SBI & IBPS 2023 Exams
A Foundation Batch (Batch 1) (English)

Clear All SBI & IBPS 2023 Exams in First Attempt

1.Who won the Nobel Prize in chemistry for the year 2022?
A. Carolyn R. Bertozzi
B. Alain Aspect
C. John F. Clauser
D. Svante Pääbo
E. Anton Zeilinger

2.Cheetah has been re-introduced in India recently. Asiatic cheetahs in India were declared extinct in which year?
A. 1947
B. 1949
C. 1950
D. 1952
E. 1955

3.In the Monetary Policy of December 2022, Reserve Bank of India (RBI) raised the repo rate by _____.
A. 25 basis point
B. 35 basis point
C. 45 basis point
D. 55 basis point
E. 65 basis point

4.Which term is used for fraudulent phone calls to trick people into giving money or revealing personal information?
A. Flaming
B. Blogging
C. Pop- ups
D. Voice phishing
E. Hijacking

5.Eliud Kipchoge from Kenya is the only double Olympic champion from the country. When he won the medal for the Olympics for the second time?
A. Tokyo Olympics 2020
B. Rio Olympics 2016
C. London Olympics 2012
D. Beijing Olympics 2008
E. Athens Olympics 2004

6.What is the name of the hurricane that hit Florida in September 2022?
A. Andrew
B. Ian

C. Nicole
D. Charley
E. Wilma

7.The Reserve Bank of India (RBI) has removed the Central Bank of India from its Prompt Corrective Action Framework (PCAF). Why was the Central Bank of India placed under the PCA framework?
A. High net NPAs
B. Negative return on assets
C. Tier-1 leverage ratio was not in between 3.5 to 4.0 percent.
D. A and B
E. B and C

8.What is the expanded form of KLEMS?
A. capital, labor, energy, materials, and services.
B. kinetic energy, labour, ego, materials, and services.
C. capital, land, energy, mechanics, and services.
D. knowledge, land, enemy, marker, and solidarity
E. None of these

9.Who has created Special Drawing Right (SDR) to supplement the official reserves of its member countries?
A. IMF
B. WTO
C. UNESCO
D. World Bank
E. UNICEF

10.Kumbhalgarh fort is in which state of India?
A. Madhya Pradesh
B. Rajasthan
C. Uttar Pradesh
D. Chhattisgarh
E. Haryana

11.The 2022 Nobel Peace Prize is awarded to Ales Bialiatski, Memorial organization, and Center for Civil Liberties. Where do they belong?
A. US, UK, and Russia
B. Belarus, Russia, and Ukraine
C. France, Russia, and Ukraine
D. Belarus, UK, and US
E. Belarus, Peru, and Sudan

12.RBI has approved the appointment of Rama Subramaniam Gandhi as non-executive part time chairman of Yes Bank. For how many years will he hold this position?
A. 1 year
B. 2 years
C. 3 years
D. 4 years
E. 5 years

13.Who is the top performer of the Global Liveability Index 2022?
A. Vienna, Austria
B. Copenhagen, Denmark
C. Geneva, Switzerland
D. Frankfurt, Germany
E. Amsterdam, Netherlands

14.Government has extended the tenure of the Foreign Trade Policy 2015-20 till _____.
A. March 2023
B. March 2024
C. March 2025
D. March 2026
E. March 2027

15.Which country emerged as the top performer in the Global Innovation Index 2022?
A. United Kingdom
B. Netherlands
C. Switzerland
D. Denmark
E. Australia

16.India first imposed windfall taxes in July 2022. It is related to _____.
A. Tax levied by a local political unit
B. Tax the profit of companies generating huge revenue due to an unprecedented event
C. Tax imposed on profit of goods when they are transported across international borders
D. Taxes paid on the wages and salaries of employees to finance social insurance programs

E. None of these

17. What does 'C' stand for NAVIC?
A. Communication
B. Collection
C. Constellation
D. Coordination
E. Connection

18. What is India's rank in cement production in the world?
A. 2nd
B. 4th
C. 6th
D. 8th
E. 10th

19. Who is the title sponsor of the Indian Super League teams?
A. Byju's
B. Hero
C. Mahindra
D. Vivo
E. Oppo

20. Meghalaya has been declared as the best performer among smaller states for startup ecosystem by which ministry?
A. Department for Promotion of Industry and Internal Trade (DPIIT)
B. Ministry of Micro, Small and Medium Enterprises
C. Ministry of Skill Development and Entrepreneurship
D. Ministry of Finance
E. Ministry of Commerce and Industry

21. The breadth (b) of a rectangle is 65% less than the length of rectangle. The area of a circle having radius r cm is 616 cm^2 and
$r^2 = 16\frac{1}{3}(b + 5)$. What is the area of rectangle?
A. 154 cm^2
B. 84 cm^2
C. 140 cm^2
D. 126 cm^2
E. None of these

22. 15 men can do a work in 20 days. 20 women can do the same work in 30 days. 40 men worked for 3 days and after that work was stopped for some

days. The remaining work was finished by 30 women. If the total work was finished in 21 days, for how many days work was stopped?
A. 6
B. 8
C. 4
D. 3
E. 5

Direction: What approximate value will come in place of the question mark (?) in the following question? (You are not expected to calculate the exact value)

23.
$\sqrt{289.12} + 45.019 \times 6.012 + \dfrac{287.982}{16} = ?^2 - 18.93$
A. 21
B. 12
C. 45
D. 18
E. 80

24.(120.05% of 749.98) $\div \left(\dfrac{71.97}{4} \right) = ?\%$ of 124.96
A. 2
B. 40
C. 8
D. 25
E. 14

25.Which of the quadratic equations among the given options have the roots $-\dfrac{7}{2}$ and 4?
A. $14x^2 - 11x - 4 = 0$
B. $2x^2 - x - 28 = 0$
C. $4x^2 - x + 28 = 0$
D. $2x^2 - 11x - 14 = 0$
E. None of these

Direction: Study the following information carefully and answer the question. In the question, three equations (I), II and (III) are given.
I. $2x^2 - 11x - 63 = 0$
II. $5y^2 + 18y + 16 = 0$
III. $4z^2 + 19z + 22 = 0$

26. What is the product of the smaller root of equation (I) and the larger root of equation (III)?
A. 9
B. −4
C. −9
D. 12
E. 7

27. What is the sum of the larger roots of equation (I) and equation (II)?
A. $\dfrac{24}{7}$
B. 10
C. 13
D. $\dfrac{37}{5}$
E. None of these

28. If m is the smaller root of equation III and n is the smaller root of equation II, what is the value of $\dfrac{m}{n}$?
A. $\dfrac{11}{8}$
B. 3
C. $\dfrac{22}{5}$
D. $-\dfrac{11}{2}$
E. None of these

29. Mohan's age six years hence will be equal to Sohan's age 4 years ago. The numerical value of present age (in years) of Sohan's son is equal to the larger root of the equation $x^2 − 9x + 8 = 0$. If Sohan's son is 16 years younger than Mohan, find Sohan's present age.
A. 36 years
B. 34 years
C. 42 years
D. 44 years
E. 39 years

30. The ratio of number of males to females in village A is 3 : 2 and the ratio of number of males in village A to males in village B is 2 : 5. The number of females in village B is 560 more than the number of females in village A. If the population of village B is 160% more than the population of village A, find the number of males in village A.

A. 570
B. 720
C. 480
D. 360
E. 240

Direction: Study the following data carefully and answer the questions accordingly.
Input: 623715 936124 582012 946271 364238 273637
Step I : 517326 391642 850221 172649 632483 736372
Step II : 123567 123469 012258 124679 233468 233677
Step III: 72356 92346 01225 92467 163346 143367
Step IV : 13 15 5 16 7 8
Step V : 7 9 10 15 17 18
Step V is the last step of the above arrangement.
As per the rules followed in the steps given above, find out in each of the following questions the appropriate step for the given input.
Input: 649572 835133 735248 423162 173527 846241

31. Which number will be the third from right end in step IV?
A. 8
B. 13
C. 10
D. 12
E. 14

32.What will be the sum of last number of step IV and Step V?
A. 25
B. 18
C. 23
D. 30
E. 32

33.Step "245679 833351 234578 122346 123577 124468" This step belongs to which step?
A. Step II
B. Step III
C. Step IV
D. No such step
E. None of the above

34.Which number is third to the right of the second number from the left end in Step III?
A. 83335
B. 72357
C. 82446
D. 163457
E. 62234

Direction: The question below consists of a question and two statements numbered I, II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question.
35. Who amongst P, Q, R, S and T is the second shortest?
I.S is not the shortest. P is shorter than only two persons.
II. Q is taller than S and shorter than P.
A. If statement I is sufficient to answer the question, but statement II alone is not sufficient to answer the question.
B. If statement II is sufficient to answer the question, but statement I alone is not sufficient to answer the question.
C. If statement either I or II is sufficient to answer the question.
D. If both the statements I and II taken together are not sufficient to answer the question.
E. If both the statements I and II taken together are sufficient to answer the question.

Direction: The question below consists of a question and two statements numbered I, II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question.
36. How 'feather' and 'sky' is written in a code language?
I. 'beautiful feather fly' is written as 'lm on pk' and 'fly in sky' is written as 'ty lm mu'.
II. 'sky is beautiful' is written as 'pk ty hk' and 'birds in sky' is written as 'ty gy mu'.
A. If statement I is sufficient to answer the question, but statement II alone is not sufficient to answer the question.
B. If statement II is sufficient to answer the question, but statement I alone is not sufficient to answer the question.
C. If statement either I or II is sufficient to answer the question.
D. If both the statements I and II taken together are not sufficient to answer the question.
E. If both the statements I and II taken together are sufficient to answer the question.

Direction: In the following question, a word is given along with its usage in sentences given in the options. Choose the option in which the use of the given word is contextually and grammatically correct.

37.
SOAR
A. In 1743, as the city quickly grew restless from a wave of **soaring** prices, grumbling voices were heard everywhere.
B. Not a single man had any desire to revive old **soar** or to score on the other party.
C. The team's perfect season turned **soar** after they lost their second straight game.
D. I went rowing yesterday for the first time in years, and my arms are **soar** today.
E. None of the above

Direction: Out of the statements given below, find the statements that are grammatically and contextually correct. If all the statements are correct, choose E, i.e. 'All are correct'.
38.
A) In 1974, Colombia's capital Bogota began a revolution called Ciclovia, a Spanish term for cycleway.
B) Every Sunday, or on a holiday, 122 km of streets are closed, partially or fully, for citizens to cycle.
C) Today, more than 1.5 million people cycle in the city, boosted by the creation of a network of permanent cycle routes and a city mandate that enforces bike lanes on all new streets.
D) These ideas can then be made permanent based on feedback from citizens.
A. Only A
B. Both B and C
C. Only D
D. Both A and D
E. All are correct

39.
A) Tea garden workers in Assam, many of whom belonging to the Adivasi community, live on land provided by the tea estates.
B) Last year, the government raised it to Rs 205 for workers in the Brahmaputra Valley, much less than the Rs 351 originally demanded.
C) Assam's Chief Minister has pointed out that adherence to IST results in a loss of daylight hours in the state and a concomitant decline in productivity.

D) For long, North Easterners have demanded a separate time zone which would allow them to start the day an hour earlier and save that much wasted place.
A. Only A
B. Only C
C. Both A and D
D. Both B and C
E. All are correct

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) consists 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.

40.
Column I
A) Farmers have a constitutional right to continue with their absolutely
B) Has anybody seen an legal order like this before because,
C) A Bench was informed by the government's additional standing counsel
Column II
D) that most of the work relating to the stretch of road was complete.
E) to take forward the slow-moving process of disengagement on the LAC.
F) perfect protest as long as their dissent does not slip into violence.
A. A-F and C-D
B. B-E and C-F
C. A-E, B-F, and C-D
D. A-E
E. B-F

41.
Column I
A) Covid 19 (Corona virus) pandemic has brought
B) Workers have been forced to protest on the factory gate in the cold
C) Leader of the Opposition in the Legislative Assembly said he would
Column II
D) for the last three week for their legitimate demands.
E) great pressure on World Health Organisation.
F) step down from their post if civic bodies scam was proven.
A. B-D
B. C-F

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

###ANSWERS###

1. Ans. A.
● Nobel Prize in Chemistry 2022 is given to three personalities this year: **Carolyn Bertozzi, Barry Sharpless** and **Morten Meldal.**
● Barry Sharpless and Morten Meldal have laid the foundation for a functional form of chemistry click chemistry in which molecular building blocks snap together quickly and efficiently.
● Carolyn Bertozzi has taken click chemistry to a new dimension and started utilizing it in living organisms.

2. Ans. D.
● Last cheetah as shot in India in 1947, and they were officially declared extinct in 1952.
● Prime Minister of India launched the first global intercontinental carnivore translocation of African cheetahs from Namibia to Kuno-Palpur National Park in India.
● Historic reintroduction of Cheetahs in India is part of a long series of measures for ensuring sustainability and environment protection in the last 8 years which has resulted in significant achievements in the area of environment protection and sustainability.

3. Ans. B.
● Monetary Policy Committee (MPC) increased the policy repo rate under the liquidity adjustment facility (LAF) by 35 basis points to 6.25 per cent with immediate effect in its December 2022 Monetary Policy.
● Repo rate is the rate at which Reserve Bank of India (RBI) lends money to commercial banks in the event of any shortfall of funds.

4. Ans. D.
● Voice phishing is a form of phishing that occurs over voice-based media, comprising voice over IP (VoIP) or plain old telephone service (POTS).
● It uses speech synthesis software to leave voicemails notifying the victim of suspicious activity in a bank or credit account.

5. Ans. A.
● Eliud Kipchoge EGH is a Kenyan long-distance runner who competes in the marathon and formerly specialized at the 5000-metre distance.
● He is regarded as the greatest marathon runner of all time and is the 2016 Rio Olympics and 2020 Tokyo Olympic marathon champion and the world record holder in the marathon with a time of 2:01:09 set at the 2022 Berlin Marathon.

6. Ans. B.
● Hurricane Ian formed over the central Caribbean Sea in September 2022, as a tropical storm, the ninth tropical storm of the 2022 season and hit Florida.

● Its top maximum sustained winds of 155 mph had been recorded hours before landfall, when Category 4 hurricane was 2 mph shy of reaching Category 5 classification, the strongest classification on the Saffir-Simpson Hurricane Wind Scale.

7. Ans. D.

● Reserve Bank of India (RBI) removed the Central Bank of India from the Prompt Corrective Action (PCA) framework on complying with parameters like net non-performing assets (net NPAs) and capital ratios.

● RBI had placed Central Bank under PCA in June 2017 due to high net NPAs and negative return on assets.

● Central Bank was the last of the public sector lenders to come out of PCA as Indian Overseas Bank and UCO Bank were removed from the framework last September.

8. Ans. A.

● KLEMS stands for Capital (K), Labour (L), Energy (E), Materials (M) and Services (S).

● It refers to broad categories of intermediate inputs that are consumed by industries in their production of goods and services.

9. Ans. A.

● Special Drawing Rights (SDR) were created in 1969 by the International Monetary Fund (IMF).

● It is neither a currency nor a claim on the IMF and is a potential claim on the freely usable currencies of IMF members.

● It can be exchanged for these currencies and serves as the unit of account of the IMF and some other international organizations.

● The SDR basket of currencies includes US dollar, Euro, Japanese yen, pound sterling and the Chinese renminbi.

10. Ans. B.

● Kumbhalgarh fort is also known as the Great Wall of India and is a Mewar fortress on the westerly range of Aravalli Hills, just about 48 km from Rajsamand city of Rajasthan.

● It is a World Heritage Site included in Hill Forts of Rajasthan and was built during the 15th century by Rana Kumbha.

● Chief architect who built this fort was named as Mandan, who documented his style of work in his text, Rajvallabh.

11. Ans. B.

● 2022 Nobel Peace Prize winners Ales Bialiatski is from Belarus, human rights organization Memorial is from Russia and human rights organization Center for Civil Liberties from Ukraine.

● Centre for Civil Liberties was founded for the purpose of advancing human rights and democracy in Ukraine and has taken a stand to strengthen

Ukrainian civil society and pressure the authorities to make Ukraine a full-fledged democracy.

● Memorial was established in 1987 by human rights activists in former Soviet Union who wanted to ensure that the victims of communist regime's oppression would never be forgotten.

● Ales Bialiatski was one of the initiators of the democracy movement that emerged in Belarus in the mid-1980s and has devoted his life to promoting democracy and peaceful development in his home country.

12. Ans. C.

● Reserve Bank of India (RBI) has approved the appointment of Rama Subramaniam Gandhi as non-executive (part time) chairman of Yes bank for a period of three years.

● R Gandhi also had a three-year secondment to the Securities and Exchange Board of India (SEBI) and held the charge of Director of the Institute for Development and Research in Banking Technology (IDRBT), Hyderabad.

● Yes Bank headquarters: Mumbai

13. Ans. A.

● Austrian Capital, Vienna has topped the Global Liveability Report, 2022, with a 99.1 rating.

● It replaced Auckland (New Zealand) which topped in 2021 Global Liveability Report.

● Vienna was ranked at 12th position in 2021 since most of its museums and restaurants were closed due to Covid-19.

● It rebounded to 1st place, which it also held in 2018 and 2019.

● In the index New Delhi, has been ranked 112th, Mumbai at 117th position, Chennai at 142nd and Ahmedabad at 146th positions.

14. Ans. A.

● Government has extended the tenure of the Foreign Trade Policy 2015-20 by another six months till March 2023, instead of replacing it with a new policy by September 30 as it had envisaged, citing requests from industry bodies.

● Foreign Trade Policy (FTP) 2015-2020 was introduced for the facilitation of foreign trade by reducing the cost and time of transaction and raising the competitive bar for Indian Exports.

15. Ans. C.

● Switzerland is the most innovative economy in the world in 2022 for the 12th year in a row, followed by United States, Sweden, United Kingdom, and Netherlands.

● India was ranked 40th position out of 132 in Global Innovation Index (GII) 2022 rankings released by World Intellectual Property Organization (WIPO).

● Global Innovation Index (GII) is published annually and has been a leading reference for measuring an economy's innovation performance.

● Theme for Global Innovation Index 2022: **"What is the future of innovation-driven growth?"**

16. Ans. B.

● Windfall tax is a tax levied by governments against certain industries when economic conditions allow those industries to experience significantly above average profits.

● They are primarily levied on companies in the targeted industry that have benefited the most from economic windfall, most often commodity-based businesses.

17. Ans. C.

● NAVIC stands for Navigation with Indian Constellation.

● It is an autonomous regional satellite navigation system that provides accurate real-time positioning and timing services and covers India and a region extending 1,500 km around it, with plans for further extension.

18. Ans. A.

● India has been ranked as the world's second-largest cement producer.

● It accounts for more than 7% of the global installed capacity and has a lot of potential for development in the infrastructure and construction sector and the cement sector is expected to largely benefit from it.

● China is the first cement production of the world.

19. Ans. B.

● Two-wheeler vehicles manufacturer, Hero with headquarters at New Delhi has been declared as the Title Sponsor of the ISL since its inaugural season in 2014.

● Most recently, the company renewed its deal with the ISL in January 2020 in a three-year agreement reportedly worth ₹160 crore.

● Indian Super League (ISL) is the topflight of professional men's football in India, for the 2022-23 season.

20. Ans. A.

● Meghalaya has been adjudged as the best performer among smaller states having population of less than 1 crore in developing startup ecosystem for budding entrepreneurs, according to the ranking of states and Union territories by the Department for Promotion of Industry and Internal Trade (DPIIT).

● DPIIT ranking is an annual report which pegs the country's states and UTs according to their startup ecosystems.

21. Ans. C.

$\frac{22}{7} \times r^2$ = 616

⇒ r² = 196

So, $16\frac{1}{3}(b + 5)$ = 196

$\Rightarrow \frac{49}{3}(b+5)$ = 196

$\Rightarrow$ b + 5 = 12

$\Rightarrow$ b = 7

35% of the length of rectangle = 7 cm

So, the length of rectangle = $\frac{7}{0.35}$ = 20 cm

Area of rectangle = length × breadth = 7 × 20 = 140 cm^2

22. Ans. A.

15m × 20 = 20w × 30

$\Rightarrow$ m = 2w

$\Rightarrow$ 40m = 80w

Let the work was stopped for x days.

Then, 80w × 3 + 30w × (21 − 3 − x) = 20w × 30

$\Rightarrow$ 240 + 540 − 30x = 600

$\Rightarrow$ 30x = 780 − 600

$\Rightarrow$ 30x = 180

$\Rightarrow$ x = 6

23. Ans. D.

By approximation, we get:

$\sqrt{289}$ + 45 × 6 + $\frac{288}{16}$ = ?^{2} − 18.93

$\Rightarrow$ 17 + 270 + 18 = ?^{2} − 19

$\Rightarrow$ 305 = ?^{2} − 19

$\Rightarrow$?^{2} = 305 + 19 = 324

$\Rightarrow$? = 18

24. Ans. B.

By approximation, we get:

(120% of 750) ÷ $\left(\frac{72}{4}\right)$ = ?% of 125

$\Rightarrow \frac{120}{100}$× 750 × $\left(\frac{4}{72}\right)$ = $\frac{?}{100}$ × 125

$\Rightarrow$ 50 = $\frac{?}{4}$ × 5

$\Rightarrow$? = $\frac{50 \times 4}{5}$ = 40

25. Ans. B.

A quadratic equation with roots a and b is given by (x − a)(x − b) = 0

So, the required equation = $\frac{\left(x - \left(-\frac{7}{2}\right)\right)(x - 4)}{}$ = 0

$\Rightarrow \left(x + \frac{7}{2}\right)(x - 4)$ = 0

$\Rightarrow$ (2x + 7)(x − 4) = 0

$\Rightarrow 2x^2 - 8x + 7x - 28 = 0$
$\Rightarrow 2x^2 - x - 28 = 0$
26. Ans. E.
I. $2x^2 - 11x - 63 = 0$
$\Rightarrow 2x^2 - 18x + 7x - 63 = 0$
$\Rightarrow 2x(x - 9) + 7(x - 9) = 0$
$\Rightarrow (x - 9)(2x + 7) = 0$
$\Rightarrow x = 9, -7/2$
II. $5y^2 + 18y + 16 = 0$
$\Rightarrow 5y^2 + 10y + 8y + 16 = 0$
$\Rightarrow 5y(y + 2) + 8(y + 2) = 0$
$\Rightarrow (y + 2)(5y + 8) = 0$
$\Rightarrow y = -2, -8/5$
III. $4z^2 + 19z + 22 = 0$
$\Rightarrow 4z^2 + 8z + 11z + 22 = 0$
$\Rightarrow 4z(z + 2) + 11(z + 2) = 0$
$\Rightarrow (z + 2)(4z + 11) = 0$
$\Rightarrow z = -2, -11/4$

Smaller root of equation (I) = $-\dfrac{7}{2}$
Larger root of equation (III) = -2

Required product = $\left(-\dfrac{7}{2}\right) \times (-2) = 7$
27. Ans. D.
I. $2x^2 - 11x - 63 = 0$
$\Rightarrow 2x^2 - 18x + 7x - 63 = 0$
$\Rightarrow 2x(x - 9) + 7(x - 9) = 0$
$\Rightarrow (x - 9)(2x + 7) = 0$
$\Rightarrow x = 9, -7/2$
II. $5y^2 + 18y + 16 = 0$
$\Rightarrow 5y^2 + 10y + 8y + 16 = 0$
$\Rightarrow 5y(y + 2) + 8(y + 2) = 0$
$\Rightarrow (y + 2)(5y + 8) = 0$
$\Rightarrow y = -2, -8/5$
III. $4z^2 + 19z + 22 = 0$
$\Rightarrow 4z^2 + 8z + 11z + 22 = 0$
$\Rightarrow 4z(z + 2) + 11(z + 2) = 0$
$\Rightarrow (z + 2)(4z + 11) = 0$
$\Rightarrow z = -2, -11/4$

Required sum = $9 - \dfrac{8}{5} = \dfrac{37}{5}$
28. Ans. A.
I. $2x^2 - 11x - 63 = 0$

⇒ $2x^2 - 18x + 7x - 63 = 0$
⇒ $2x(x - 9) + 7(x - 9) = 0$
⇒ $(x - 9)(2x + 7) = 0$
⇒ $x = 9, -7/2$
II. $5y^2 + 18y + 16 = 0$
⇒ $5y^2 + 10y + 8y + 16 = 0$
⇒ $5y(y + 2) + 8(y + 2) = 0$
⇒ $(y + 2)(5y + 8) = 0$
⇒ $y = -2, -8/5$
III. $4z^2 + 19z + 22 = 0$
⇒ $4z^2 + 8z + 11z + 22 = 0$
⇒ $4z(z + 2) + 11(z + 2) = 0$
⇒ $(z + 2)(4z + 11) = 0$
⇒ $z = -2, -11/4$

$\dfrac{m}{n} = \dfrac{-\frac{11}{4}}{-2} = \dfrac{11}{8}$

29. Ans. B.
$x^2 - 9x + 8 = 0$
⇒ $x^2 - 8x - x + 8 = 0$
⇒ $x(x - 8) - 1(x - 8) = 0$
⇒ $(x - 8)(x - 1) = 0$
⇒ $x = 8, 1$
Larger root = 8
Present age of Sohan's son = 8 years
Present age of Mohan = 8 + 16 = 24 years
Let the present age of Sohan be y years.
Then, $24 + 6 = y - 4$
⇒ $y = 30 + 4 = 34$ years

30. Ans. C.
Let the number of males in village A be 6x.
So, the number of females in village A = 4x

Number of males in village B = $\dfrac{6x}{2} \times 5$ = 15x
Number of females in village B = 4x + 560
$15x + 4x + 560 = 260\%$ of $(6x + 4x)$
⇒ $19x + 560 = 26x$
⇒ $7x = 560$
⇒ $x = 80$
Number of males in village A = 6 × 80 = 480

31. Ans. C.
Step I: The number which is odd, written in reverse order.

The number which is even, 1st and 2nd digits are interchanged then 3rd and 4th digits are interchanged and at last 4th and 5th digits are interchanged.
Step II: Each digits written in ascending order in each number.
Step III: Multiplication of 1st and last digit, and then written remaining digits of each number.
Step IV: Addition of 1st and last digit of each number.
Step V: Addition of 2 in each number which is in step IV and then written in ascending order.
Input: 649572 835133 735248 423162 173527 846241
Step I : 465927 331538 372584 241326 725371 142648
Step II : 245679 133358 234578 122346 123577 124468
Step III: 184567 83335 163457 62234 72357 82446
Step IV : 8 13 8 10 14 14
Step V : 10 10 12 15 16 16
Hence, required number is 10.
32. Ans. D.
Step I: The number which is odd, written in reverse order.
The number which is even, 1st and 2nd digits are interchanged then 3rd and 4th digits are interchanged and at last 4th and 5th digits are interchanged.
Step II: Each digits written in ascending order in each number.
Step III: Multiplication of 1st and last digit, and then written remaining digits of each number.
Step IV: Addition of 1st and last digit of each number.
Step V: Addition of 2 in each number which is in step IV and then written in ascending order.
Input: 649572 835133 735248 423162 173527 846241
Step I : 465927 331538 372584 241326 725371 142648
Step II : 245679 133358 234578 122346 123577 124468
Step III: 184567 83335 163457 62234 72357 82446
Step IV : 8 13 8 10 14 14
Step V : 10 10 12 15 16 16
Hence, required answer is 30.
33. Ans. D.
Step I: The number which is odd, written in reverse order.
The number which is even, 1st and 2nd digits are interchanged then 3rd and 4th digits are interchanged and at last 4th and 5th digits are interchanged.
Step II: Each digits written in ascending order in each number.
Step III: Multiplication of 1st and last digit, and then written remaining digits of each number.
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Step III: 184567 83335 163457 62234 72357 82446
Step IV : 8 13 8 10 14 14
Step V : 10 10 12 15 16 16
Hence, option D is correct.
34. Ans. B.
Step I: The number which is odd, written in reverse order.
The number which is even, 1st and 2nd digits are interchanged then 3rd and 4th digits are interchanged and at last 4th and 5th digits are interchanged.
Step II: Each digits written in ascending order in each number.
Step III: Multiplication of 1st and last digit, and then written remaining digits of each number.
Step IV: Addition of 1st and last digit of each number.
Step V: Addition of 2 in each number which is in step IV and then written in ascending order.
Input: 649572 835133 735248 423162 173527 846241
Step I : 465927 331538 372584 241326 725371 142648
Step II : 245679 133358 234578 122346 123577 124468
Step III: 184567 83335 163457 62234 72357 82446
Step IV : 8 13 8 10 14 14
Step V : 10 10 12 15 16 16
Hence, required answer is 72357.
35. Ans. E.
I.S is not the shortest. P is shorter than only two persons.
(not S) < _ < P < _ < _
II. Q is taller than S and shorter than P.
S < Q < P
Taking both together:
S < Q < P< _ < _
Here we get Q is the second shortest.
Both the statements I and II taken together are sufficient to answer the question.
Hence, option (E) is the answer.
36. Ans. E.
I. 'beautiful feather fly' is written as 'lm on pk' and 'fly in sky' is written as 'ty lm mu'.
From this statement, we have
Fly = lm
II. 'sky is beautiful' is written as 'pk ty hk' and 'birds in sky' is written as 'ty gy mu'.

From this statement, we have

Sky = ty

And, from both the statements together, we have

Beautiful = pk

In = mu

Is = hk

Feather = on

Birds = gy

Both the statements are necessary to answer the question.

Hence, option (E) is the answer.

37. Ans. A.

B: Sore

C: Sour

D: Sore

38. Ans. E.

39. Ans. D.

Mark the errors:

A: is stating a fact. So, the main verb "belong" should be in simple present tense. Since the subject, "tea garden workers", is plural, the verb should also be in plural. It should be "belong", instead of "belonging".

D: The sentence is talking about "time zone" and to start the day earlier. In this context, it should be about saving wasted "time", rather than "place".

40. Ans. A.

B does not make a pair with anyone.

41. Ans. C.

A-E is the correct pair.

BD forms contextual pair but is grammatically incorrect. Here, 'week' should be replaced with 'weeks'

C' and 'F' too can be connected together to make a contextually meaningful sentence but because of the usage of 'their' in 'E', the sentence thus formed will be grammatically incorrect.