No Rob is Edit
- B. Some Den is not Ink
- C. No Ink is Rob
- D. All Den being Edit is a possibility
- E. Some Den is Ink

9. Statement:

All Size is Ride

Only a few Ride is Fog

Some Fog is Big

- A. All Size is Big
- B. No Big is Ride
- C. Some Ride is not Fog
- D. Some Size is not Fog
- E. All Fog is Size



10. Which state government has signed an MoU with ISMC Analog Fab Private Limited for setting up a semiconductor fab plant in the state at a cost of Rs 22,900 crore?

- A. Kerala
- B. Tamil Nadu
- C. Karnataka
- D. Andhra Pradesh
- E. Telangana

11. Who among the following has become the first woman to join the Army Aviation Corps as a combat aviator?

- A. Captain Summy Singh
- B. Captain Abhilasha Barak
- C. Captain Padma Bandopadhyay
- D. Captain Harita Kaur Deol
- E. Captain Tania Shergill

12. Who among the following has been named as the Chairperson of Reliance Jio Infocomm?

- A. Isha Ambani
- B. Nita Ambani
- C. Akash Ambani
- D. Anant Ambani
- E. Russell Mehta

13. Banwarilal Purohit has been appointed as the new governor of which state?

- A. Nagaland
- B. Uttarakhand
- C. Haryana
- D. Punjab
- E. Assam

14. The Reserve Bank of India (RBI) has granted the National Asset Reconstruction Company (NARCL), the licence to register as an asset reconstruction company (ARC). It is also dubbed as _____.

- A. Bad Bank
- B. Asset Management Company
- C. Asset Monetization Company
- D. PARA
- E. None of the above

15. Gautam Adani has been named among the world's 100 most influential people of 2022 by TIME magazine. He has been named in which category?

- A. Icons
- B. Pioneers
- C. Titans
- D. Innovators
- E. Leaders

16. Dholera Greenfield Airport is located in which state?

- A. Arunachal Pradesh
- B. Himachal Pradesh
- C. Sikkim
- D. Gujarat
- E. Odisha



17. Which of the following statements is correct with respect to soiled note?

- A. Notes which are in pieces and/or of which the essential portions are missing
- B. Any banknote, which is wholly or partially, obliterated, shrunk
- C. Notes which are washed, altered or indecipherable
- D. A note which, has become dirty due to usage and also includes a two-piece note pasted together wherein both the pieces presented belong to the same note and form the entire note.
- E. Notes which are wholly or partially, obliterated, shrunk, washed, altered or indecipherable

18. Who among the following has headed the Securities and Exchange Board of India (SEBI) constituted the Foreign Portfolio Investors (FPIs) Advisory Committee?

- A. Arvind Subramanian
- B. T. V. Somanathan
- C. Ajay Bhushan Pandey
- D. Sanjeev Sanyal
- E. KV Subramanian

19. Which city plans to build the world's first "Bitcoin City", funded initially by bitcoin-backed bonds?

- A. El Salvador
- B. Belmopan
- C. San Jose
- D. Tegucigalpa
- E. San Marino city

Direction: (20-21) In the given question, a part of the sentence is missing and given as a blank, that can be filled by an idiom. Choose the correct alternative out of the given five options to complete the sentence meaningfully and grammatically.

20. Shreya didn't get through the interview, and she felt her hard work was _____.

- A. Yarns changed to cotton
- B. All for naught
- C. In seventh heaven
- D. Tickling pink
- E. Having a whale of time

Direction: In the given question, a part of the sentence is missing and given as a blank, that can be filled by an idiom. Choose the correct alternative out of the given five options to complete the sentence meaningfully and grammatically.

21. Using computers nowadays is _____ compared to how difficult they were to use twenty years ago.

- A. No picnic
- B. Pat on the back
- C. Herculean task
- D. Child's play
- E. Veg out



Direction: In this question, two columns I and II and three sentences are given, which are divided into two parts. Column I (A, B and C) consist of first half of each sentence and Column II (D, E and F) consists of second half of each sentence. Match column I with column II, so that the sentences formed are both meaningful and grammatically correct. Choose the option as your answer.

22. Ques.

Column I

A) The starstruck fan was too shocked to speak, so he

B) The tea didn't taste very good,

C) Being a very picky eater, I tend to sort the food on my plate,

Column II

D) so I used some sugar to sweeten it.

E) just stared and blinked his eyes over and over again

F) to sort candy like Skittles or M&M's into groups of the same color.

- A. A-D
- B. B-F

- C. C-E
- D. A-E and B-D
- E. All A-D, B-E and C-F

23. Ques.

Column I

A) Mother tried to insert a gift into the trinket box,

B) The family members couldn't all agree on a vacation spot,

C) Walter relied on his sturdy truck to get him back and

Column II

D) but it was much too big to fit inside.

E) forth to work and trusted that it would never break down through him.

F) so they let grandpa choose.

- A. A-E
- B. C-E
- C. C-F and A-D
- D. A-E and B-D
- E. A-D and B-F

Direction: (24-26) Read the sentence to find out whether there is an error in it. The error, if any,



will be in one part of the sentence. The number corresponding to that part will be your answer. If the given sentence is correct as it is, mark the answer as 'No error'. Ignore the errors of punctuation, if any.

24. The lonely puppy (1)/ stared out the window, (2)/ gazed at the yard and wishing (3)/ he could go outside to play. (4)

- A. 1
- B. 2
- C. 3
- D. 4
- E. No error

25. Too heavy (1)/ to be carried by his friends, (2)/ the unconscious Kurt was dragged (3)/ to safety by him instead. (4)

- A. 1
- B. 2
- C. 3
- D. 4
- E. No error

Direction: Read the sentence to find out whether there is an error in it. The error, if any, will be in one part of the sentence. The number corresponding to that part will be your answer. If the given sentence is correct as it is, mark the answer as 'No error'. Ignore the errors of punctuation, if any.

26. During the class election, (1)/ most of the students have voted (2)/ for Bobby while a few wrote (3)/ down Whitney's name on their ballots. (4)

- A. 1
- B. 2
- C. 3
- D. 4
- E. No error

27. Operating System is an interface between_____.

- A. User and program
- B. User and hardware
- C. Both of the above
- D. User and user
- E. None of these

28. The Third Generation Computer was made with_____.

- A. Vacuum Tube
- B. Discrete Components
- C. Integrated circuits
- D. Bio Chips
- E. None of these

29. Which of the following is non-impact printer?

- A. Drum printer
- B. Line printer
- C. Chain printer
- D. Laser printer
- E. None of these



30. What does Phishing mean in computer operations?

- A. Abuse message
- B. Fraudulent attempt to acquire sensitive information
- C. To check the malware attack on internet network
- D. To check the excess heat release by mother board

31. Which of the following is a ransomware?

- A. SQL Slammer
- B. Nimda
- C. Morris Worm
- D. Petya
- E. None of the above/More than one of the above

32. Which protocol is used to send e-mail?

- A. HTTP
- B. POP3
- C. SMTP
- D. SSH
- E. None of these

33. Which of the following is not a computer language?

- A. High – Level Language
- B. Machine Language
- C. Low Level Language

- D. Medium Level Language
- E. None of these

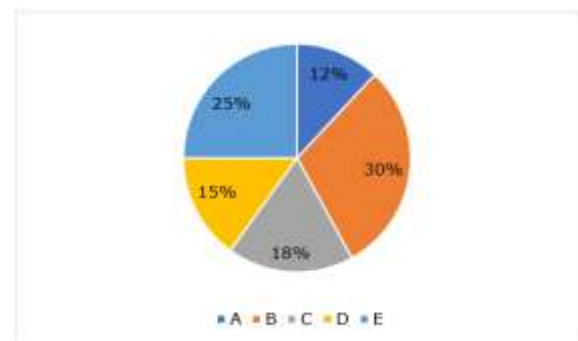
34. Modem is used for:

- A. Multiplexing/Demultiplexing
- B. Modulation/Demodulation
- C. Error detection
- D. Error Correction

Direction: (35-39) Study the following pie charts carefully and answer the given questions.

The given below pie chart shows the percentage distribution of total number of buses and cars manufactured by five companies-A, B, C, D and E

Total number of buses and cars manufactured by five companies is 196000



The given below pie chart shows the percentage distribution of number of cars manufactured by five companies-A, B, C, D and E



Total number of cars manufactured by five companies is 90000



35. What is the ratio of number of cars manufactured by A to the number of buses manufactured by B?

- A. 15 : 31
- B. 14 : 23
- C. 9 : 16
- D. 20 : 37
- E. None of these

36. If 25% of buses manufactured by D were electric buses and the rest were CNG and diesel buses in ratio of 11 : 4, then find the number of diesel buses manufactured by company D

- A. 1625
- B. 1248
- C. 1380
- D. 1260
- E. None of these

37. In previous year production of cars by company E was 15% less than the production of cars by same company in present year (as shown in pie chart) and production of buses by company B was 40% less than the present production of buses (as shown in pie chart) by the same company. What was the difference in the number of buses manufactured by company B and cars manufactured by company E in previous year?

- A. 10080
- B. 13270
- C. 10240
- D. 12240
- E. None of these

38. Average number of buses manufactured by C and E is approximately what percentage of the total number of cars manufactured by company E?

- A. 162%
- B. 108%
- C. 196%
- D. 209%
- E. 250%

39. Ratio of number of quality check passed buses of company A to the number of quality test failed buses of the same company is 13 : 3. Percentage of quality test failed cars in the company B is $6\frac{2}{3}\%$. What is the ratio of number of quality failed



buses of company A to the number of quality failed cars of company B?

- A. 23 : 32
- B. 5 : 8
- C. 11 : 15
- D. 37 : 52
- E. None of these

Direction: (40-41) What should come in place of the question mark (?) in the following number series?

40. 319, 354, 408, 485, 589, ?

- A. 662
- B. 724
- C. 891
- D. 1204
- E. 1036

Direction: What should come in place of the question mark (?) in the following number series?

41. 126, 632, 2530, 7592, 15186, ?

- A. 26248
- B. 14844
- C. 19412
- D. 15188
- E. 13614

42. P and Q start a business in partnership by investing Rs. 4000 and Rs. 1500 respectively. At the end of 6 months R joined the business with a capital of Rs. (X -

1000). At the end of year profit of P is 60% more than the profit of R. Find the value of X.

- A. 8000
- B. 6000
- C. 7500
- D. 4800
- E. 9000

43. Two trains A and B run between Delhi and Kanpur. Train A starts at 7 am from Delhi and 2 hours later train B starts from Kanpur. Speed of train B is 60 km/h and train A which is 250 m long can pass a tower in 5 seconds. If the distance between Delhi and Kanpur is 720 km then at what time will the two trains cross each other?

- A. 12:30 pm
- B. 11:15 am
- C. 1:45 pm
- D. 2:15 pm
- E. 11:30 am

44. The curved surface area of a cone is 40 cm² more than the lateral surface area of a cuboid. The height of the cone is 24 cm and its radius is 7 cm. The length and breadth of the cuboid are 11 cm and 6 cm respectively. What is the height of the cuboid?

- A. 12 cm
- B. 18 cm
- C. 15 cm
- D. 24 cm
- E. None of these



ANSWERS

1. Ans. B.

Day	People	Cities
Monday	A	Jaipur
Tuesday	C	Cuttack
Wednesday	G	Indore
Thursday	B	Agra
Friday	D	Pune
Saturday	E	Gwalior
Sunday	F	Mumbai

2. Ans. B.

Day	People	Cities
Monday	A	Jaipur
Tuesday	C	Cuttack
Wednesday	G	Indore
Thursday	B	Agra
Friday	D	Pune
Saturday	E	Gwalior
Sunday	F	Mumbai

3. Ans. A.

Day	People	Cities
Monday	A	Jaipur
Tuesday	C	Cuttack
Wednesday	G	Indore
Thursday	B	Agra
Friday	D	Pune
Saturday	E	Gwalior
Sunday	F	Mumbai

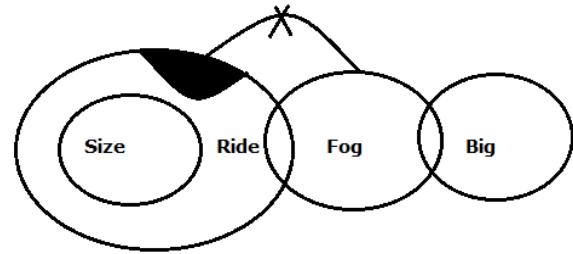
4. Ans. D.

Day	People	Cities
Monday	A	Jaipur
Tuesday	C	Cuttack
Wednesday	G	Indore
Thursday	B	Agra
Friday	D	Pune
Saturday	E	Gwalior
Sunday	F	Mumbai

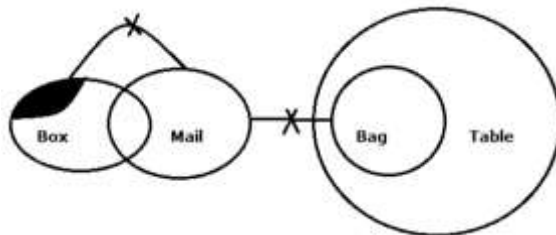
5. Ans. B.



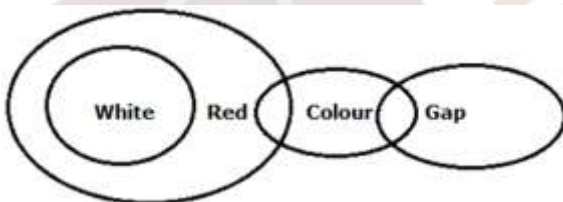
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Monday	A	Jaipur
Tuesday	C	Cuttack
Wednesday	G	Indore
Thursday	B	Agra
Friday	D	Pune
Saturday	E	Gwalior
Sunday	F	Mumbai



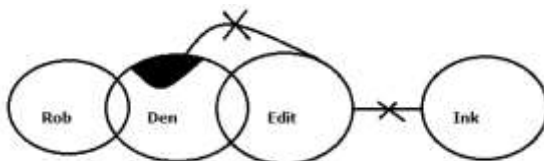
6. Ans. D.



7. Ans. D.



8. Ans. B.



9. Ans. C.

10. Ans. C.

Karnataka government has signed an MoU with ISMC Analog Fab Private Limited (Israel-based) for setting up a semiconductor fab plant in the state at a cost of Rs 22,900 crore (USD 3 billion).

The project will be implemented over a period of seven years and generate 1,500 jobs.

The ISMC has also requested 150 acres of land in Mysuru's Kochanahalli Industrial area for this project.

11. Ans. B.

* Captain Abhilasha Barak from Haryana, has become the first woman officer to join the Army Aviation Corps as a combat aviator after completing her training.

* She was awarded the coveted wings along with 36 other army pilots by the DG and Colonel Commandant of Army Aviation in Nashik.



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* She was commissioned into the Indian Army from the Officers Training Academy, Chennai in 2018.

* She has been assigned to the second flight of the 2072 Army Aviation Squadron.

12. Ans. C.

- The board of Reliance Jio Infocomm has approved the appointment of Akash Ambani (non-executive director of the company) as its chairman.

- He has joined the Reliance Jio in 2014.

- The board has also approved the appointment of Raminder Singh Gujral and KV Chowdary, as additional directors of the company.

- The appointment of Pankaj Mohan Pawar as MD of Jio has also been approved.

- The board has also accepted the resignation of Mukesh Ambani as Reliance Jio director.

13. Ans. D.

* Banwarilal Purohit has been appointed as new governor of Punjab.

* He served as a governor of Tamil Nadu for almost four years.

* He is one of the highly visible and controversial Governors.

* In October 2017, Banwarilal Purohit was appointed the 14th Governor of Tamil Nadu when the state was reeling under a political crisis following J Jayalithaa's death.

* To replace him, RN Ravi, Governor of Nagaland, was appointed the Governor of Tamil Nadu.

14. Ans. A.

* The Reserve Bank of India (RBI) has granted the National Asset Reconstruction Company (NARCL), which is seeking to turn around bad loans worth Rs 2 trillion, the licence to register as an asset reconstruction company (ARC).

* The licence to NARCL, dubbed as bad bank, was granted by the central bank on Monday, said an official.

* The approval to the entity has been accorded under Section 3 of the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act 2002.

15. Ans. C.

* Gautam Adani, Karuna Nundy (SC lawyer) and Khurram Parvez (Kashmiri human rights activist)



have been named among the world's 100 most influential people of 2022 by TIME magazine.

* The six categories of the list: Icons, Pioneers, Titans, Artists, Leaders and Innovators.

* Adani has been named under the Titans category, Nundy and Parvez named under the Leaders category.

16. Ans. D.

- The CCEA chaired by PM Narendra Modi has approved the proposal for the development of Phase I of New Greenfield Airport at Dholera, Gujarat.

- The estimated cost of the project is Rs. 1305 crore and to be completed within 48 months.

- The project is being implemented by DIACL, a JVC of AAI, Govt of Gujarat and National Industrial Corridor Development and Implementation Trust.

- Dholera Greenfield Airport is situated at an aerial distance of 80 Km from Ahmedabad, Airport.

17. Ans. D.

Soiled note means a note which, has become dirty due to usage and also includes a two-piece note pasted together wherein both the

pieces presented belong to the same note and form the entire note.

- **The mutilated banknote** is a banknote, of which a portion is missing or which is composed of more than two pieces.

- **Imperfect banknote** means any banknote, which is wholly or partially, obliterated, shrunk, washed, altered or indecipherable but does not include a mutilated banknote.

18. Ans. E.

- * The Securities and Exchange Board of India (SEBI) has constituted of Foreign Portfolio Investors (FPIs) Advisory Committee.

- * Aim: To increase the overseas flows into the country.

- * The 15 members committee will be chaired by former Chief Economic Adviser KV Subramanian.

- * Other members: Representing foreign banks, stock exchanges depositories and RBI.

- * The committee will review investment avenues available for FPIs and to advise on the feasibility of new investment avenues.

19. Ans. A.



- El Salvador President Nayib Bukele has announced to build the world's first Bitcoin City in the country

- This new city is planned to be developed in the eastern region of La Union and will be initially funded by bitcoin-backed bonds.

- It would get geothermal power from a volcano.

- Bitcoin City will not levy any taxes except for value added tax (VAT).

- One half of this VAT levied will be used to fund the bonds issued to build the city and the next half would be used to pay for services such as garbage collection.

20. Ans. B.

The correct answer is B.

21. Ans. D.

The idiom "no picnic" means "an activity or action is not fun". But the sentence implies that using computers was difficult twenty years ago and now it is easier. So, the correct idiom would be "child's play". The idiom "child's play" means "an extremely simple task or act."

The correct option is D.

22. Ans. D.

F is not related to any of the fragments, hence cannot be combined.

23. Ans. E.

The correct answer is E.

24. Ans. C.

It should be gazing in place of gazed, as per the rule of parallelism as the other verb used here is 'wishing'.

25. Ans. D.

'Him' is incorrect here. As the pronoun here refers to the friends and not Kurt, so the correct pronoun would be 'them'.

26. Ans. B.

In the second part, the phrase 'have voted' is incorrect.

Here the error lies in using the present perfect tense instead of the simple past tense. The present perfect is a present tense.

27. Ans. B.

An **Operating system** is a program, which acts as an interface between a **user** and the **hardware**.

28. Ans. C.



The computers of the third generation used **integrated circuits** (IC's) in place of **transistors**. A single **IC** has many **transistors**, **resistors**, and **capacitors** along with the associated circuitry.

Note: The period of the **third generation** was **1965-1971**.

29. Ans. D.

Ans. D

Non-impact printers do not use a striking device to produce characters on the paper and because these printers do not hammer against the paper they are much quieter.

30. Ans. B.

* **Phishing** is characterised by attempting to fraudulently acquire sensitive information such as passwords, credit cards, etc., by masquerading.

* Phishing is a cyber attack that uses disguised email as a weapon.

* According to 2019 Verizon Data Breach Investigation Report, nearly a third of all breaches in the past year involved phishing.

* **Whaling, Spear Phishing, Clone Phishing** are some of the types of phishing.

31. Ans. D.

Petya is a family of encrypting malware that infects Microsoft Windows-based computers. Petya infects the master boot record to execute a payload that encrypts data on infected a hard drives' systems. The data is unlocked only after the victim provides the encryption key, usually after paying the attacker a ransom for it. SQL Slammer, Morris Worm and Nimda are computer Viruses.

32. Ans. C.

Simple Mail Transfer Protocol (**SMTP**) protocol is used by the **Mail Transfer Agent** (MTA) to deliver your **email** to the recipient's **mail server**. The **SMTP protocol** can only be used to **send emails, not to receive** them.

33. Ans. D.

Ans. D

Medium Level Language is not a computer language. A programming language is a formal constructed language designed to communicate instructions to a machine, particularly a computer.

34. Ans. B.



A modem modulates and demodulates electrical signals sent through phone lines, coaxial cables, or other types of wiring; in other words, it transforms digital information from your computer into analog signals that can transmit over wires, and it can translate incoming analog signals back into digital data that your computer can understand.

Thus, option B is correct.

35. Ans. A.

Total number of (buses + cars) manufactured by company A = 12% of 196000 = 23520

Number of cars manufactured by company A = 20% of 90000 = 18000

Number of buses manufactured by company A = 23520 - 18000 = 5520

Similarly we can calculate the number of cars and buses for other companies. The following table shows the number of cars and buses for each companies.

Company	Number of (Buses + Cars)	Number of Cars	Number of Buses
A	23520	18000	5520
B	58800	21600	37200
C	35280	13500	21780
D	29400	22500	6900
E	49000	14400	34600

Required ratio = 18000 : 37200 = 15 : 31

36. Ans. C.

Total number of (buses + cars) manufactured by company A = 12% of 196000 = 23520

Number of cars manufactured by company A = 20% of 90000 = 18000

Number of buses manufactured by company A = 23520 - 18000 = 5520

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B	58800	21600	37200
C	35280	13500	21780
D	29400	22500	6900
E	49000	14400	34600

Number of diesel buses manufactured by D = $\frac{4}{15}$ of 75% of 6900

= 20% of 6900



= 1380

37. Ans. A.

Total number of (buses + cars) manufactured by company A = 12% of 196000 = 23520

Number of cars manufactured by company A = 20% of 90000 = 18000

Number of buses manufactured by company A = 23520 - 18000 = 5520

Similarly we can calculate the number of cars and buses for other companies. The following table shows the number of cars and buses for each companies.

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B	58800	21600	37200
C	35280	13500	21780
D	29400	22500	6900
E	49000	14400	34600

Production of cars by company E in previous year = 85% of 14400

= 85 × 144 = 12240

Production of buses by company B in previous year = 60% of 37200

= 60 × 372 = 22320

Required difference = 22320 - 12240 = 10080

38. Ans. C.

Total number of (buses + cars) manufactured by company A = 12% of 196000 = 23520

Number of cars manufactured by company A = 20% of 90000 = 18000

Number of buses manufactured by company A = 23520 - 18000 = 5520

Similarly we can calculate the number of cars and buses for other companies. The following table shows the number of cars and buses for each companies.

Company	Number of (Buses + Cars)	Number of Cars	Number of Buses
A	23520	18000	5520
B	58800	21600	37200
C	35280	13500	21780
D	29400	22500	6900
E	49000	14400	34600

Average number of buses manufactured by C and E = $\frac{21780 + 34600}{2} = 28190$

Required percentage = $\frac{28190}{14400} \times 100 \approx 196\%$



39. Ans. A.

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Number of buses manufactured by company A = 23520 - 18000 = 5520

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Number of quality failed buses of company A = $\frac{3}{16} \times 5520 = 1035$

Number of quality failed cars of company B = $\frac{20}{300} \times 21600 = 1440$

Required ratio = 1035 : 1440 = 23 : 32

40. Ans. B.

The pattern of the series is:

$$319 + 5 \times 7 = 354$$

$$354 + 6 \times 9 = 408$$

$$408 + 7 \times 11 = 485$$

$$485 + 8 \times 13 = 589$$

$$589 + 9 \times 15 = 724$$

Hence, the missing number is 724.

41. Ans. D.

The pattern of the series is:

$$126 \times 5 + 2 = 632$$

$$632 \times 4 + 2 = 2530$$

$$2530 \times 3 + 2 = 7592$$

$$7592 \times 2 + 2 = 15186$$

$$15186 \times 1 + 2 = 15188$$

Hence, the missing number is 15188.

42. Ans. B.

Ratio of profit shares of P, Q and R

$$= (4000 \times 12) : (1500 \times 12) : (X - 1000) \times 6$$

$$= 8000 : 3000 : (X - 1000)$$



Let the profit of P, Q and R be 8000y, 3000y and $(X - 1000)y$ respectively.

$$\text{Then, } 8000y = 1.6(X - 1000)y$$

$$\Rightarrow X = 6000$$

43. Ans. E.

Distance travelled by train B from 7 am to 9 am = $2 \times 60 = 120$ km

$$\text{speed of train A} = \frac{250}{5} = 50 \text{ m/s} = 180 \text{ km/h}$$

$$\text{Time taken by train to meet after 9 am} = \frac{720 - 120}{180 + 60} = 2.5 \text{ hours}$$

$$\text{Time} = 9 \text{ am} + 2.5 \text{ hours} = 11:30 \text{ am}$$

44. Ans. C.

$$\text{Slant height of cone} = \sqrt{7^2 + 24^2} = 25 \text{ cm}$$

$$\text{Curved surface area of cone} = \frac{22}{7} \times 7 \times 25 = 550 \text{ cm}^2$$

$$\text{Curved surface area of cuboid} = 550 - 40 = 510 \text{ cm}^2$$

$$2h(l + b) = 510$$

$$\Rightarrow h(11 + 6) = 255$$

$$\Rightarrow h = 15 \text{ cm}$$

