RRB NTPC UG Memory Based Mock (8 Aug Exam)

Q1. Which Article of the Constitution provided for the Council of Ministers with the Chief Minister as its head to aid and advise the Governor?
(a) Article 163
(b) Article 164
(c) Article 165
(d) Article 162

Q2. Article 39A provides for:
(a) Organisation of Village Panchayat
(b) Equal Justice and Free Legal Aid
(c) Uniform civil code for the citizens
(d) Definition of State

Q3. Which Article of the Constitution of India deals with determination of doubts and disputes relating to the election of a President or Vice-President?
(a) Article 81
(b) Article 71
(c) Article 61
(d) Article 91

Q4. Who appoints the judges of the High Court?
(a) President
(b) Governor
(c) Chief Justice of India
(d) Chief Justice of High Court

Q5. Which of the following rivers flow westward in India?
(a) Mahanadi
(b) Krishna
(c) Narmada
(d) Godavari

Q6. Who among the following was the first Chairman of the Order of Business Committee of the Constituent Assembly?
(a) Sachchidananda Sinha
(b) Kanaiyalal Maneklal Munshi
(c) Harendra Coomar Mookerjee
(d) Jawaharlal Nehru

Q7. Which among the following is the largest phylum of Animalia?
(a) Platyhelminthes
(b) Ctenophora
(c) Mollusca
(d) Arthropoda

Q8. Which of the following Articles of the Indian Constitution deal with cultural and educational rights?
(a) Articles 24 and 25
(b) Articles 26 and 27
(c) Articles 29 and 30
(d) Articles 22 and 23

Q9. What is the scheduled completion date for the CCS 10 building under the Central Vista redevelopment project?
(a) April 2025
(b) April 2026
(c) October 2026
(d) December 2025

Q10. Which of the following folk dances is performed by the tribes of Araku Valley in Visakhapatnam District?
(a) Chakri
(b) Kajari
(c) Dhimsa
(d) Wancho

Q11. Which of the following events is part of the 11th National Handloom Day celebrations in 2025?
(a) Weaving Demonstrations at Handloom Haat
(b) Saree Festival at Handloom Haat
(c) Fashion Show 'Vastra Veda' at Bharat Mandapam
(d) All of the above

Q12. Which of the following states of India touches minimum state boundaries?
(a) Tamil Nadu
(b) Odisha
(c) Kerala
(d) Sikkim

Q13. Pulicat Lake is a saltwater lagoon on the Coromandel Coast of _____.
(a) Andhra Pradesh
(b) Telangana
(c) Odisha
(d) Karnataka

Q14. According to the RBI's Monetary Policy Review (August 2025), which sector showed uneven growth with electricity and mining lagging?
(a) Services Sector
(b) Agricultural Sector
(c) Industrial Sector
(d) Financial Sector

Q15. In which year and venue is India's first-ever franchise-based Archery League scheduled to be held?
(a) October 2024, Indira Gandhi Stadium, Delhi
(b) October 2025, Yamuna Sports Complex, Delhi
(c) November 2025, Balewadi Stadium, Pune
(d) October 2025, Netaji Indoor Stadium, Kolkata

Q16. Rani Mukerji was honored with the Best Actress award at the 71st National Film Awards for her performance in which of the following films?
(a) Mardaani 2
(b) Hichki
(c) Mrs Chatterjee vs Norway
(d) Black

Q17. SRI method is related to
(a) wheat
(b) cotton
(c) mustard
(d) paddy

Q18. Which of the following folk dances is known as 'parrot dance' in Chhattisgarh?
(a) Suwa Dance
(b) Karma Dance
(c) Raut Nacha
(d) Kaksar Dance

Q19. The headquarters of the International Criminal Court (ICC) is located in which city?
(a) Brussels
(b) Geneva
(c) The Hague
(d) Paris

Q20. In which year was the International Telecommunication Union (ITU) established?
(a) 1865
(b) 1945
(c) 1919
(d) 1950

Q21. In June 2025, which of the following fossil parks was added to the UNESCO Tentative List of World Heritage Sites from India?
(a) Mandla Plant Fossil National Park
(b) Salkhan Fossils Park, Uttar Pradesh
(c) Ariyalur Fossil Park, Tamil Nadu
(d) Shivalik Fossil Park, Himachal Pradesh

Q22. Which teams won the inaugural Hockey India Masters Cup 2025 in the Men's and Women's categories, respectively?
(a) Odisha (Men), Haryana (Women)
(b) Tamil Nadu (Men), Punjab (Women)
(c) Tamil Nadu (Men), Odisha (Women)
(d) Maharashtra (Men), Punjab (Women)

Q23. The Tamil Nadu government's restoration project of Kariyachalli Island is part of which initiative, and what is the total estimated project cost?
(a) Blue Ocean Plan – ₹25 crore
(b) Green Coast Project – ₹100 crore
(c) Ocean Care Mission – ₹40 crore
(d) TNSHORE Initiative – ₹50 crore

Q24. The Bonalu festival is celebrated annually in which Indian state?
(a) Karnataka
(b) Andhra Pradesh
(c) Telangana
(d) Tamil Nadu

Q25. Google has launched the 'AI Mode' in India, powered by which custom technology?
(a) BERT
(b) GPT-4
(c) Gemini 2.5
(d) DeepMind

Q26. Which country is the largest producer of lettuce in the world in 2025?
(a) Spain
(b) China
(c) United States
(d) Italy

Q27. What is the name of the scheme under which PNB has provided ₹17.02 crore to the families of 26 martyred soldiers and paramilitary personnel?
(a) Rakshak Plus Scheme
(b) Veer Shakti Scheme
(c) Shakti Raksha Scheme
(d) Bharat Raksha Scheme

Q28. Who was the renowned environmentalist, known as 'Aranya Rishi', who passed away at the age of 93 in June 2025?
(a) Sunderlal Bahuguna
(b) Maruti Chitampalli
(c) Rajendra Singh
(d) Salim Ali

Q29. Which country ranks first in the world with the highest average IQ in 2025?
(a) Taiwan
(b) Japan
(c) Singapore
(d) China

Q30. According to the 2025 Global Gender Gap Report, what is the current global gender parity?
(a) 68.8%
(b) 72.5%
(c) 60.4%
(d) 75.0%

Q31. Jagadguru Rambhadracharya, the recipient of the 58th Jnanpith Award, is a renowned scholar of which language?
(a) Pali
(b) Prakrit
(c) Urdu
(d) Sanskrit

Q32. BrahMos is what type of missile in terms of its propulsion stage design?
(a) Single-stage missile
(b) Two-stage missile
(c) Three-stage missile
(d) Multi-stage ballistic missile

Q33. Which of the following species is commonly found in Nongkhyllem Wildlife Sanctuary in Meghalaya?
(a) Asiatic Lion and Acacia nilotica
(b) Rufous-necked Hornbill and Shorea robusta
(c) Snow Leopard and Juniperus indica
(d) Indian Bustard and Prosopis juliflora

Q34. Founder of 'Dasholi Gram Swaraj Sangh' is :
(a) Chandi Prasad Bhatt
(b) Sunder Lal Bahuguna
(c) Gaura Devi
(d) Anil Joshi

Q35. Who was the founder of the Mauryan Dynasty?
(a) Chandragupta Maurya
(b) Ashoka
(c) Bindusara
(d) Harshavardhana

Q36. Which river is also known as Dakshin Ganga?
(a) Godavari
(b) Kaveri
(c) Krishna
(d) Tungabhadra

Q37. Krishna Deva Raya was a contemporary of
(a) Humayun
(b) Shershah
(c) Babur
(d) Akbar

Q38. Who was the founder of Sunga dynasty?
(a) Pushyagupta
(b) Pushyamitra
(c) Pushparaja
(d) Pravarsena

Q39. Who was the founder of Nanda dynasty?
(a) Bimbisara
(b) Dhanananda
(c) Ramananda
(d) Mahapadamananda

Q40. Who was the founder of Kanva dynasty?
(a) Vasumitra
(b) Bhumimitra
(c) Vasudeva
(d) Devabhuti

Q41. Anjali and Ritu appeared in an examination. Anjali scored 20 marks more than Ritu and her marks were 70 percent of the sum of their marks. How many marks did Anjali score?
(a) 15
(b) 35
(c) 20
(d) 50

Q42. In which of the following discount percentage will be maximum?
(a) Marked price = 3200, selling price = 2800
(b) Marked price = 4000, selling price = 3600
(c) Marked price = 2400, selling price = 2000
(d) Marked price = 2800, selling price = 2400

Q43. A man covers a distance of N km in 5 hours at a speed of 18 km/hr. If he wants to cover the same distance in 3 hours, find the speed of the man.
(a) 36 km/hr
(b) 30 km/hr
(c) 54 km/hr
(d) 24 km/hr

Q44. A shopkeeper sells a product at some loss(not loss%). If he reduces the selling price of the product by 5 percent, his loss would increase by 4 percent (of the loss). Is. At what loss% does he sell his product? (Note- Options are rounded to the nearest number)
(a) 40 percent
(b) 35 percent
(c) 55.55 percent
(d) 63.63 percent

Q45. Six persons went to a hotel to get their food. Five of them spent Rs 15 per person on their respective meals and the sixth spent Rs 8 more than the average expenditure of all the six persons. What was the total money spent by them?
(a) Rs 95.3
(b) Rs 117.4
(c) Rs 101.2
(d) Rs 99.6

Q46. What is the least natural number that should be added to 1135 so that the sum is completely divisible by 3,4,5, and 6?
(a) 3
(b) 5
(c) 2
(d) 4

Q47. Sharad invested his assets of ₹30,000 in two schemes X and Y on simple interest. The rate of interest on X is 10% p.a. and on Y is 2% p.a. The total interest received in 2 years is ₹3,000. Find the sum invested in scheme X.
(a) ₹11,280
(b) ₹11,250
(c) ₹11,300
(d) ₹11,200

Q48. Simplify the following.

$$\frac{\left(1\frac{1}{4} \div 1\frac{5}{10}\right)}{-\frac{1}{2}-\frac{2}{3}+\frac{4}{5}-\frac{1}{3}+\frac{1}{5}+\frac{3}{4}}$$

(a) 5/3
(b) 12/3
(c) 2/3
(d) 10/3

Q49. A number is increased by 10% and then decreased by 10%. It is again increased by 20% What is the net change in percent?
(a) 20.4% increase
(b) 15.6%
(c) 21.6% decrease
(d) 18.8% increase

Q50. A group has boys and girls in the ratio 16/2 :15/3.If 1 boy and 3 girls join in, the ratio becomes 1/2:1/3. Find the number of girls originally in the group.
(a) 11
(b) 35
(c) 28
(d) 72

Q51. x varies directly as the square of y and inversely as the cube root of z and x = 2, when y = 4, z = 8. What is the value of y when x = 3, and z = 27?
(a) 5, - 5
(b) 4, - 4
(c) 1, - 1
(d) 6, - 6

Q52. Three taps A, B and C can fill a tank in 10, 18 and 6 hours, respectively. If A is open all the time and B and C are open for one hour each alternatively, starting with B, the tank will be full in:
(a) 5 hours
(b) 6 1/2 hours
(c) 5 1/2 hours
(d) 6 hours

Q53. What is the value of $\frac{0.3216}{0.05} \times \frac{0.05}{0.16}$?
(a) 0.201
(b) 201
(c) 20.1
(d) 2.01

Q54. Karan is 20 % more efficient than Sachit . If Sachit alone can complete a work in 20 days, then in how many days will Karan alone complete the same work?
(a) 50/7 days
(b) 50/3 days
(c) 100/3 days
(d) 100/7 days

Q55. If 70 per cent of the total bags were sold at a profit of 30 per cent and the remaining bags were sold at a loss of 20 per cent, then what would be the overall profit percentage?
(a) 12 percent
(b) 18 percent
(c) 20 percent
(d) 15 percent

Q56. What is the value of $8.\overline{642}$?
(a) 8634/999
(b) 8642/900
(c) 8642/999
(d) 8634/900

Q57. If $l = \frac{6}{5}$ of m and $m = \frac{5}{8}$ of n, then the ratio of l : n is:
(a) 1 : 2
(b) 1 : 3
(c) 3 : 4
(d) 2 : 3

Q58. Find the volume of a cylinder with a radius of 7 cm and a height of 10 cm. (The value of π is 22/7)
(a) 1800 cm^3
(b) 1000 cm^3
(c) 1540 cm^3
(d) 512 cm^3

Q59. The average weight of 7 people increases by 5 kg when a new person comes in place of one of them weighing 55 kg. What is the weight of the new person?
(a) 85 kgs
(b) 90 kgs
(c) 75kgs
(d) 100 kgs

Q60. Hitesh is three times as old as his son, and his daughter is 3 years younger than the son. If the sum of the ages of these three people 3 years ago was 123 years, then Hitesh's present age (in years) is:
(a) 81
(b) 72
(c) 88
(d) 91

Q61. If m = a $\cos^3\beta$ and n = b $\sin^3\beta$, then find the value of $\left(\frac{m}{a}\right)^{\frac{2}{3}} + \left(\frac{n}{b}\right)^{\frac{2}{3}}$.
(a) 3
(b) 0
(c) 1
(d) 2

Q62. The ratio of the lengths of two corresponding sides of two similar triangles is 3 : 10. The ratio of the areas of these two triangles, in the order mentioned, is:
(a) 9 : 100
(b) 10 : 101
(c) $3\sqrt{3}$: 10
(d) 3 : 10

Q63. Vikram, Anjali and Raj started a business in partnership, investing in the ratio of 7 : 3 : 20, respectively. At the end of the year, they earned a profit of ₹28,800, which is 25% of their total investment. How much did Anjali invest (in ₹)?
(a) ₹11,472
(b) ₹11,564
(c) ₹11,520
(d) ₹11,682

Q64. If a + b = 41, and a − b = 38, find the value of $(a + b)^2$.
(a) 1763
(b) 1733
(c) 1759
(d) 1681

Q65. 15 chairs and 3 tables cost ₹7,800 and 14 chairs and 6 tables cost ₹9,200. What is the cost of 17 chairs and 18 tables?
(a) ₹17,598
(b) ₹17,604
(c) ₹17,600
(d) ₹17,596

Q66. Simplify:
$\frac{\sqrt{0.028224}}{\sqrt{0.000784}}$
(a) 22
(b) 24
(c) 6
(d) 19

Q67. A 360-m-long train passes a man travelling at a speed of 9 km/h, in the opposite direction, in 16 seconds. How long (in seconds) will it take to completely cross another train of length 240 m travelling at a speed of 45 km/h, in the same direction?
(a) 90
(b) 96
(c) 108
(d) 80

Q68. Find the surface area of a sphere whose diameter is equal to 84 cm
(a) 6539π cm^2
(b) 7035π cm^2
(c) 7056π cm^2
(d) 7733π cm^2

Q69. The areas of a rectangular garden and a square garden are equal. If the length and thebreadth of the first garden are 32 m and 8 m, then find the perimeter of the squaregarden.
(a) 62 m
(b) 52 m
(c) 56 m
(d) 64 m

Q70. In a circle centered at O, a diameter AB is extended to a point C outside the circle. CD is a tangent at point D on the circle. If CD =$7\sqrt{3}$ cm and ∠DBC = 120°, then the length of the diameter of the circle is equal to:
(a) 16 cm
(b) 14 cm
(c) 18 cm
(d) 20 cm

Q71. In the question below are given some statements followed by some conclusions based on the given statements. Take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements.
Statement: 1. All gold are silver .
2 . Some silver are copper.
Conclusion: I. No copper is gold .
II. No silver is gold.
(a) Only conclusion I follows.
(b) Only conclusion II follows.
(c) Both conclusions I and II follows.
(d) None of the conclusions follows.

Q72. Select the missing pair (5th letter cluster : 6th letter cluster) that is related in the same way as the first letter cluster is related to the second letter cluster and the third letter cluster is related to the fourth letter cluster.
GMB : IOD :: FHJ : HJL :: ?
(a) RST:PUR
(b) XYZ:ZZB
(c) PRT:QTU
(d) FBH:HDJ

Q73. In the question given below, four letter pairs are given. The letter given on the left side of (-) is related to the letter given on the right side of (-) by some Logic/Rule/Relation. Three are alike based on the same Logic/Rule/Relation. Choose the odd one out from the given alternatives.
(a) BOZ-YMY
(b) NCP-JZN
(c) TQH-QOG
(d) LER-ICQ

Q74. Mohit walks 120 m towards south then turning to his right he walks 120 m then turning to his left, he walks 90 m. Again, he turns to his left and walks 120 m. How far is he from his initial position?
(a) 210 m
(b) 180 m
(c) 190 m
(d) 200 m

Q75. Select the number from among the given options that can replace the question mark (?) in the following series.
4, 13, 40, ?, 364, 1093
(a) 180
(b) 120
(c) 160
(d) 121

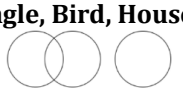
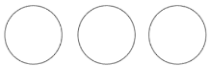
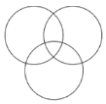
Q76. Select the term from the given options that can replace the question mark (?) in the following series.
M, 14, O, 16, ?, 18, S, 20
(a) P
(b) Q
(c) R
(d) S

Q77. Find the wrong number in the following number series:
10, 17, 26, 36, 50
(a) 26
(b) 36
(c) 50
(d) 17

Q78. Eight friends (A, B, C, D, E, F, G, H) sit around a circular table, all of them facing the centre. Only three people sit between G and D. D sits second to the right of F. C is a neighbour of D. A sits third to the left of B. H sits second to the right of C. E and A are not immediate neighbours of each other. Who is sitting between B and E, when counted from the left of E?
(a) G
(b) D
(c) F
(d) C

Q79. In this question, a statement is followed by two courses of actions, numbered I and II. You must assume everything in the statement to be true and on the basis of the information given in the statement, decide which of the course of action/s logically follow for pursuing.
Statement:
In City X, the number of car accidents has spiked recently due to poor road conditions and lack of adequate signage.
Course of Action:
I. The city should launch an awareness campaign to educate drivers on safe driving practices.
II. Immediate Road repair and installation of proper signage should be carried out.
(a) Only I follows
(b) Neither I nor II follows
(c) Both I and II follow
(d) Only II follows

Q80. Eight people are sitting in two parallel rows containing 4 people each, in such a way that there is equal distance between adjacent persons.
In row 1-G, I, F and T are seated and all of them are facing south
In row 2-B, O, N and D are seated and all of them are facing north.
Thus each person faces another person from the other row. No one sits to the right of B. Only two people sit between N and B. The one facing O sits second to the right of the one facing B. I sits to the immediate right of F. G sits to the immediate right of I and doesn't face O.
Which of the following represents both people sitting at the extreme ends of the rows?
(a) G and D
(b) T and N
(c) I and B
(d) T and O

Q81. Select the Venn diagram that best illustrates the relationship between the following classes.
Eagle, Bird, House
(a) 
(b) 
(c) 
(d) 

Q82. Mukesh is twenty-fifth from left and Suresh is twenty-fourth from right in a row of 40 students. If Dhiren is sitting in between them, what will be his position from left?
(a) 21
(b) 26
(c) 24
(d) 23

Q83. In a certain code language, 'STAY' is coded as '3845' and 'LAYS' is coded as '3578'. How is 'T' coded in the given language?
(a) 3
(b) 5
(c) 8
(d) 4

Q84. Consider the given statements to be true even if they seem to be at variance with commonly known facts and decide which of the given conclusions logically follow(s) from the statements.
Statements: I. Some rats are white.
II. Some white are pigs.
III. All pigs are blue.
IV. No pig is a donkey.
V. All donkeys are tall.
Conclusion: I. Some tall are not pigs.
II. Some rats are pigs.
III. All blue being donkeys is a possibility.
(a) Only I follows.
(b) Only I and II follow.
(c) Only II and III follow.
(d) Only II follows.

Q85. Supply the right letters for the Question Mark (?):
ZA, UF, QJ, ?, LO
(a) NM
(b) PM
(c) AM
(d) QM

Q86. In a College, L and M were teaching Biology and Physics. N and M were teaching Physics and English. O and L were teaching Sanskrit and Biology. P and M were teaching Geography and Spanish. L and M were teaching which subjects?
(a) Physics
(b) Biology and Physics
(c) Sanskrit
(d) Physics and Sanskrit

Q87. Select the set in which the numbers are related in the same way as are the numbers of the following sets.
(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 - Operations on 13 such as adding/subtracting/multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed.)
(25, 5, 20)
(40, 8, 32)
(a) (100,16,64)
(b) (80,16,60)
(c) (80,16,64)
(d) (80,14,64)

Q88. In a warehouse, to keep 5 boxes A to E exactly one above the other, the following conditions are given:
1. Box A should be placed exactly three places above the box D.
2. Box C should not be kept on the top.
3. Only one box should be kept between the box E and box B.
If box E is at the bottom, then what is the position of box C from the top?
(a) 2nd
(b) Inadequate data
(c) 4th
(d) 3rd

Q89. In a Science test among 6 students, Hansraj scored equal to Varun. Nandkishor scored more than Varun but less than Poonam. Pranjal scored more than Sam but less than Varun. Who scored the second lowest in the Science test?
(a) Nandkishor
(b) Pranjal
(c) Poonam
(d) Sam

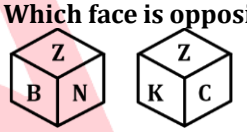
Q90. In a certain code language,
' P+Q ' means ' P is the mother of Q ',
' P-Q ' means ' P is the wife of Q ',
' P×Q ' means ' P is the father of Q ' and
' P÷Q' means ' P is the brother of Q '.
How is A related to E if ' A+B-C×D÷E '?
(a) Mother's sister
(b) Mother's mother
(c) Father's mother
(d) Father's sister

Q91. Supply the right letters for the Questions Mark (?):
AZ , BY , ? , DV , ET , FS
(a) CO
(b) CW
(c) CY
(d) None of these

Q92. Select the option that is related to the third word in the same way as the second word is related to the first word.
Wall : Paint :: Shoe : ?
(a) Polish
(b) Whitewash
(c) Plaster
(d) Spray

Q93. If 'A' stands for ' ÷ ', ' B ' stands for ' × ', ' C ' stands for ' + ' and ' D ' stands for ' - ', what will be come in place of the question mark '?' in the following equation?
(14 B 4) A 2 C (15 A 5) B 9 D 34 C (48 A 6) B 2 = ?
(a) 45
(b) 37
(c) 22
(d) 17

Q94. A dice has its faces marked by letters K, N, A, B, C and Z. Two positions of the same dice are given below. Which face is opposite to face A?



(a) Z
(b) B
(c) N
(d) K

Q95. Which of the following two signs need to be interchanged to balance the given equation?
20 – 4× 3 ÷ 8 + 2 = 12
(a) ÷ and×
(b) + and -
(c) + and ÷
(d) × and +

Q96. Arrange the given words in the alphabetical order:
1. BUTTERFLY 2. BEE
3. BREEZE 4. BUSH
5. BEETLE
(a) 25314
(b) 25341
(c) 23451
(d) 25413

Q97. If R = T, Y > K, N < E, K < N, E < P, U > P and T > Y, then which of the following conclusions is NOT correct?
(a) N < U
(b) Y > N
(c) E < U
(d) R > K

Q98. The Calendar of the year 2009 is same as that of the year:
(a) 2013
(b) 2014
(c) 2015
(d) 2016

Q99. Which of the following equations is correct when the numbers 12 and 6 are interchanged and the signs ÷ and + are interchanged?
(a) 6 ÷ 4 ×5 - 12 + 3 = 30
(b) 9 ÷ 6 × 4 + 12 - 3 = 18
(c) 12 ÷ 3 - 8 - 6 + 1 = 15
(d) 4 - 6 × 12 ÷ 5 + 7 = 22

Q100.What will come in the place of the question mark (?) in the following equation if '9' and'3' are interchanged?
2 – 3 ÷ 9 × 6 + 5 = ?
(a) – 9
(b) 5
(c) 13/3
(d) – 11

Solutions

1. **(a):** The correct answer is (a) **Article 163**
Explanation:
- **Article 163** of the Constitution of India states that **there shall be a Council of Ministers with the Chief Minister at the head to aid and advise the Governor** in the exercise of his functions.
- The Governor is bound to act on the **advice of the Council of Ministers**, except in situations where the Constitution permits discretionary power.

Information Booster:
- The structure of the State Executive includes the **Governor**, **Chief Minister**, **Council of Ministers**, and **Advocate General**.
- This provision mirrors **Article 74**, which provides for the Union Council of Ministers to aid the President.

Additional Knowledge:
(Option b) **Article 164**
- Deals with the **appointment of the Chief Minister and other ministers** by the Governor.

(Option c) **Article 165**
- Refers to the **Advocate General** for the state.

(Option d) **Article 162**
- Defines the **extent of executive power of the State**.

2. **(b):** The correct answer is (b) **Equal Justice and Free Legal Aid**
Explanation:
- **Article 39A** was added to the Constitution of India by the **42nd Amendment Act, 1976**.
- It directs the **State to ensure equal justice and provide free legal aid** to citizens, especially the poor and weaker sections, to ensure justice is not denied due to economic or other disabilities.
- It forms part of the **Directive Principles of State Policy (Part IV)**, which are not enforceable by courts but are fundamental in governance.

Information Booster:
- The **Legal Services Authorities Act, 1987** was enacted to implement Article 39A, leading to the establishment of **NALSA** (National Legal Services Authority).
- Free legal aid is also a **fundamental right under Article 21** (Right to Life) as interpreted by the Supreme Court.
- This provision emphasizes the **welfare and socialist objectives** of the Constitution.

Additional Knowledge:
(Option a) **Organisation of Village Panchayat**
- Covered under **Article 40**, not Article 39A.

(Option c) **Uniform civil code for the citizens**
- Mentioned in **Article 44**, a separate directive principle.

(Option d) **Definition of State**
- Provided under **Article 12**, which defines "State" for the purposes of Part III (Fundamental Rights), not Article 39A.

3. **(b):** The Correct Option: (b) : Article 71
Explanation
•→**Article 71** of the Indian Constitution deals with the **matters relating to doubts and disputes in connection with the election of the President and Vice-President**.
•→It states that all such disputes shall be **inquired into and decided by the Supreme Court**, and its decision shall be final.
•→This article ensures a **judicial mechanism** to resolve electoral disputes for the highest constitutional offices.
Information Booster:
1. The Supreme Court has **exclusive jurisdiction** over disputes regarding Presidential and Vice-Presidential elections.
2. An election can be **challenged only through an election petition** filed directly in the Supreme Court.
3. If the election of a President or Vice-President is declared void, acts done by them before such declaration remain valid (as per constitutional safeguards).
Additional Knowledge:
- **Article 81**

•→Deals with the **composition of the House of the People (Lok Sabha)**.
•→Not related to Presidential or Vice-Presidential elections.
- **Article 61**

•→Pertains to the **procedure for the impeachment of the President**.
•→Not concerned with election disputes.
- **Article 91**

•→No such Article deals with election matters; irrelevant in this context.

4. **(a):** The correct answer is (a) President
Explanation:
- As per **Article 217 of the Constitution of India**, **the President** appoints the **Chief Justice and other Judges of a High Court**.
- The President must consult the **Chief Justice of India**, the **Governor of the state**, and in case of appointment of a judge other than the Chief Justice, the **Chief Justice of the High Court**.
- This ensures a system of **checks and balances** among the executive and judiciary.

Information Booster:
- The **collegium system** plays a vital role in the appointment process. It comprises the **Chief Justice of India and senior judges of the Supreme Court**.
- High Court judges hold office until the age of **62 years**.
- The process aims to ensure **judicial independence**, free from political or executive influence.

Additional Knowledge:
(b) Governor – Only consulted; does not have appointing authority.
(c) Chief Justice of India – Plays a crucial advisory role but does not formally appoint.
(d) Chief Justice of High Court – Consulted for appointments, but cannot appoint judges.

5. **(c):** The correct answer is (c) **Narmada**
Explanation:
Most major rivers in India flow **eastward**, draining into the **Bay of Bengal**, but a few flow **westward**, into the **Arabian Sea**.
•→The **Narmada River** is one of the most important **west-flowing rivers** in India.
•→It flows westward through the **rift valley** between the **Vindhya and Satpura ranges**, and drains into the **Arabian Sea**.
Information Booster:
•→Other major west-flowing rivers include the **Tapi** and **Mahi**.
•→Narmada is also known for the **Narmada Valley Project** and **Sardar Sarovar Dam**.
Additional Knowledge: Mahanadi (Option a) . Flows eastward and drains into the Bay of Bengal. . Originates in Chhattisgarh.
Krishna (Option b) . An eastward-flowing river. . Originates in Maharashtra and drains into the Bay of Bengal.
Godavari (Option d) . Also flows eastward. . Known as the **Dakshin Ganga**, it is the second longest river in India.

6. **(b):** **Correct Answer:** B. Kanaiyalal Maneklal Munshi
Explanation:
- **K.M. Munshi** chaired the **Order of Business Committee**, which was responsible for deciding the agenda and the order in which the various provisions of the Constitution would be discussed during the Assembly's sessions.
- The **Order of Business Committee** played a vital role in ensuring that the discussions and debates in the Constituent Assembly were organized efficiently.

Committee Chairmen (as per your provided list):
1. **Committee on the Rules of Procedure** – Rajendra Prasad
2. **Steering Committee** – Rajendra Prasad
3. **Finance and Staff Committee** – Rajendra Prasad
4. **Credential Committee** – Alladi Krishnaswami Ayyar
5. **House Committee** – B. Pattabhi Sitaramayya
6. **Order of Business Committee** – K.M. Munshi
7. **Ad hoc Committee on the National Flag** – Rajendra Prasad
8. **Committee on the Functions of the Constituent Assembly** – G.V. Mavalankar

This clarification should now be in line with the correct historical record.

7. **(d):** The correct answer is (d) **Arthropoda**
Explanation:
•→**Phylum Arthropoda** is the **largest phylum** in the **Animal Kingdom**, accounting for over **80% of all known animal species**.
•→It includes insects, crustaceans, arachnids, centipedes, and millipedes.
•→Arthropods are **bilaterally symmetrical**, have **jointed appendages**, **segmented bodies**, and **chitinous exoskeletons**.
Information Booster:
•→Examples: **Ants, butterflies, crabs, spiders, prawns.**
•→Arthropods are found in **virtually every habitat** — terrestrial, aquatic, and aerial.
Additional Knowledge:
Platyhelminthes (Option a) . Also called flatworms (e.g., Planaria, Tapeworm). . Much smaller group with simple body structure.
Ctenophora (Option b) . Known as comb jellies. . Marine animals, very small in number.
Mollusca (Option c) . Second-largest phylum (e.g., snails, octopus, clams). . Diverse but still smaller than Arthropoda.

8. **(c):** The correct answer is (c) Articles 29 and 30.
•→**Articles 29 and 30** of the Indian Constitution deal with **Cultural and Educational Rights**.
•→**Article 29**: Protects the rights of any section of citizens to conserve their culture, language, and script.
•→**Article 30**: Provides the right of minorities to establish and administer educational institutions of their choice.
•→These Articles safeguard the rights of minorities in terms of education and cultural preservation.
Information Booster:
•→**Article 29**: Ensures that no citizen shall be denied admission to any educational institution based on their language, religion, race, or caste, promoting inclusivity in education.
•→**Article 30**: Specifically protects the rights of religious and linguistic minorities, ensuring that they can set up educational institutions and manage them according to their needs.
Additional Information:
•→Other relevant Articles dealing with the cultural and educational rights of minorities include:
•→**Article 15**: Prohibits discrimination on grounds of religion, race, caste, sex, or place of birth.
•→**Article 16**: Provides equality of opportunity in matters of employment and appointments to public offices.
•→**Article 19(1){g}**: Guarantees the right to practice any profession, occupation, trade, or business.

9. **(b):** **The correct answer is: (b) April 2026**
Explanation: CCS 10, one of the buildings under the **Common Central Secretariat (CCS)** project, is scheduled for completion by **April 2026** as part of the broader **Central Vista redevelopment** plan.

Information Booster:
•→**CCS 2** and **CCS 3** are expected to be completed by **next month**.
•→The entire **Common Central Secretariat** plan will include **10 buildings** for various ministries.
•→**CCS 6** and **CCS 7** are projected for completion by **October 2026**.
•→The redevelopment aims to create a **modern** and **efficient workspace** for government operations.
•→The **Central Vista** plan includes other significant projects, such as a **new Parliament building**.
Additional Knowledge:
•→The redevelopment is part of India's **vision for the 21st century**, aiming to blend **modern infrastructure** with **administrative efficiency**.
•→**CCS 10** will be a critical part of the centralized **government operations**.

10. (c): The correct answer is (c) Dhimsa.
•→Dhimsa is a traditional tribal dance performed by the tribes of Araku Valley in Visakhapatnam District, Andhra Pradesh.
•→The dance is performed during festivals and important occasions and is characterized by rhythmic beats and movements in a circle.
•→The dancers, typically adorned in colorful attire, move in sync with the beats of the drums, creating a lively and captivating performance.
Information Booster:
•→Dhimsa is deeply associated with the tribal culture of the region, especially the indigenous tribes like the Araku and the Bonda.
•→It is often accompanied by folk music and traditional instruments such as the drum and flute.
•→This dance form is an important cultural expression of the tribal people and is performed to celebrate seasonal harvests and religious festivals.
Additional Information:
•→Folk dances like Dhimsa play an essential role in preserving the cultural heritage of indigenous communities in India.
•→Tribal dances in regions like Araku Valley are unique, with each tribe having its own distinct style and rhythm.

11. (d): **The correct answer is: (d) All of the above**
Explanation: The **11th National Handloom Day** celebrations will include a variety of events, including **weaving demonstrations at Handloom Haat**, a **Saree Festival**, and the fashion show **'Vastra Veda'** at **Bharat Mandapam**.
Information Booster:
- The **Saree Festival** will showcase **116 different handloom saree weaves**.
- '**Vastra Veda**' will highlight important **handloom weaves** from different regions of India.
- The fashion show '**Naad**' will focus on the **music of weaves**.
- The events will be held from **1st to 8th August 2025**.
- **International buyers**, **exporters**, and **weavers** will gather at the **India International Hand-woven Expo**.

Additional Knowledge:
- The events are designed to **promote Indian handlooms globally** and engage the public with India's weaving traditions.
- They will foster connections between **weavers** and the **fashion industry**.

12. (d): **The correct answer is: (D) Sikkim**
Explanation:
- **Sikkim** shares its borders with only **one Indian state**: **West Bengal**.
- It also shares international borders with **Nepal** to the west, **Bhutan** to the east, and **China** (Tibet Autonomous Region) to the north.
- This makes it the state with the **fewest state boundaries** in India.

Information Booster:
- Sikkim is the **second smallest** state in India by area, known for its **mountainous terrain** and **Kangchenjunga**, the third-highest mountain in the world.
- It is a landlocked state and was the **22nd state** to join India in 1975.
- The state is strategically important due to its proximity to **China** and **Nepal**.

Additional Knowledge:
- **Tamil Nadu** – Shares boundaries with **4 states**: **Kerala, Karnataka, Andhra Pradesh**, and **Telangana**.

- **Odisha** – Shares boundaries with **5 states**: **West Bengal, Jharkhand, Chhattisgarh, Andhra Pradesh**, and **Telangana**.
- **Kerala** – Shares boundaries with **3 states**: **Karnataka, Tamil Nadu**, and the **Indian Ocean** to the south.

13. (a): The correct answer is (a) Andhra Pradesh.
•→Pulicat Lake is a saltwater lagoon located on the Coromandel Coast of Andhra Pradesh.
•→It is the second-largest brackish water lake in India and is situated on the border of Andhra Pradesh and Tamil Nadu.
•→Pulicat Lake is known for its rich biodiversity, especially migratory birds, and is an important ecological site.
Information Booster:
•→The lake is a hotspot for birdwatching, especially during the migratory season, with species such as flamingos, pelicans, and herons.
•→It is connected to the Bay of Bengal and plays a vital role in the local ecosystem and economy, especially for fishing communities.
Famous Lakes of India:

Lake	Location	Type
Pulicat Lake	Andhra Pradesh/Tamil Nadu	Brackish Water Lagoon
Dal Lake	Jammu & Kashmir	Freshwater
Vembanad Lake	Kerala	Freshwater
Sambhar Lake	Rajasthan	Saltwater
Chilika Lake	Odisha	Brackish Water Lagoon
Kolleru Lake	Andhra Pradesh	Freshwater
Nainital Lake	Uttarakhand	Freshwater
Wular Lake	Jammu & Kashmir	Freshwater

Additional Information:
•→Lakes like Chilika and Sambhar are crucial for biodiversity, particularly for migratory birds, and contribute significantly to local economies.
•→Pulicat Lake's conservation efforts are important due to its role in supporting diverse wildlife.

14. (c): **The correct answer is (c) Industrial Sector**
Explanation:
- In the **August 2025 MPC review**, **RBI** highlighted the **industrial sector's performance** as **uneven**.
- Specific mention was made of **underperformance in electricity and mining** sub-sectors.
- This stood in contrast to stronger momentum in the **agriculture** and **services sectors**.

Information Booster:
- The **Index of Industrial Production (IIP)** showed a **slowdown** in **electricity** and **mining** compared to manufacturing.
- **Mining activity** was affected by **global commodity price volatility** and **regulatory hurdles**.
- **Electricity generation** growth was **tepid** due to **lower demand** from core industries.
- The **industrial sector** contributes around **25% to India's GDP**, but is highly sensitive to **input costs** and **policy shifts**.

15. (b): The correct answer is (b) October 2025, Yamuna Sports Complex, Delhi.
•→The **Archery Association of India (AAI)** has announced the launch of India's **first franchise-style Archery League** in **October 2025**, to be held at the **Yamuna Sports Complex in Delhi** over 11 days.
•→The event is a significant step to promote **professional archery** in the country by blending national and international talent.
Information Booster:
•→The league will feature **6 franchise teams** comprising:
– Top Indian archers (Olympians and national medalists)
– Foreign players, including those from the **world's top 10 rankings**
•→Events will include both **Compound** and **Recurve** formats.
•→Backed by:
– **World Archery**
– **World Archery Asia**
– **Ministry of Youth Affairs and Sports, Government of India**

Additional Information:
•→The league aims to **boost India's archery infrastructure**, talent pipeline, and **global visibility**.
•→India has had **prominent archers** like **Deepika Kumari**, **Atanu Das**, and **Abhishek Verma**, but lacked a dedicated league until now.
•→The league format is inspired by successful models like the **Pro Kabaddi League** and **Ultimate Table Tennis**.

16. (c): The correct answer is option (c) Mrs Chatterjee vs Norway
Explanation
At the **71st National Film Awards** (announced on **August 1, 2025**), **Rani Mukerji** was awarded the **Best Actress** for her powerful and emotional portrayal in the film **Mrs Chatterjee vs Norway**.
•→The film is based on a **real-life incident** involving an Indian mother whose children were taken away by Norwegian authorities, leading to a **legal and emotional battle across international borders**.
•→Rani Mukerji delivered a **gripping performance**, embodying the pain, resilience, and determination of a mother fighting for justice in a foreign country.
•→The performance was lauded for its **intensity and authenticity**, making it one of her career's most acclaimed roles.
•→This award further solidifies Rani's legacy as one of India's most **versatile and respected actresses**.
Information Booster
•→The film is inspired by the true story of **Sagarika Chakraborty**.
•→Directed by **Ashima Chibber**, the movie drew critical acclaim for its **social relevance and emotional depth**.
•→This was **Rani Mukerji's first National Film Award**.
•→The movie addresses themes like **motherhood, cross-cultural misunderstanding, and bureaucratic rigidity**.
•→It received widespread recognition both **domestically and internationally**.

17. (d): **Correct answer is (D) paddy**
Explanation: The **SRI (System of Rice Intensification)** method is a technique for increasing the yield of **paddy (rice)** by using less water, younger seedlings, wider spacing, and organic inputs. It improves root growth and enhances productivity.
Additional knowledge (Other options):
(A) Wheat – Wheat is typically grown using conventional broadcasting or drilling methods, not SRI.
(B) Cotton – Cotton cultivation uses seed drilling or transplanting in some areas, but not SRI.
(C) Mustard – Mustard is grown using line sowing or broadcasting; SRI has no relevance.

18. (a): The correct answer is: (a) **Suwa Dance**.
•→**Suwa Dance** is a folk dance from **Chhattisgarh**, often referred to as the **'parrot dance'** due to the mimicry of the movements of parrots during the performance.
•→This dance is performed mainly by women and is popular during festivals and special occasions, especially in the rural areas of Chhattisgarh.
Information Booster:
•→The **Suwa Dance** is a **celebration of nature**, with performers often mimicking animals and birds in their movements.
•→It is primarily performed in **tribal communities** and involves graceful and rhythmic dance steps.
•→**Karma Dance** and **Raut Nacha** are also significant folk dances in Chhattisgarh, but they do not have the "parrot dance" association.
Additional Information:
•→**Karma Dance** is a folk dance associated with the **Karma festival** celebrated in Chhattisgarh and other regions of India. It is performed during the harvest season and has a strong focus on tribal culture and rituals.
•→**Raut Nacha** is another important dance form in Chhattisgarh, traditionally performed by the **Gonds**, a tribal community. It is linked to **Lord Krishna** and showcases the warrior culture of the tribe.
•→**Kaksar Dance** is also a traditional dance performed by certain tribal communities but is less known compared to **Suwa Dance**, **Karma Dance**, and **Raut Nacha**.

19. (c): The correct answer is option (c) The Hague
Explanation
The **International Criminal Court (ICC)** has its headquarters in **The Hague**, **Netherlands**.
•→The Hague is known as the global center for international law and justice, also hosting several other international courts, including the International Court of Justice (ICJ).

•→The ICC is responsible for prosecuting individuals for crimes such as genocide, war crimes, and crimes against humanity.

Information Booster

•→The **Rome Statute** is the founding treaty of the International Criminal Court.
•→The **ICC** started its work in **2002** after the Rome Statute's entry into force.
•→The court can only prosecute crimes committed on or after **1 July 2002**, not retroactively.
•→**Ukraine** recently became the **125th State Party** to the **Rome Statute**, strengthening international law and accountability.
•→The ICC's jurisdiction includes crimes such as **genocide**, **war crimes**, **crimes against humanity**, and the **crime of aggression**.
•→**India**, **United States**, and **China** are not parties to the **Rome Statute**, meaning these countries do not recognize the jurisdiction of the ICC.
•→**International Criminal Court (ICC)**: The court was designed to complement national judicial systems. It only takes action when national courts are unwilling or unable to prosecute serious international crimes.
•→**The Hague** (Netherlands) is the location of the ICC, which is known for being the center of international justice, also hosting the International Court of Justice (ICJ).

20. (a): The correct answer is option (a) 1865

Explanation

•→The **International Telecommunication Union (ITU)** was established in **1865**, making it the **oldest specialized agency** of the **United Nations** and one of the longest-standing international organizations in the world.
•→Originally founded as the **International Telegraph Union**, its mission was to standardize and regulate international telegraphy. Over the decades, ITU evolved to embrace the fast-changing world of **Information and Communication Technologies (ICTs)**.

Information Booster

•→Established in **1865** as the **International Telegraph Union**
•→Became a **UN specialized agency in 1947**
•→Headquarters: **Geneva, Switzerland**
•→Objective: **Bridging the global digital divide**
•→Membership includes **194 countries + private & academic sector bodies**
•→Key functions: **Spectrum allocation, standard-setting, ICT development**

21. (b): The correct answer is: (b) Salkhan Fossils Park, Uttar Pradesh

Explanation:

- **Salkhan Fossils Park**, also called **Sonbhadra Fossils Park**, located in **Sonbhadra district, UP**, was added to **UNESCO's Tentative List** in **June 2025**.
- It covers about **25 hectares** and holds **stromatolite fossils** dating back **1.4 billion years** to the **Mesoproterozoic era**.
- The park lies in the **Kaimoor Wildlife Sanctuary** and is embedded in the **Bhander limestone of the Vindhyan Supergroup**.
- This marks the **first formal step** towards World Heritage Site recognition by UNESCO.

Information Booster:

- Salkhan's fossils are among the **oldest life forms on Earth**.
- Stromatolites are layered bio-chemical rocks formed by **cyanobacteria**.
- India has **43 World Heritage Sites** as of June 2025.
- It also has **63 Tentative Sites**, including Salkhan Fossils Park.
- A **MoU** was signed with **BSIP** (Lucknow) for scientific study.
- The site is legally protected under multiple **environmental laws**.
- Expected full **UNESCO evaluation by 2027**.

About United Nations Educational, Scientific and CulturalOrganisation(UNESCO):

Director-General**(DG)**– Audrey Azoulay
Headquarters-Paris, France
Established-1945
Member Nations– 194

22. (c): The correct answer is: (c) Tamil Nadu (Men), Odisha (Women)

Explanation:

- The **Hockey Unit of Tamil Nadu (Men)** and the **Hockey Association of Odisha (Women)** were crowned **champions** of the **1st Hockey India Masters Cup 2025**, held in **Chennai, Tamil Nadu**.
- **Tamil Nadu Men** defeated **Hockey Maharashtra** 5-0 in the final.
- **Odisha Women** edged out **Hockey Punjab** 1-0 in a closely contested final.
- Hence, option **(c)** is the correct answer.

Information Booster:

- Final venue: **Mayor Radhakrishnan Hockey Stadium**, Chennai.
- **Men's category**: 12 teams in 4 pools (A-D), knockout format.
- **Women's category**: 8 teams in 2 pools (A-B).
- **Bronze (Men)**: Hockey Chandigarh beat Odisha 2-1.
- **Bronze (Women)**: Hockey Haryana beat TN 4-3.
- The event promotes **veteran players** and **state-level hockey excellence**.
- Organized by **Hockey India** to promote **grassroots and senior-level participation**.

23. (d): The correct answer is: (d) TNSHORE Initiative – ₹50 crore

Explanation:

- The **Tamil Nadu Sustainably Harnessing Ocean Resource (TNSHORE)** initiative is leading the **restoration of Kariyachalli Island**, following the earlier success with **Vaan Island**.
- The project is **funded by the Tamil Nadu government and the World Bank** with a total allocation of **₹50 crore**.
- It aims to restore coral reefs, seagrass beds, and coastal stability using **8,500 artificial reef modules**.
- Hence, option **(c)** is correct.

Information Booster:

- **Kariyachalli Island** is part of the **Gulf of Mannar Marine National Park**.
- The island's size shrank from **20.85 ha in 1969** to **3.14 ha at high tide in 2024**.
- The project involves **IIT-Madras**, **Forest Dept.**, and **Suganthi Devadason Marine Research Institute**.
- **Coral mining** in the Gulf of Mannar ceased in **2005** due to ecological damage.
- **Over 300 local fishers** are engaged in the restoration process.
- Environmental and wave dynamic studies were done before project execution.

24. (c): The correct answer is option (c) Telangana

Explanation

1. **State of Celebration**: Bonalu is a traditional Hindu festival celebrated **exclusively in Telangana**, especially in cities like **Hyderabad, Secunderabad**, and other parts of the state.
2. **Deity Worshipped**: The festival honors **Goddess Mahakali**, believed to protect the local population from diseases and misfortunes.
3. **Rituals Involved**: Women carry decorated pots (bonam) with rice, jaggery, and curd as offerings to the goddess in local temples.
4. **Timing**: Bonalu is usually celebrated during the **Ashada month (July/August)** according to the Hindu calendar.
5. **Official Recognition**: Bonalu was declared a **state festival** by the Telangana government in 2014 after the formation of the state.

Information Booster

- →Celebrated in: **Telangana**
- →Cities: Hyderabad, Secunderabad, and Warangal
- →Worship: Goddess Mahakali
- →Time: July–August (Ashada month)
- →Declared State Festival: In **2014** by Telangana government

25. (c): The correct answer is (c) Gemini 2.5

- Google's **'AI Mode'** in India is powered by **Gemini 2.5**, which is a **custom version** of Google's advanced AI model, **Gemini 2.5**.
- This **AI Mode** enables **complex queries**, **multimodal interactions**, and **advanced reasoning**, enhancing the search experience for users by processing more natural and conversational queries, moving beyond traditional keyword-based searches.

Information Booster:

- **Key Features of AI Mode**:
  - **Advanced Query Processing**: Handles complex, detailed, and nuanced queries more effectively than traditional search.
  - **Multimodal Interactions**: Users can interact via **text**, **voice**, or **image inputs**, making it more versatile.
  - **Real-time Information Access**: It integrates **Google's Knowledge Graph** and other live data sources to deliver accurate, real-time answers.
  - **E-commerce Integration**: The app helps users with detailed product information, price comparisons, and availability from multiple sources.
- **Power of Gemini 2.5**:
  - **Gemini 2.5** is Google's **custom AI model** that powers the AI Mode, bringing advanced **reasoning**, **context understanding**, and **multimedia search capabilities** to improve how search queries are processed and answered.

26. (b): The correct answer is (b) China

Explanation:

- China is the largest producer of lettuce, contributing over 13 million tonnes annually, which accounts for more than 50% of the global supply.
- The United States is the second-largest producer, with around 3.5 million metric tons annually.
- Spain and Italy are also major European producers, but their production volumes are significantly smaller than China's.
- China's vast agricultural land, favorable growing conditions, and large-scale farming techniques make it the dominant force in global lettuce production.

Information Booster:

- China's lettuce production is crucial for both domestic consumption and export, with the country meeting a large share of global demand.
- The United States, Spain, and Italy are key contributors but fall far behind China in production volumes.

Additional Knowledge:

Spain (Option a)

- Spain is an important European lettuce producer and exporter, but it lags significantly behind China in production.

United States (Option c)

- The United States is the second-largest producer of lettuce, primarily grown in California, but its production is much lower than China's.

Italy (Option d)

- Italy is a significant producer of lettuce within Europe, but it does not compete with the scale of production seen in China or the United States.

27. (a): The correct answer is (a) Rakshak Plus Scheme.

- The **Rakshak Plus Scheme** by **PNB** has provided **₹17.02 crore** to the families of **26 martyrs** from the **defense and paramilitary** sectors. This scheme offers financial protection and insurance benefits, including **₹1 crore personal accidental insurance** and **₹1.5 crore air travel insurance**.

Information Booster:

- The scheme aims to ensure **timely financial support** and provide **tailored benefits** to the families of defense personnel.
- It reflects PNB's commitment to supporting India's security forces and their families in times of loss.
- **Binay Gupta**, Chief General Manager (BARM), PNB, emphasized that the scheme is more than financial aid, symbolizing the nation's respect for the sacrifices of its armed forces.

28. (b): The correct answer is (b) Maruti Chitampalli

- **Maruti Chitampalli**, a revered environmentalist and **Padma Shri awardee**, passed away at the age of **93** on **June 20, 2025**, in **Solapur, Maharashtra**.
- Fondly called **'Aranya Rishi'** (Sage of the Forests), he was a former **forest officer**, **author**, and **wildlife expert**, known for his work in **wildlife preservation** and **eco-literature**.
- Chitampalli served in the **Forest Department** for **36 years** and traveled extensively to document ecological aspects and engage with tribal communities. He was also fluent in **13 languages**, which allowed him to communicate deeply with local communities.

- He authored significant works like **'Pakshikosha'** (Encyclopedia of Birds), **'Pashukosha'** (Encyclopedia of Animals), and **'Matsyakosha'** (Encyclopedia of Fish).
- His contributions greatly influenced **environmental literature** and **policy debates** surrounding ecological conservation in India.

Information Booster:

•→**Maruti Chitampalli** was awarded the **Padma Shri** in **2025** for his lifelong contribution to environmental conservation and ecological literature.

•→He was remembered as a **spiritual guardian of forests** and an advocate for **tribal ecological knowledge**.

•→His work in **eco-literature** significantly shaped **public awareness** about the importance of wildlife and environmental preservation.

•→**His books** are widely used in **forest training academies**, **schools**, and by **NGOs** working in the environmental sector.

29. (b): The correct answer is (b) Japan

- **Japan** ranks **first** in the world with the highest average IQ of **106.48** in **2025**.
- Japan is known for its **advanced technology**, **strong problem-solving abilities**, and a **robust education system**, which significantly contribute to the intelligence levels of its population.
- The country's focus on **hard work**, discipline, and innovation plays a crucial role in its high IQ ranking.

Information Booster:

- **Taiwan** comes **second** with an average IQ of **106.47**. The country excels in **technology** and has a highly educated and diligent population.
- **Singapore** ranks third, with an average IQ of **105.89**, largely due to its focus on **critical thinking** and problem-solving in education.
- **Hong Kong** is fourth with an average IQ of **105.37**, supported by a **healthy diet** and a high-quality education system.
- **China** ranks fifth with an average IQ of **104.10**, benefiting from rapid **economic growth** and a competitive education system.

30. (a): The correct answer is option (a) 68.8%

Explanation

The **2025 Global Gender Gap Report** indicates that **global gender parity** has reached **68.8%**, marking the **strongest annual improvement** in gender parity since the **COVID-19 pandemic**. However, the report highlights that at the **current rate**, **full global parity** will still take **123 years** to achieve.

Information Booster

•→**Global gender parity** has improved to **68.8%** in the **2025 Global Gender Gap Report**.

•→**Women make up 41.2% of the global workforce**, but they hold only **28.8% of leadership positions**.

•→Despite progress, **full global gender parity** is estimated to be **123 years away** at the current rate.

•→The report marks the **strongest improvement** in gender parity since the **COVID-19 pandemic**.

Additional Knowledge

1. **Impact of the COVID-19 Pandemic on Gender Parity** The **COVID-19 pandemic** had a significant impact on **gender equality**, but the **2025 Global Gender Gap Report** shows the strongest recovery since the pandemic. Women, especially in the workforce, were disproportionately affected by the pandemic due to factors like caregiving responsibilities and job losses. However, the **2025 report** indicates that progress has been made in addressing these disparities.

2. **Workforce Participation and Leadership RolesWomen** now represent **41.2% of the global workforce**, yet they hold only **28.8% of leadership positions**, highlighting the **critical gap** in **decision-making roles**. This disparity reflects ongoing challenges in achieving true gender equality, particularly in high-level corporate and political positions.

3. **Global Gender Parity Timeline** Despite improvements, the report estimates that it will take **123 years** for **global gender parity** to be fully achieved, emphasizing the **slow pace of progress** and the need for more targeted and accelerated efforts in policy and societal change to close the gender gap.

4. **Closing the Gender Gap** Governments, organizations, and society must continue to focus on addressing barriers to women's **economic participation**, **healthcare access**, and **political empowerment** to reduce the gender gap at a faster rate.

31. (d): The correct answer is option (d) Sanskrit

Explanation

Jagadguru Ramanandacharya Swami Rambhadracharya, a revered spiritual leader and literary genius, was awarded the **58th Jnanpith Award** for his extraordinary contributions to **Sanskrit literature**. He is widely acknowledged for composing **four Sanskrit epics**, including the well-known *Geet Ramayan* and *Dashavatara Charitam*. His works masterfully combine elements of **devotional poetry, philosophy, and classical narrative structure**, earning him a distinguished place in modern Sanskrit scholarship.

Despite **losing his eyesight in infancy**, Rambhadracharya achieved extraordinary academic and spiritual milestones. By the age of 5, he had **memorized the Bhagavad Gita and Ramcharitmanas**, showcasing his prodigious intellect. In 2001, he founded the **Jagadguru Rambhadracharya Divyang State University (JRDSU)** in **Chitrakoot**, dedicated to educating students with disabilities, especially the visually impaired. This institution now serves over **2,000 divyang (differently-abled)** students.

He is a symbol of how **literature, education, and national spirit** can be deeply intertwined. Through his epics and his university, Rambhadracharya has empowered thousands and has become an inspiration for generations of scholars and citizens.

Information Booster

- →**Language of scholarship:** Sanskrit
- →**Composed:** 4 Sanskrit epics including *Geet Ramayan* and *Dashavatara Charitam*
- →**Lost eyesight:** In infancy
- →**Memory feat:** Memorized Gita and Ramcharitmanas by age 5
- →**Founded:** JRDSU in Chitrakoot (2001)
- →**Serves:** Over 2,000 visually impaired students

Additional Knowledge

(a) Pali Pali is an ancient language closely associated with **Theravāda Buddhism** and the **Tipitaka (Pali Canon)**. Though significant in the Buddhist tradition, Rambhadracharya is not known for contributions to Pali literature.

(b) Prakrit Prakrit refers to a group of Middle Indo-Aryan languages used in Jain, Buddhist, and some Hindu texts. Though important in ancient Indian literature, it is not Rambhadracharya's medium of scholarship.

(c) Urdu Urdu is the primary language of Gulzar, who also received the 58th Jnanpith Award alongside Rambhadracharya. While Urdu has a rich poetic and lyrical tradition, Rambhadracharya's literary work is rooted entirely in Sanskrit.

(d) Sanskrit Correct Answer. Rambhadracharya is a living legend in the realm of **Sanskrit literature**. His compositions, educational initiatives, and spiritual commentaries have expanded the reach of Sanskrit in the modern era. He integrates devotional, philosophical, and cultural themes in his works, making Sanskrit accessible and relevant even today.

32. (b): The correct answer is option (b) **Two-stage missile**

Explanation

The **BrahMos missile** is a **two-stage supersonic cruise missile** designed for high-speed, precision strikes. Its propulsion system includes:

1. **First Stage**: A **solid-propellant booster** that accelerates the missile to supersonic speed immediately after launch.
2. **Second Stage**: A **liquid-fueled ramjet engine** that takes over in the cruise phase, propelling the missile to speeds of up to **Mach 2.8 to Mach 3**.

This two-stage configuration allows BrahMos to achieve **sustained supersonic speeds**, enhanced range, and pinpoint accuracy. The solid booster ensures rapid initial acceleration, while the ramjet maintains high-speed cruise with efficient fuel usage.

In addition to its propulsion system, BrahMos features **stealth technology**, **advanced guidance systems** with embedded software, and follows the **"Fire and Forget"** principle, meaning it requires no further guidance after launch. These features make it highly survivable and effective against well-defended targets.

The missile's two-stage structure enables its deployment from **multiple platforms**—land-based launchers, warships, submarines, and aircraft—enhancing its operational versatility.

Information Booster

- →**BrahMos** is a **two-stage missile**.
- →**Stage 1**: Solid-propellant booster for launch acceleration.
- →**Stage 2**: Liquid-fueled ramjet engine for cruise phase.
- →Reaches speeds of **Mach 2.8–3.0**.
- →Supports **"Fire and Forget"** operation.
- →Integrates **stealth** and **advanced guidance systems**.

Additional Knowledge

(a) Single-stage missile – Incorrect. Single-stage missiles have limited speed and range. BrahMos requires two propulsion stages to achieve sustained supersonic speeds.

(b) Two-stage missile – Correct answer. BrahMos uses a **solid booster** in its first stage and a **liquid ramjet** in the second stage, enabling long-range, high-speed cruise.

(c) Three-stage missile – Incorrect. BrahMos operates efficiently with only two stages. A third stage is not part of its design.

(d) Multi-stage ballistic missile – Incorrect. BrahMos is a **cruise missile**, not a ballistic missile. Ballistic missiles have different flight profiles and are generally multi-stage only in longer-range or intercontinental versions.

33. (b): The correct answer is option (b) **Rufous-necked Hornbill and Shorea robusta**.

Explanation

Nongkhyllem Wildlife Sanctuary, located in the **Ri-Bhoi district of Meghalaya**, is rich in both **faunal and floral diversity**:

Fauna:

•→Home to **over 400 bird species**, notably the **endangered Rufous-necked Hornbill**, which is a key indicator of forest health.

•→Also supports various mammals like the **Clouded Leopard**, **Asian Elephant**, and **Himalayan Black Bear**.

Flora:

•→The sanctuary's forests are dominated by species such as:

•→**Shorea robusta** (Sal tree)

•→**Tectona grandis** (Teak)

•→**Terminalia myriocarpa**

•→**Gmelina arborea**

34. (a): **Chandi Prasad Bhatt** is the founder of the **Dasholi Gram Swaraj Sangh (DGSS)**, an organization based in Chamoli district, Uttarakhand. He was one of the pioneers of the Chipko Movement, which sought to protect forests from deforestation.

Important Key Points:

1. DGSS was established in 1964 as a cooperative aimed at promoting sustainable forest-based livelihoods.
2. Bhatt's leadership helped raise awareness about environmental conservation and the importance of community forestry.
3. The organization became a key player in the Chipko Movement, where villagers hugged trees to prevent their felling.
4. The DGSS advocated for the use of local resources in a sustainable manner to improve rural economies.
5. Bhatt's efforts earned him several national and international awards, including the Ramon Magsaysay Award.
6. The Chipko Movement led to reforms in forest policies and inspired environmental movements worldwide.

Knowledge Booster:

- **Sunder Lal Bahuguna**: A prominent environmentalist associated with the Chipko Movement but not the founder of DGSS.

35. (a): •→Chandragupta Maurya founded the Mauryan Dynasty around 322 BCE.

•→He was guided by the great scholar Chanakya, who played a crucial role in establishing the empire.

•→Overthrew the Nanada Dynasty and expanded the Mauryan Empire across northern India.

•→Established a centralized administration and a strong army.

•→He abdicated the throne in favor of his son, Bindusara, and retired to Shravanabelagola in Karnataka, where he embraced Jainism.

Information Booster:

•→First time in history, most of the Indian subcontinent was united.

•→Pataliputra (modern-day Patna) was the capital of the Mauryan Empire.

•→His advisor, Chanakya, authored the "Arthashastra," an ancient treatise on politics, economy, and statecraft.

•→His military conquests included battles against Alexander's successors in northwestern India.

•→Chandragupta's administrative system was divided into provinces for better governance.

•→His empire's economic system included agriculture, trade, and taxation.

36. (a): River Godavari is also known as Dakshin Ganga. So the answer is (a).
- It is also known as Vridh Ganga. It is the largest Peninsular river system. It rises in the Nasik district of Maharashtra and discharges its water into the Bay of Bengal.
- Its tributaries run through the states of Maharashtra, Madhya Pradesh, Chhattisgarh, Odisha and Andhra Pradesh.
- Pravara, Purna, Manjra, Penganga, Wardha, Wainganga, Pranhita (combined flow of Wainganga, Penganga, Wardha), Indravati, Maner and the Sabri are tributaries of Godavari.

37. (c): Krishna Deva Raya was an Emperor of the Vijayanagara Empire who reigned from 1509–1529 CE. The time period of Babur's rule in India was from 1526 to 1530.

38. (b): The Sunga dynasty was established by Pushyamitra Sunga, after the fall of the Maurya Empire and its capital was Pataliputra.

39. (d): Mahapadmananda was the first king of the Nanda dynasty.

40. (c): The Kanva dynasty or Kanvayana was a Brahmin dynasty[1] that replaced the Shunga dynasty in Magadha, and ruled in the Eastern part of India and it is founded by Vasudeva.

41. (b): **Given:**
Anjali secured 20 marks more than Ritu.
Solution:
Let us assume Ritu scored M marks in the exam.
Marks of Anjali = M + 20

$$\Rightarrow (M + M + 20) \times \frac{70}{100} = M + 20$$
$$\Rightarrow (2M + 20) \times \frac{70}{100} = M + 20$$
$$\Rightarrow \frac{140M + 1400}{100} = M + 20$$
$$\Rightarrow 140M + 1400 = 100M + 2000$$
$$\Rightarrow 40M = 600$$
$$\Rightarrow M = 15$$

Marks of Anjali = M + 20 = 15 + 20 = 35

42. (c): **Given:**
Option A: Marked Price = ₹3200, Selling Price = ₹2800
Option B: Marked Price = ₹4000, Selling Price = ₹3600
Option C: Marked Price = ₹2400, Selling Price = ₹2000
Option D: Marked Price = ₹2800, Selling Price = ₹2400
Formula Used:

$$\text{Discount \%} = \left(\frac{\text{Marked Price} - \text{Selling Price}}{\text{Marked Price}}\right) \times 100$$

Solution:
Option A:

$$\text{Discount \%} = \left(\frac{3200 - 2800}{3200}\right) \times 100 = \frac{400}{3200} \times 100 = 12.5\%$$

Option B:

$$\text{Discount \%} = \left(\frac{4000 - 3600}{4000}\right) \times 100 = \frac{400}{4000} \times 100 = 10\%$$

Option C:

$$\text{Discount \%} = \left(\frac{2400 - 2000}{2400}\right) \times 100 = \frac{400}{2400} \times 100 \approx 16.67\%$$

Option D:

$$\text{Discount \%} = \left(\frac{2800 - 2400}{2800}\right) \times 100 = \frac{400}{2800} \times 100 \approx 14.29\%$$

43. (b): **Given:** A man covers a distance of N km in 5 hours at a speed of 18 km/hr

Formula Used:

$$\text{Speed} = \frac{\text{Distance}}{\text{Time}}$$

Solution:

N = 5 × 18 = 90 km

Speed to cover 90 km in 3 hours = $\frac{90}{3}$ = 30 km/h

44. (c): **Given:** The shopkeeper sells the product at some loss.
If the shopkeeper reduces the selling price by 5%, his loss increases by 4%.
Formula Used: Loss = Cost price - Selling price
Solution: Let be assume cost price of product is C and selling price of product is S and loss is L
=> L = C - S
=> 1.04L = C - 0.95S
=> 1.04L = C - 0.95 × (C - L)
=> 0.09L = 0.05C

$$\Rightarrow L = \frac{0.05}{0.09} \times C = 0.5555 \times C$$

=> L% = 55.55%

45. (d): **Given:** Five people spent 15 rupees each on their meals.
Solution: Let the average expenditure of all six persons be A.
Total expenditure of five persons = 15 × 5 = 75
Expenditure of the sixth person = A + 8
Total expenditure of all six persons = 6A
Accordin to given condition:
75 + A + 8 = 6A
=> A =83/5
The total amount spent by them =83/5 × 6 = 99.6
Thus, the total expenditure of the six persons is Rs 99.6.

46. (b): **Given:** Number = 1135
Required: Least natural number to be added so that the result is divisible by 3, 4, 5, and 6
Solution: LCM(3,4,5,6) = 60
(1135 + x) ÷ 60 = 0
1135 ÷ 60 = 18 remainder 55
Number to be added = 60 – 55 = 5

47. (b): **Given:** Total investment = ₹30,000
Scheme X: Rate = 10% p.a.
Scheme Y: Rate = 2% p.a.
Time = 2 years
Total interest = ₹3,000
Formula Used:

$$\text{Simple Interest (SI)} = \frac{P \times R \times T}{100}$$

Solution:

Invested in scheme X = ₹x

Amount in scheme Y = ₹(30,000 − x)

$$SI_X = \frac{x \times 10 \times 2}{100} = \frac{20x}{100}$$

$$SI_Y = \frac{(30,000 - x) \times 2 \times 2}{100} = \frac{4(30,000 - x)}{100}$$

Total interest:

$$\frac{20x}{100} + \frac{4(30,000 - x)}{100} = 3000$$

20x + 120,000 - 4x = 300,000

16x = 180,000

$$x = \frac{180,000}{16} = 11,250$$

48. (d): **Given:**

$$\frac{\left(1\frac{1}{4} \div 1\frac{5}{10}\right)}{-\frac{1}{2}-\frac{2}{3}+\frac{4}{5}-\frac{1}{3}+\frac{1}{5}+\frac{3}{4}}$$

Concept Used:

Operation preference wise	Symbol
Brackets	[], {}, ()
Orders, of	^{x} (power), √ (root), of
Division	÷
Multiplication	×
Addition	+
Subtraction	-

Solution:

$$= \frac{\left(1\frac{1}{4} \div 1\frac{5}{10}\right)}{-\frac{1}{2}-\frac{2}{3}+\frac{4}{5}-\frac{1}{3}+\frac{1}{5}+\frac{3}{4}}$$

$$= \frac{\left(\frac{5}{4} \div \frac{15}{10}\right)}{-\frac{1}{2}-\frac{2}{3}+\frac{4}{5}-\frac{1}{3}+\frac{1}{5}+\frac{3}{4}}$$

$$= \frac{\left(\frac{5}{4} \times \frac{10}{15}\right)}{\frac{-30-40+48-20+12+45}{60}}$$

$$= \frac{\left(\frac{1}{2} \times \frac{5}{3}\right)}{\frac{-90+105}{60}}$$

$$= \frac{\left(\frac{5}{6}\right)}{\frac{-90+105}{60}}$$

$$= \frac{\left(\frac{5}{1}\right)}{\frac{15}{10}}$$

$$= \frac{10}{3}$$

49. (d): **Given:**

A number is increased by 10%

Then decreased by 10%

Then increased again by 20%

Formula Used:

$$\text{New Value} = \text{Original Value} \times \left(1+\frac{a}{100}\right) \times \left(1-\frac{b}{100}\right) \times \left(1+\frac{c}{100}\right)$$

$a = 10, b = 10, c = 20$

Solution:

Original number = 100

$$= 100 \times \left(1+\frac{10}{100}\right) \times \left(1-\frac{10}{100}\right) \times \left(1+\frac{20}{100}\right)$$

$$= 100 \times \left(\frac{110}{100}\right) \times \left(\frac{90}{100}\right) \times \left(\frac{120}{100}\right)$$

$$= 11 \times 9 \times \left(\frac{12}{10}\right)$$

$$= \left(\frac{1188}{10}\right)$$

= 118.8%
Increased % = 118.8% - 100% = 18.8%

50. (b): **Given:**

Initial ratio of boys to girls = $\frac{16}{2} : \frac{15}{3} = 8 : 5$

After adding 1 boy and 3 girls, ratio becomes $\frac{1}{2} : \frac{1}{3} = 3 : 2$

Solution:

Number of boys = 8x

Number of girls = 5x

Boys = 8x + 1

Girls = 5x + 3

$$\frac{8x+1}{5x+3} = \frac{3}{2}$$

$$\frac{8x+1}{5x+3} = \frac{3}{2}$$

$2(8x + 1) = 3(5x + 3)$

$16x + 2 = 15x + 9$

$x = 7$

Original number of girls = 5x = 5 × 7 = 35

51. (d): **Given:**

$$Cx \propto \frac{y^2}{\sqrt[3]{z}}$$

When x = 2,y = 4,z = 8

Solution:

$$x = k \times \frac{y^2}{\sqrt[3]{z}}$$

$$k = \frac{x \times \sqrt[3]{z}}{y^2}$$

x = 2,y = 4,z = 8

$$k = \frac{2 \cdot \sqrt[3]{8}}{4^2} = \frac{2 \cdot 2}{16} = \frac{4}{16} = \frac{1}{4}$$

x = 3,z = 27, and $k = \frac{1}{4}$

$$3 = \frac{1}{4} \cdot \frac{y^2}{\sqrt[3]{27}}$$

$$3 = \frac{1}{4} \cdot \frac{y^2}{3}$$

$$3 = \frac{y^2}{12}$$

$$y^2 = 36$$

$y = \sqrt{36} = 6$ or -6

52. (a): **Given:**

Tap A fills in 10 hours → Rate = $\frac{1}{10}$

Tap B fills in 18 hours → Rate = $\frac{1}{18}$

Tap C fills in 6 hours → Rate = $\frac{1}{6}$

Solution:

A + B (1st hour)

$\frac{1}{10}+\frac{1}{18}=\frac{28}{180}=\frac{14}{90}=\frac{7}{45}$

A + C (2nd hour)

$\frac{1}{10}+\frac{1}{6}=\frac{3+5}{30}=\frac{8}{30}=\frac{4}{15}$

Total work in 2 hours =

$\frac{7}{45}+\frac{4}{15}=\frac{7}{45}+\frac{12}{45}=\frac{19}{45}$

After 2 hours → $\frac{19}{45}$ tank filled

After 4 hours → $2\times\frac{19}{45}=\frac{38}{45}$

Remaining = $1-\frac{38}{45}=\frac{7}{45}$

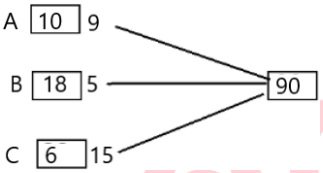
Next hour (5th hour) is odd → A + B work

Their combined rate = $\frac{7}{45}$

So in 5th hour, A + B will fill exactly $\frac{7}{45}$

Total time = 4 full hours + 1 hour = 5 hours

Alternate Method:



Total Work = 90 Unit

A + B (1st hour) = 9 + 5 = 14

A + C (2nd hour) = 9 + 15 = 24

After 2 hours = 14 +24 = 38unit

After 4 hours = 76unit

Remaining Work = 90 - 76 = 14 unit

Next hour (5th hour) is odd → A + B work

$\frac{14}{14}=1\text{ h}$

Total Time = 4 + 1 = 5 h

53. (d): **Given:**

$\frac{0.3216}{0.05}\times\frac{0.05}{0.16}$

Solution:

$=\frac{0.3216}{0.05}\times\frac{0.05}{0.16}$

$=\frac{0.3216}{0.16}$

$=2.01$

54. (b): **Given:**
Karan is 20% more efficient than Sachit
Sachit alone can complete the work in 20 days
Formula Used:
Time =Work/Efficiency
Solution:
Sachit's efficiency = 1 unit/day
Karan's efficiency = 1 + 20% of 1 = 1.2 units/day
Total work = 1 × 20 = 20 units
Karan's time =20/1.2=200/12=50/3days

55. (d): **Given:**
70% of bags sold at 30% profit
30% of bags (remaining) sold at 20% loss
Solution:

$$\text{Overall Profit \%} = \left(\frac{70 \times 30 + 30 \times (-20)}{100}\right)$$

$$= \frac{2100 - 600}{100}$$

$$= \frac{1500}{100}$$

= 15%

56. (a): **Given:**

$8.\overline{642}$

Solution:

$x = 8.\overline{642}$

$1000x = 8642.\overline{642}$

$x = 8.\overline{642}$

$1000x - x = 8642.\overline{642} - 8.\overline{642}$

$999x = 8634$

$999x = \frac{8634}{999}$

Alternate Method:

$8.\overline{642}$

$= \frac{8634}{999}$

57. (c): **Given:**

$l = \frac{6}{5}, \quad m = \frac{5}{8}$ of n

$l = \frac{6}{5}$ of m

Solution:

$l = \frac{6}{5} \times m$

$l = \frac{6}{5} \times \left(\frac{5}{8}n\right)$

$l = \frac{6 \times 5}{5 \times 8}n$

$l = \frac{6}{8}n$

$I = \frac{3}{4}n$

$\frac{l}{n} = \frac{3}{4}$

l : n = 3 : 4

58. (c): **Given:** Radius, r = 7 cm
Height, h = 10 cm
Formula Used: Volume of the cylinder = π × r^2 × h
Solution: Volume of the cylinder =22/7× 7^2 × 10 = 1540 cubic cm

59. (b): **Given:** The average weight of 7 people increases by 5 kg when a new person comes in place of one of them weighing 55 kg.
Formula Used: Weight of new person = weight of the person being replaced + total change in weight
Solution:
Weight of the person replaced = 55 kg
Total change in weight due to new person = 5 kg per person for 7 people
Total change in weight due to new person = 5 × 7 = 35 kg
Weight of new person = 55 + 35 = 90 kg

60. (a): **Given:**
Hitesh = 3 × son's age
Daughter = son's age – 3
3 years ago, total of their ages = 123 years
Solution:
Let son's present age = x years
Then:
Hitesh's present age = 3x
Daughter's present age = x - 3
Ages 3 years ago:
Son = x - 3, Hitesh = 3x - 3, Daughter = x - 3 - 3 = x - 6
Now:
(x - 3) + (3x - 3) + (x - 6) = 123
5x - 12 = 123
5x = 135
x = 27
Hitesh's present age = 3x = 3 × 27 = 81 years

61. (c): **Given:**
$m = a\cos^3\beta$
$n = b\sin^3\beta$
Formula Used:
$\sin^2\beta + \cos^2\beta = 1$
Solution:
$m = a\cos^3\beta \implies \cos\beta = \left(\frac{m}{a}\right)^{\frac{1}{3}}$
$n = b\sin^3\beta \implies \sin\beta = \left(\frac{n}{b}\right)^{\frac{1}{3}}$
Now,
$\sin^2\beta + \cos^2\beta = 1$
$\left[\left(\frac{m}{a}\right)^{\frac{1}{3}}\right]^2 + \left[\left(\frac{n}{b}\right)^{\frac{1}{3}}\right]^2 = 1$
$\left(\frac{m}{a}\right)^{\frac{2}{3}} + \left(\frac{n}{b}\right)^{\frac{2}{3}} = 1$

62. (a): **Given:**
The ratio of the corresponding sides of two similar triangles is 3 : 10
Formula Used:
$$\text{Ratio of Areas} = \left(\frac{\text{Length of corresponding sides of the first triangle}}{\text{Length of corresponding sides of the second triangle}}\right)^2$$
Solution:
$$\text{Ratio of Areas} = \left(\frac{3}{10}\right)^2 = \frac{3^2}{10^2} = 9 : 100$$

63. (c): **Given:**
Ratio of investments: Vikram : Anjali : Raj = 7 : 3 : 20
Total profit earned at the end of the year = ₹28,800
The profit earned is 25% of their total investment
Solution:
Let the total investment be T.
Profit = 25% of total investment
$₹28,800 = 0.25 \times T$
$T = \frac{28,800}{0.25} = ₹1,15,200$
$\text{Profit share for Anjali} = \frac{3}{30} \times \text{Total Profit}$
$\text{Anjali's Investment} = \frac{3}{30} \times T$
$\text{Anjali's Investment} = \frac{3}{30} \times ₹1,15,200 = ₹11,520$

64. (d): **Given:**
a + b = 41
a - b = 38
Solution:
$(a+b)^2=41^2 = 1681$

65. (c): **Given:**
15 chairs and 3 tables cost ₹7,800.
14 chairs and 6 tables cost ₹9,200.
We need to find the cost of 17 chairs and 18 tables.
Solution:
Let the cost of one chair be x and the cost of one table be y
From the given condition;
15x + 3y = 7800.....(1)
14x + 6y = 9200.....(2)
Subtracting 2× (1) - (2)
$30x + 6y = 15600$
$-14x - 6y = -9200$
$16x = 6400$
x=400
Substituting x = 400 into the first equation to find y:
15(400) + 3y = 7800
3y = 7800 - 6000 = 1800
y = 600
Now, the cost of 17 chairs and 18 tables:
= 17x + 18y = 17(400) + 18(600)
= 6800 + 10800 = ₹17600

66. (c): **Given:**
$\frac{\sqrt{0.028224}}{\sqrt{0.000784}}$
Solution:
$\frac{\sqrt{0.028224}}{\sqrt{0.000784}}$
$= \frac{\sqrt{28224}}{\sqrt{784}}$
$= \frac{168}{28} = 6$

67. (d): **Given:**
Length of first train = 360 m
Speed of man = 9 km/h
Time to pass the man (opposite direction) = 16 s
Length of second train = 240 m
Speed of second train = 45 km/h
Trains move in same direction
Formula Used:

$$\text{Speed (m/s)} = \frac{\text{Speed (km/h)} \times 5}{18}$$

$$\text{Distance} = \text{Speed} \times \text{Time}$$

Solution:

Let speed of train = x km/h

Relative speed with man (opposite) = x + 9 km/h

Converting to m/s:

$$\frac{x+9}{3.6} = \frac{360}{16} = 22.5$$

$x + 9 = 22.5 \times 3.6 = 81$

$x = 72$ km/h

Now, for second train:

Relative speed = 72 - 45 = 27 km/h

$\rightarrow$ In m/s: $\frac{27 \times 5}{18} = 7.5$ m/s

Total length = 360 + 240 = 600 m

$$\text{Time} = \frac{600}{7.5} = 80 \text{ seconds}$$

68. (c): **Given:**
Diameter of the sphere = 84 cm
Radius r =84/2 = 42 cm
Formula Used:
Surface Area of sphere $=4\pi r^2$
Solution:
Surface Area of the sphere $=4\times\pi\times4^2$
$=4\times\pi\times1764$
$=7056\pi cm^2$

69. (d): **Given:**
Length of the rectangular garden = 32 m
Breadth of the rectangular garden = 8 m
Area of the rectangular garden = Area of the square garden
Formula Used:
Area of rectangle = Length × Breadth
Area of square = $(\text{Side})^2$
Perimeter of square = 4 × Side
Solution:
Area of rectangle = Area of square
$32 \times 8 = (\text{Side})^2$

$$\text{Side} = \sqrt{256} = 16 \text{ m}$$

Perimeter of the square garden:
Perimeter = 4 × 16 = 64 m

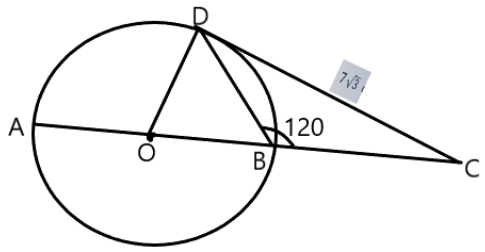
70. (b): **Given:**

Circle with center (O), diameter (AB) extended to point (C)

(CD) is tangent at (D), with ($CD = 7\sqrt{3}$) cm

($\angle DBC = 120^\circ$)

Solution:



Tangent-Radius Theorem

($OD \perp CD$), so ($\angle ODC = 90^\circ$)

Isosceles Triangle

(OB = OD) (both radii), so ($\angle OBD = \angle ODB$)

In ($\triangle BDC$), ($\angle DBC = 120^\circ$)

Since ($\angle ODB$) is part of ($\angle BDC$), and ($\angle ODC = 90^\circ$), we have

$\angle OBD = 180 - 120 = 60$ so that $\angle ODB = 60$ Both are radius

$\angle ODB = \angle ODC - \angle BDC = 90^\circ - 60^\circ = 30^\circ$

In right ($\triangle ODC$)

$$\tan(\angle DOC) = \frac{CD}{OD} \implies \tan(60^\circ) = \frac{7\sqrt{3}}{r}$$

$$\sqrt{3} = \frac{7\sqrt{3}}{r} \implies r = 7 \text{ cm}$$

Diameter

AB = 2r

= 14 cm

71. (d): **Statement**:

1. All gold are silver .
2. Some silver are copper.

From the given statements possible Venn diagram will be.

Conclusion:

I. No copper is gold. (**False**, there is no direct or indirect relation between copper and gold).

II. No silver is gold. (**False**, all gold are silve).

So, **None of the conclusions follows.**

Thus, correct option is (d).

72. (d): **Given**: GMB : IOD :: FHJ : HJL :: ?

1	2	3	4	5	6	7	8	9	10	11	12	13
A	B	C	D	E	F	G	H	I	J	K	L	M
Z	Y	X	W	V	U	T	S	R	Q	P	O	N
26	25	24	23	22	21	20	19	18	17	16	15	14

Logic: 1st letter + 2 = 4th letter, 2nd letter + 2 = 5th letter and 3rd letter + 2 = 6th letter

For, GMB : IOD

G + 2 = I, M + 2 = O, B + 2 = D

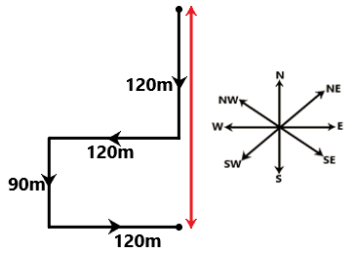
For, FHJ : HJL
F + 2 = H, H + 2 = J, J + 2 = L
Now, we check each options.
Option (a): RST : PUR **(Not Follow)**
R + 2≠= P, S + 2 = U, T + 2≠= R
Option (b): XYZ : ZZB **(Not Follow)**
X + 2 = Z, Y + 2≠= Z, Z + 2 = B
Option (c): PRT : QTU **(Not Follow)**
P + 2≠= Q, R + 2 = T, T + 2≠= U
Option (d): FBH : HDJ **(Follow)**
F + 2 = H, B + 2 = D, H + 2 = J
Thus, the correct option is (d).

73. (b):

1	2	3	4	5	6	7	8	9	10	11	12	13
A	B	C	D	E	F	G	H	I	J	K	L	M
Z	Y	X	W	V	U	T	S	R	Q	P	O	N
26	25	24	23	22	21	20	19	18	17	16	15	14

Logic: 1st letter - 3 = 4th letter, 2nd letter - 2 = 5th letter and 3rd letter - 1 = 6th letter
Now, we check each options.
Option (a): BOZ-YMY **(Follow)**
B - 3 = Y, O - 2 = M, Z - 1 = Y
Option (b): NCP-JZN **(Not Follow)**
N - 3≠= J, C - 2≠= Z, P - 1≠= N
Option (c): TQH-QOG **(Follow)**
T - 3 = Q, Q - 2 = O, H - 1 = G
Option (d): LER-ICQ **(Follow)**
L - 3 = I, E - 2 = C, R - 1 = Q
Thus, correct option is (b).

74. (a): **Given**:
Mohit walks 120 m towards south then turning to his right he walks 120 m then turning to his left, he walks 90 m.
Again, he turns to his left and walks 120 m.
From the given information path diagram will be.



120 + 90 = 210m
210m far is he from his initial position.
Thus, correct option is (a).

75. (d): **Given**: 4, 13, 40, ?, 364, 1093
Logic: Numbers are mutiply by 3 then + 1 is pattern follow.
4× 3 + 1 = 13
13× 3 + 1 = 40
40× 3 + 1 = **121**

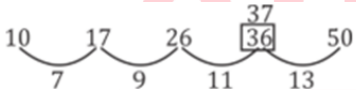
121× 3 + 1 = 364
364× 3 + 1 = 1093
So, the missing term is **121**.
Thus, correct option is (d).

76. (b): **Given**: M, 14, O, 16, ?, 18, S, 20

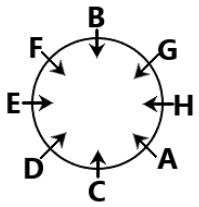
1	2	3	4	5	6	7	8	9	10	11	12	13
A	B	C	D	E	F	G	H	I	J	K	L	M
Z	Y	X	W	V	U	T	S	R	Q	P	O	N
26	25	24	23	22	21	20	19	18	17	16	15	14

Logic: Letter and number are increasing + 2 place alternatley.
M + 2 = O
14 + 2 = 16
O + 2 = **Q**
16 + 2 = 18
Q + 2 = S
18 + 2 = 20
So, the missing term is **Q**.
Thus, correct option is (b).

77. (b): **Given Series**: 10, 17, 26, 36, 50
Step-by-Step Logic:
17 - 10 = 7 (odd)
26 - 17 = 9 (odd)
36 - 26 = 10 (even, which is incorrect)
50 - 36 = 14 (even, which is incorrect)
According to the pattern, the differences should be increasing odd numbers like 7, 9, 11, 13, etc.
7 (odd)
9 (odd)
11 (should be next, not 10)
13 (should be next, not 14)
Thus, 36 is the wrong term in the series. It should be 35 to follow the correct pattern.
Final Correct Option: (B) 36
Alternative method



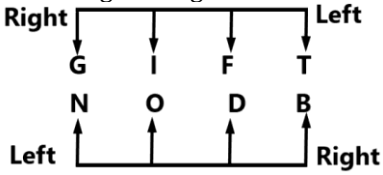
78. (c): **Given**:
Eight friends (A, B, C, D, E, F, G, H) sit around a circular table, all of them facing the centre.
Only three people sit between G and D.
D sits second to the right of F.
C is a neighbour of D.
A sits third to the left of B.
H sits second to the right of C.
E and A are not immediate neighbours of each other.
From the given information seating arrangement will be.



F is sitting between B and E, when counted from the left of E.
Thus, correct option is (c).

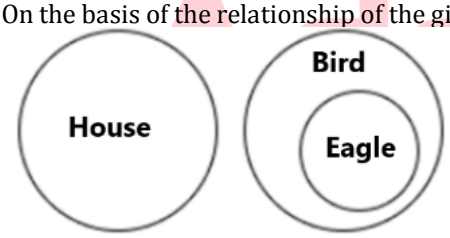
79. (d): **Given:**
Statement:
In City X, the number of car accidents has spiked recently due to poor road conditions and lack of adequate signage.
Course of Action:
I. The city should launch an awareness campaign to educate drivers on safe driving practices **(Does not follow,** While awareness might help marginally, it **does not directly address the root cause** mentioned in the statement).
II. Immediate Road repair and installation of proper signage should be carried out **(Follow,** This directly addresses the **specific problems** identified in the statement. Therefore, it is a **logical course of action** to reduce accidents).
So, **only II follows.**
Thus, the correct option is: (d)

80. (b): **Given:**
Eight people are sitting in two parallel rows with 4 people each.
Row 1 (facing south): G, I, F, T
Row 2 (facing north): B, O, N, D
Each person faces someone from the opposite row.
No one sits to the right of B.
Only two people sit between N and B.
The one facing O sits second to the right of the one facing B.
I sits to the immediate right of F.
G sits to the immediate right of I.
G does not face O.
According to the given information, Seating arrangements will be:



As per the arrangements, T and N both people sitting at the extreme ends of the rows.
Thus, the correct option is **(b) T and N**

81. (b): **Given:** Eagle, Bird, House
On the basis of the relationship of the given words, The correct Venn diagram will be:

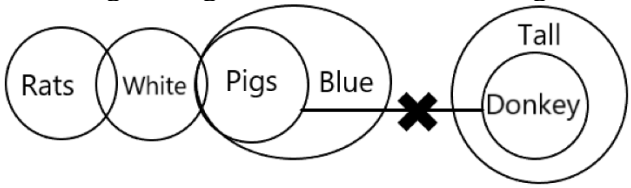


Since, Eagle is a type of Bird => So, Eagle is a subset of Bird
House is completely unrelated to both Eagle and Bird => No overlap
Thus, the correct option is **(b).**

82. (a): **Given:**
Mukesh is 25th from the left
Suresh is 24th from the right
Total number of students = 40
Dhiren is sitting between Mukesh and Suresh
Position from left = Total students - Position from right + 1
= 40 - 24 + 1 = 17th from the left
They are sitting at 17th and 25th positions from the left.
Dhiren is sitting between them, so he must be at the middle position.
Middle position = (17 + 25) / 2 = **21**
So, Dhiren is **21st** from the left.
Thus, correct option is (a).

83. (d): **Given:**
STAY → 3845
LAYS → 3578
From the given coded language code will be shown bellow:
S T AY → 38 4 5
L AYS → 35 7 8
So, **T** is coded as **4.**
Thus, the correct option is: **(d)**

84. (a): **Given:**
Statements:
I. Some rats are white.
II. Some white are pigs.
III. All pigs are blue.
IV. No pig is a donkey.
V. All donkeys are tall.
According to the given information Venn diagram will be-



Conclusion:
I. Some tall are not pigs.
From Statement IV, no pig is a donkey. From Statement V, all donkeys are tall. Therefore, all tall donkeys cannot be pigs, meaning some tall are not pigs. This conclusion follows.
II. Some rats are pigs.
Statement I says some rats are white, and Statement II says some white are pigs. However, there is no direct link or overlap between rats and pigs. This conclusion does not follow.
III. All blue being donkeys is a possibility.
Statement III says all pigs are blue, and Statement IV says no pig is a donkey. Hence, no blue entity can be a donkey since all blue are pigs, and pigs cannot be donkeys. This conclusion does not follow.
Thus, the correct optio is (a) **Only I follows.**

85. (a): **Given**: ZA, UF, QJ, ?, LO

1	2	3	4	5	6	7	8	9	10	11	12	13
A	B	C	D	E	F	G	H	I	J	K	L	M
Z	Y	X	W	V	U	T	S	R	Q	P	O	N
26	25	24	23	22	21	20	19	18	17	16	15	14

Logic: 1st letter decreasing - 5, - 4, - 3, - 2 and 2nd letter increasing + 5, + 4, + 3, + 2 place.
For, 1st letter
Z - 5 = U, U - 4 = Q, Q - 3 = **N**, N - 2 = L
For, 2nd letter
A + 5 = F, F + 4 = J, J + 3 = **M**, M + 2 = O
So, the missing term is **NM**.
Thus, correct option is (a).

86. (b): **Given**:
In a College, L and M were teaching Biology and Physics.
N and M were teaching Physics and English.
O and L were teaching Sanskrit and Biology.
P and M were teaching Geography and Spanish.

Teachers	**Subjects**
L and M	Biology and Physics
N and M	Physics and English
O and L	Sanskrit and Biology
P and M	Geography and Spanish

L and M were teaching **Biology and Physics**.
Thus, correct option is (b).

87. (c): **Given:**
(25, 5, 20)
(40, 8, 32)
Logic: (3rd Number + 2nd Number) = 1st Number
(25, 5, 20)
(20 + 5) = 25
(40, 8, 32)
(32 + 8) = 40
Let's check each options:
Option A: (100, 16, 64)
(64 + 16) = 80≠= 100
Option B:(80, 16, 60)
(60 + 16) = 76≠= 6
Option C: (80, 16, 64)
(64 + 16) = **80** (**Follow**)
Option D: (80, 14, 64)
(64 + 14) = 78≠= 80
So, (80, 16, 64), as it follows the pattern.
Thus, the correct option is: (c)

88. (a): **Given:**
Box A should be placed exactly three places above the box D.
Box C should not be kept on the top.
Only one box should be kept between the box E and box B.
Box E is at the bottom.

Position	Box
5th	A
4th	C
3rd	B
2nd	D
1st	E

So, **Box C** is in the **2nd** position from the top.
Thus, correct option is (a).

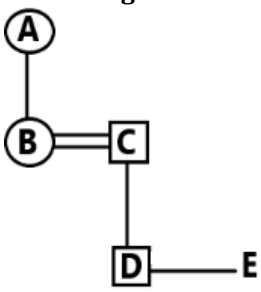
89. (b): **Given:**
Hansraj scored equal to Varun.
Nandkishor scored more than Varun but less than Poonam.
Pranjal scored more than Sam but less than Varun.
Now, based on the above information, we can order the scores as:
Poonam > Nandkishor > Varun = Hansraj > **Pranjal** > Sam
The second lowest score is **Pranjal**.
Thus, correct option is (b).

90. (b): **Given:**
P+Q means P is the mother of Q

Symbols	+	-	×	÷
Relation	Mother	Wife	Father	Brother

Symbol in Diagram	Meaning
- / O	Female
+/ □	Male
=	Married Couple
—	Siblings
|	Difference Of Generation

From the given information Relationship diagram will be:



A is related to **E** as a **Mother's mother.**
Thus, the correct option is **(b) Mother's mother.**

91. (b): **Given:** AZ , BY , ? , DV , ET , FS
Logic: Each 1st letter is increased by 1, and each 2nd letter is decreased by 1 and 2 alternatives.

1	2	3	4	5	6	7	8	9	10	11	12	13
A	B	C	D	E	F	G	H	I	J	K	L	M
Z	Y	X	W	V	U	T	S	R	Q	P	O	N
26	25	24	23	22	21	20	19	18	17	16	15	14

For 1st letters:
A + 1 = B, **B + 1 = C**, C + 1 = D, D + 1 = E, E + 1 = F
For 2nd letters;
Z - 1 = Y, **Y - 2 = W**, W - 1 = V, V - 2 = T, T - 1 = S
So, CW is missing term.
Thus, the correct answer is (b).

92. (a): **Given:**
Wall : Paint :: Shoe : ?
Logic:
The relationship is Object : Substance applied to it for maintenance or appearance.
Wall : Paint → Paint is applied to **beautify/protect** walls
Shoe : Polish → Polish is applied to **shine/protect** shoes
Additional Information (Other Options):
(B) Whitewash – Applied on walls, not on shoes.
(C) Plaster – Used for walls, not for shoes.
(D) Spray – Generic term, not specific to shoes.
Thus, correct option is (b).

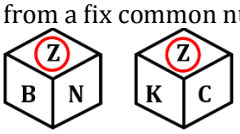
93. (b): **Given:** (14 B 4) A 2 C (15 A 5) B 9 D 34 C (48 A 6) B 2 = ?

Signs	÷	×	+	-
Alphabets	A	B	C	D

Operation preference wise	Symbol
Brackets	[], , ()
Orders, of	(power), √(root), of
Division	÷
Multiplication	×
Addition	+
Subtraction	−

After putting the signs in the given equation will be:
(14 B 4) A 2 C (15 A 5) B 9 D 34 C (48 A 6) B 2 = ?
(14 × 4) ÷ 2 + (15 ÷ 5) × 9 - 34 + (48 ÷ 6) × 2 = ?
(56) ÷2 + (3)×9 - 34 + (8)×2 = ?
28 + 27 - 34 + 16 = ?
71 - 34 = ?
? = 37
Thus, correct option is (b).

94. (a): **Logic:** In these types of dice problems, we should write all three numbers/letters in clockwise or anticlockwise from a fix common number/letter.



Common face to clock wise rotate:

Z N B
| | |
Z C K

So, **Z** is opposite to face **A.**
Thus, the correct option is**: (a)**

95. (c): **Given**: 20 – 4× 3 ÷ 8 + 2 = 12
Given equation is solve by **BODMAS** rule.

Operation preference wise	Symbol
Brackets	[], , ()
Orders, of	(power), √(root), of
Division	÷
Multiplication	×
Addition	+
Subtraction	–

Now, we check each options.
Option (a):÷ and×
New equation: 20 – 4÷ 3× 8 + 2 = 12
4 is not divisible by 3
Option (b): + and -
New equation: 20 + 4× 3 ÷ 8 - 2 = 12
3 is not divisible by 8
Option (c): + and÷
New equation: 20 – 4× 3 + 8÷ 2 = 12
20 - 4× 3 + 4 = 12
20 - 12 + 4 = 12
24 - 12 = 12
12 = 12
Option (d):× and +
New equation: 20 – 4 + 3 ÷ 8× 2 = 12
3 is not divisible by 8
Thus, correct option is (c).

96. (b): **Given words:**
1. BUTTERFLY 2. BEE 3. BREEZE 4. BUSH 5. BEETLE
BEE – Starts with B-E-E
BEETLE – Starts with B-E-E, same as BEE, but T comes after E, so BEE comes first.
BREEZE – Starts with B-R, which comes after B-E, so BREEZE comes after both BEE and BEETLE.
BUSH – Starts with B-U, which comes after B-R, so after BREEZE.
BUTTERFLY – Starts with B-U, same as BUSH, next letters T and S, and since S < T, BUSH comes before BUTTERFLY.
So, the final order is: **25341**
2. BEE 5. BEETLE 3. BREEZE 4. BUSH 1. BUTTERFLY
Thus, correct option is (b).

97. (b): **Given** - R = T, Y > K, N < E, K < N, E < P, U > P and T > Y
N < U
(N < E, E < P, U > P) provides conclusion true.
Y > N
cannot not find conclusion in the given statement - false.
E < U
(E < P, U > P) provides conclusion true.
R > K
(Y > K, T > Y, R = T) provides conclusion true.
option B is answer.

98. (c): **Given**: The Calendar of the year 2009 is same as that of the year = ?
No. of odd days in non leap year = Remainder of (365÷ 7) = 1 odd day
No. of odd days in leap year = Remainder of (366÷ 7) = 2 odd days
Now, 7 odd days will come in 6 years (5 non leap years and 1 leap year).
Therefore, year with same calendar as 2009 will be 2009 + 6 = **2015**
So, **2015** is same year.
Thus, correct option is (c).
Note : A calendar year is repeated every 7 odd days.

99. (a):

Symbol/Number	12	÷
Interchange	6	+

Operation preference wise	Symbol
Brackets	$[], , ()$
Orders, of	$(\text{power}), \sqrt{(\text{root})}, \text{of}$
Division	$\div$
Multiplication	$\times$
Addition	$+$
Subtraction	$-$

Let's check options;
A) 6 ÷ 4 ×5 - 12 + 3 = 30
New equation:
12 + 4 ×5 - 6 ÷ 3 = 30
12 + 4 ×5 - 2 = 30
12 + 20 - 2 = 30
32 - 2 = 30
30 = 30 (Correct)
Thus, correct option is (a).

100.(d): **Given:** 2 – 3 ÷ 9 × 6 + 5 = ?

Operation preference wise	Symbol
Brackets	$[], , ()$
Orders, of	$(\text{power}), \sqrt{(\text{root})}, \text{of}$
Division	$\div$
Multiplication	$\times$
Addition	$+$
Subtraction	$-$

if '9' and'3' are interchanged?
After interchanging the digits in the given equation will be:
2 – 9 ÷ 3 × 6 + 5 = ?
? = 2 – 3 × 6 + 5
? = 2 – 18 + 5
? = 7 - 18
? = -11
Thus, the correct option is **(d) -11.**