



**VENKIS
COACHING**

*Hard work beats luck...
keep pushing forward!*



VENKATESH NETHI
DIRECTOR

www.venkiscoaching.com

+91 6301414541

SSC CGL Pre

Solution

VENKIS COACHING

SCP-907344064-E

- BALAJI COLONY TIRUPATI CELL 9391794863
- DILSUKHNAGAR HYDERABAD CELL:9398611586
- OPP TO CLOCK TOWER VRC CENTRE NELLORE CELL:6301414541







VENKIS COACHING

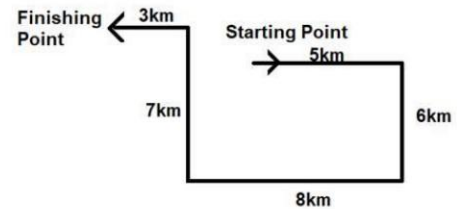
General Intelligence and Reasoning

1. **Answer: (C)**
Clues:
 1) Only one box is smaller than box N.
 2) Box P is bigger than box M but smaller than box Q.
 3) At least one box is bigger than Q.
Inferences:
 From clue 1, N is the second smallest box.
 From clue 2 and 3, O is the biggest box, M is the smallest box and Q is the second largest box.
 The final arrangement is as follows:
 $O > Q > P > N > M$
 So, box P is the third biggest box.
2. **Answer: (B)**
 The logic followed here is:
 The 2nd number is 'n' less than the cube of the 1st number.
 In 7:336,
 $2^{\text{nd}} \text{ number} = 7^3 - 7$
 $343 - 7 = 336$
 In 9:720,
 $6^{\text{th}} \text{ number} = 9^3 - 9$
 $729 - 9 = 720$
 Similarly,
 In 5:?
 $4^{\text{th}} \text{ number} = 5^3 - 5$
 $125 - 5 = 120$
 So, '120' will come in place of question mark.
3. **Answer: (C)**
 Correct sequence is:
abcdef/ abcdef/ abcdef/ abcdef
4. **Answer: (C)**
 In option 'a':
 $21 + 3 - 12 \times 6 \div 4 = 36$
 LHS:
 $= 21 + 3 - 12 \times 6 \div 4$
 $= 21 + 3 - 3 \times 6$
 $= 21 + 3 - 18$
 $= 24 - 18$
 $= 6$
 LHS \neq RHS
 In option 'b':
 $21 \times 3 + 12 - 6 \div 4 = 36$
 LHS:
 $= 21 \times 3 + 12 - 6 \div 4$
 $= 21 \times 3 + 12 - 1.5$
 $= 63 + 12 - 1.5$
 $= 75 - 1.5$
 $= 73.5$
 LHS \neq RHS
 In option 'c':
 $21 - 3 + 12 \times 6 \div 4 = 36$
 LHS:
 $= 21 - 3 + 12 \times 6 \div 4$
 $= 21 - 3 + 3 \times 6$
 $= 21 - 3 + 18$
 $= 39 - 3$
 $= 36$
 LHS = RHS
 In option 'd':
 $21 + 3 - 12 \div 6 \times 4 = 36$
 LHS:
 $= 21 + 3 - 12 \div 6 \times 4$
 $= 21 + 3 - 2 \times 4$
 $= 21 + 3 - 8$
 $= 24 - 8$

= 16

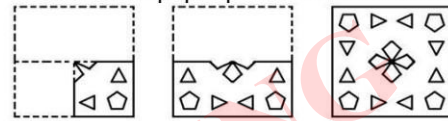
LHS \neq RHS

5. **Answer: (B)**
 'Author' writes 'Books' in the same way 'Journalist' writes about 'News' in newspaper.
6. **Answer: (A)**
 The following arrangement can be drawn from the given statements:

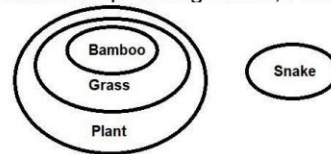


So, the finishing point is in north-west direction with respect to her starting point.

7. **Answer: (B)**
 The unfolded paper piece is shown below:

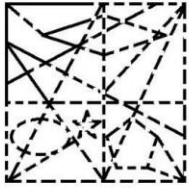


8. **Answer: (A)**
 Since Suman is the wife of Rajesh's son, she is Rajesh's daughter-in-law.
9. **Answer: (D)**
 All Bamboo are Grass, all Grass are Plant but there is not relation of Snake with Bamboo, Grass and Plant. Therefore, the figure that best represents the relationship among Grass, Plant, Bamboo, Snake is:



10. **Answer: (D)**
 Third number = (Second number - First number) \times 2
 In (22, 78, 112)
 Third number = $(78 - 22) \times 2$
 Third number = 56×2
 Third number = 112
 In (34, 57, 56)
 Third number = $(57 - 34) \times 2$
 Third number = 23×2
 Third number = 56
 In option 'a': (12, 36, 48)
 Third number = $(36 - 12) \times 2$
 Third number = 24×2
 Third number = 48
 In option 'b': (27, 89, 124)
 Third number = $(89 - 27) \times 2$
 Third number = 62×2
 Third number = 124
 In option 'c': (31, 67, 72)
 Third number = $(67 - 31) \times 2$
 Third number = 36×2
 Third number = 72
 In option 'd': (43, 92, 108)
 Third number = $(92 - 43) \times 2$
 Third number = 49×2
 Third number = 98
 Third number \neq 108

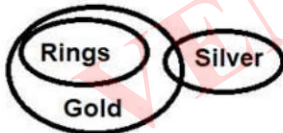
11. **Answer: (B)**
 The embedded figure is shown below:



12. **Answer: (B)**
The logic followed here is as follows:
Code = Product of the positional value of the letters - Number of letters
For 'BAG',
Code = Positional value ('B' × 'A' × 'G') - 3
Code = (2 × 1 × 7) - 3
Code = 14 - 3
Code = 11
For 'GET':
Code = Positional value ('G' × 'E' × 'T') - 3
Code = (7 × 5 × 20) - 3
Code = 700 - 3
Code = 697
For 'HOT':
Code = Positional value ('H' × 'O' × 'T') - 3
Code = (8 × 15 × 20) - 3
Code = 2400 - 3
Code = 2397
So, 'HOT' is coded as '2397'.

13. **Answer: (C)**
The correct order of the given words as they would appear in an English dictionary is as follows:
4- Patriarchy, 5- Patrimony, 3- Patriot, 2- Patron, 1- Pattern
'4, 5, 3, 2, 1' is the correct order of the given words as they would appear in an English dictionary
14. **Answer: (A)**
Given expression: 12 A 16 C 9 D 221 B 13 = ?
Expression after replacing letter with symbols:
 $12 \times 16 + 9 - 221 \div 13 = ?$
 $192 + 9 - 17 = ?$
 $201 - 17 = ?$
 $? = 184$

15. **Answer: (B)**



Conclusions:

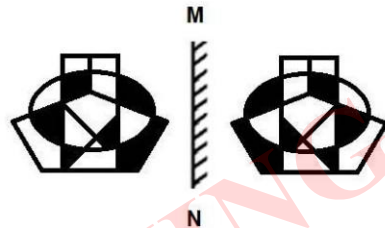
- I. Some Rings can be Silver: Follow (As, there is no direct relation between Rings and Silver. So, all possible conclusions follow.)
II. All Rings are Silver: Doesn't follow (As, there is no direct relation between Rings and Silver. So, no definite conclusion follows)
III. Some Rings are not Silver: Doesn't follows (As, there is no direct relation between Rings and Silver. So, no definite conclusion follows)
But conclusion II and III forms a complimentary pair.
So, either conclusion II or conclusion III follows
So, only conclusion I and either conclusion II or conclusion III follows.

16. **Answer: (A)**



17. **Answer: (A)**
The logic followed here is as follows:
For letter,
 $B + 3 = E, E + 3 = H, H + 3 = K, K + 3 = N, N + 3 = Q$
For number,
 $5 \times 2 = 10$
 $10 + 3 = 13$
 $13 \times 4 = 52$
 $52 + 5 = 57$
 $57 \times 6 = 342$
 $342 + 7 = 349$
'Q349' will replace the question mark [?] in the given series.

- The complete series is as follows:
B10, E13, H52, K57, N342, Q349
18. **Answer: (D)**
If mirror is placed to the right of the figure,



19. **Answer: (D)**
The logic followed here is as follows:
Second number = (First number - 11)²
In option 'a', '27: 256':
Second number = (27 - 11)² = 16²
Second number = 256
In option 'b', '35: 576':
Second number = (35 - 11)² = 24²
Second number = 576
In option 'c', '41: 900':
Second number = (41 - 11)² = 30²
Second number = 900
In option 'd', '32: 484':
Second number = (32 - 11)² = 21²
Second number = 441 ≠ 484
So, '32 : 484' is the odd number pair.

20. **Answer: (D)**
The pattern followed here is as follows:
All the letters, which are at even numbered position are replaced by 2nd preceding letter as per English alphabetical series, odd numbered position letters remain same and then, they are written in reverse order.

In, FORGED

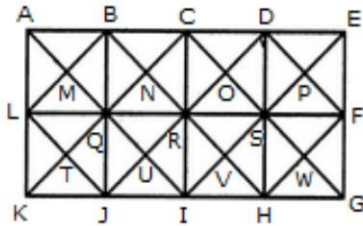
F	O	R	G	E	D
Same	-2	Same	-2	Same	-2
F	M	R	E	E	B
B	E	E	R	M	F

So, FORGED is coded as BEERMF.
Similarly, in MERITS

M	E	R	I	T	S
Same	-2	Same	-2	Same	-2
M	C	R	G	T	Q
Q	T	G	R	C	M

So, MERITS is coded as QTGRCM.

21. **Answer: (B)**
Battery is power source of Remote. Similarly, Fuel is power source of Vehicle.
22. **Answer: (C)**
The figure may be labelled as shown.



The squares composed of two components each are BNQM, CORN, DPSO, MQTL, NRUQ, OSVR, PFWS, QUJT, RVIU and SWHV i.e. 10 in number.

The squares composed of four components each are ABQL, BCRQ, CDSR, DEFS, LQJK, QRIJ, RSHI and SFGH i.e. 8 in number.

The squares composed of eight components each are BRJL, CSIQ and DFHR i.e. 3 in number.

The squares composed of sixteen components each are ACIK, BDHJ and CEGI i.e. 3 in number.

Thus, there are $10 + 8 + 3 + 3 = 24$ squares in the figure.

23. **Answer: (C)**

The logic followed here is as follows:

$$\text{Third number} = (\text{First number})^2 - (\text{Second number})^2$$

For First row: 12, 9, 63

$$\text{Third number} = 12^2 - 9^2$$

$$\text{Third number} = 144 - 81$$

$$\text{Third number} = 63$$

For Second row: 8, 5, 39

$$\text{Third number} = 8^2 - 5^2$$

$$\text{Third number} = 64 - 25$$

$$\text{Third number} = 39$$

For Third row: 17, 11, [?],

$$\text{Third number} = 17^2 - 11^2$$

$$\text{Third number} = 289 - 121$$

$$\text{Third number} = 168$$

So, '168' will replace the question mark [?].

24. **Answer: (B)**

The logic followed here is:

$$4 \times 2 + 1 = 9$$

$$9 \times 2 - 1 = 17$$

$$17 \times 2 + 1 = 35$$

$$35 \times 2 - 1 = 69$$

$$69 \times 2 + 1 = 139$$

$$139 \times 2 - 1 = 277$$

$$277 \times 2 + 1 = 555$$

So, '277' will complete the given series.

The complete series is:

4, 9, 17, 35, 69, 139, 277, 555

25. **Answer: (D)**

From 'P, Q, R', we get

P is opposite to R.

From 'S, T, U', we get

S is opposite to U.

And Q is opposite to T.

In, option 'a':

Q cannot be on adjacent face of T.

This cannot be formed.

In, option 'b':

P cannot be on adjacent face of R.

This cannot be formed.

In option 'c':

U cannot be on adjacent face of S.

This cannot be formed.

In option 'd':

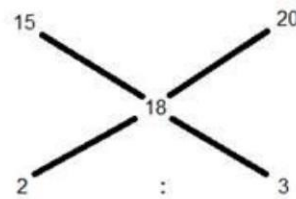
This can be formed.

Quantitative Aptitude

26. **Answer: (B)**

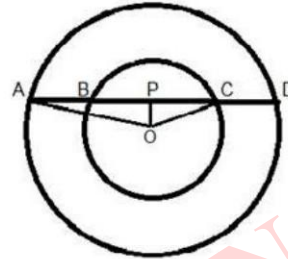
cost price of
type 'A' rice

cost price of
type 'B' rice



So, required ratio = 2:3

27. **Answer: (B)**



The given figure shows: O is the centre of the circle.

Let OP be the perpendicular to the chord AD.

So, AP = PD (Since the perpendicular from the centre bisects the chord)

$$\text{So, } AP = 44 \div 2 = 22 \text{ cm}$$

Given that, AO = 28 cm

So, from triangle OAP,

$$OP = \sqrt{28^2 - 22^2} = \sqrt{784 - 484} = \sqrt{300} = 10\sqrt{3} \text{ cm}$$

Now, from triangle OPC,

$$PC = BC \div 2 = 36 \div 2 = 18 \text{ cm}$$

$$OC = \sqrt{(10\sqrt{3})^2 + 18^2} = \sqrt{300 + 324} = \sqrt{624} = 24.98 \text{ cm}$$

28. **Answer: (B)**

Let 'a' = '12x'

$$\text{So, 'b' = } 12x \times (3/2) = '18x'$$

$$\text{And, 'c' = } 18x \times (5/4) = '22.5x'$$

$$\text{And, 'd' = } 22.5x \times (3/5) = '37.5x'$$

$$\text{So, 'e' = } 37.5x \times 1.2 = '45x'$$

So, required ratio = 18x:45x = 2:5

29. **Answer: (B)**

$$22 \frac{3}{5} = \frac{113}{5}$$

$$14 \frac{1}{8} = \frac{113}{8}$$

Let total work = 1 unit

So, efficiency of 'A' = (5/113) units/day

Efficiency of 'B' = (8/113) units/day

$$\text{So, combined efficiency of 'A' and 'B' = } \frac{5}{113} + \frac{8}{113} = \frac{13}{113} \text{ units/day}$$

So, time taken by 'A' and 'B' together to finish the

$$\text{work} = (113/13) = 8 \frac{9}{13} \text{ days}$$

30. **Answer: (A)**

Area of a triangle having sides of length 'a' cm, 'b' cm and 'c' cm is = $\sqrt{s \times (s - a) \times (s - b) \times (s - c)}$

Where 's' is the semi-perimeter of the triangle. 's' = $\{(a + b + c)/2\}$

$$\text{And, circumradius of the triangle} = \frac{a \times b \times c}{4 \times \text{Area of triangle}}$$

$$'s' = (16 + 16 + 24) \div 2 = 28 \text{ cm}$$

So, Area of triangle = $\sqrt{\{28 \times (28 - 24) \times (28 - 16) \times (28 - 16)\}}$
 $= \sqrt{\{28 \times 4 \times 12 \times 12\}}$
 $= 48\sqrt{7}$

So, circumradius of the triangle = $\frac{24 \times 16 \times 16}{48\sqrt{7} \times 4} = \frac{32\sqrt{7}}{7}$ cm

31. **Answer: (C)**

Total sum of 8 consecutive odd numbers = $20 \times 8 = 160$

According to Arithmetic progression:

Sum = $\frac{n}{2}\{2a + (n - 1) \times d\}$ [where n = number of terms, 'a' = first term and 'd' = common difference]

Or, $160 = \frac{8}{2}\{2a + (8 - 1) \times 2\}$

Or, $40 = 2a + 7 \times 2$

Or, $26 = 2a$

So, 'a' = 13

Last number = $a + (n - 1) \times d = 13 + (8 - 1) \times 2 = 27$

Previous odd number to these numbers = $13 - 2 = 11$

And, next odd number to these numbers = $27 + 2 = 29$

So, required average = $= \frac{160+11+29}{10} = 200 \div 10 = 20$

32. **Answer: (B)**

Let the sum be ₹'x'.

Compound interest = $x \times \left[\left(1 + \frac{10}{100}\right)^2 - 1 \right] = 2415$

Or, $x \times \left(\frac{121}{100} - 1\right) = 2415$

Or, 'x' = $2415 \times (100/21)$

So, 'x' = 11500

So, required sum = ₹11500

33. **Answer: (D)**

Total cost price of the bike for the man = $14500 + 2000 = ₹16,500$

So, required profit percentage = $\frac{18480 - 16500}{16500} \times 100$

$= \frac{1980}{16500} \times 100 = 12\%$

34. **Answer: (C)**

Speed of the biker = $45 \times (5/18) = 12.5$ m/s

So, speed of the train = $12.5 \times 2 = 25$ m/s

Let the length of the train be 'x' metres

ATQ;

$\{x/(25 - 12.5)\} = 16$

So, x = 200

So, length of the train = 200 metres

35. **Answer: (C)**

Let total number of shirts sold on all five days together be '100x'

Number of shirts sold on Wednesday = $100x \times 0.16$

= '16x'

And number of shirts sold on Friday = $100x \times 0.3$

= '30x'

ATQ:

$30x - 16x = 630$

So, $14x = 630$

So, x = 45

So, total number of shirts sold on all five days together = $100x = 45 \times 100 = 4500$

So, number of shirts sold on Tuesday = $4500 \times 0.16 = 720$

36. **Answer: (B)**

Surface area of the cube = $6 \times (\text{edge})^2$

$6 \times (\text{edge})^2 = 486$

Or, $(\text{edge})^2 = 81$

So, length of the edge of the cube = 9 cm

So, volume of the cube = $(\text{edge})^3 = 9^3 = 729$ cm³

37. **Answer: (D)**

Required value = $\frac{4}{3} + \left(6\frac{2}{5} \div \frac{8}{15}\right) + 2\frac{2}{3}$

$= \frac{4}{3} + \frac{32}{5} \times \frac{15}{8} + \frac{8}{3}$

$= \frac{4 + 8}{3} + 4 \times 3$

$= \frac{12}{3} + 12$

$= 4 + 12 = 16$

38. **Answer: (C)**

Required percentage = $\frac{20450+16000}{15000} \times 100$

$= \frac{36450}{15000} \times 100 = 243\%$

39. **Answer: (B)**

Given, $\cos\theta + \sin\theta = \sqrt{2}$ (I)

On squaring both sides, we have

Or, $(\cos\theta + \sin\theta)^2 = (\sqrt{2})^2$

Or, $\cos^2\theta + \sin^2\theta + 2\sin\theta\cos\theta = 2$

Using, $\sin^2\theta + \cos^2\theta = 1$

Or, $1 + 2\sin\theta\cos\theta = 2$

Or, $2\sin\theta\cos\theta = 1$

Now,

$\cos^2\theta + \sin^2\theta - 2\sin\theta\cos\theta = 1 - 1 = 0$

$(\cos\theta - \sin\theta)^2 = 0$

$\cos\theta - \sin\theta = 0$ (II)

Adding equation (I) and (II), we get

$(\cos\theta + \sin\theta) + (\cos\theta - \sin\theta) = \sqrt{2} + 0$

$2\cos\theta = \sqrt{2}$

$\cos\theta = \frac{1}{\sqrt{2}}$

So, $\theta = 45^\circ$

Now,

$\sec\theta\tan\theta = \sec 45^\circ\tan 45^\circ = \sqrt{2} \times 1 = \sqrt{2}$

40. **Answer: (B)**

Required average = $\{(60 + 80 + 70 + 95 + 105 + 40)/6\} = ₹75$

41. **Answer: (A)**

As we know if last three digits of a number is divisible by 8, then the number will be completely divisible by 8

So, '2xy' will be divisible by 8

Possible values of 2xy = 200, 208, 216, 224, 232, 240, 248, 256, 264, 272, 280, 288, 296

In the question given $x \leq y$

So, possible pairs are = 200, 208, 216, 224, 248, 256 and 288

So, possible number of pairs = 7

42. **Answer: (A)**

According to Ceva's theorem:

$\frac{BD}{CD} \times \frac{CF}{FA} \times \frac{AE}{BE} = 1$

Or,

$\frac{8}{7} \times \frac{9}{FA} \times \frac{7}{9} = 1$

So, FA = 8 cm

43. **Answer: (B)**

We know that,

$(a - b)^3 = a^3 - b^3 - 3ab(a - b)$

Or, $8^3 = 1304 - 3ab(8)$

Or, $512 = 1304 - 24ab$

Or, $24ab = 792$

So, ab = 33

44. **Answer: (D)**

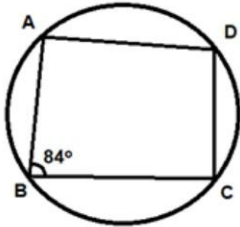
Let total number of voters in the voter list = '100x'

Number of valid votes = $0.90 \times 0.80 \times 100x = '72x'$

Number of votes received by winning candidate = 864

Number of votes received by losing candidate = $864 - (0.144 \times 100x) = (864 - 14.4x)$
 So, $864 + 864 - 14.4x = 72x$
 Or, $1728 = 86.4x$
 Or, $x = 20$
 So, total number of voters in the voter list = $20 \times 100 = 2000$

45. **Answer: (D)**



Given, $\angle ABC = 84^\circ$
 So, $\angle ADC = 180^\circ - 84^\circ = 96^\circ$ (The opposite angles of a cyclic quadrilateral are supplementary)
 So, $\angle ADC - \angle ABC = 96^\circ - 84^\circ = 12^\circ$

46. **Answer: (B)**

We know that

$$\tan(A + B) = \frac{\tan A + \tan B}{1 - \tan A \tan B}$$

$$\frac{\tan 40^\circ + \tan 20^\circ}{1 - \tan 40^\circ \tan 20^\circ}$$

$$= \tan(40^\circ + 20^\circ) = \tan 60^\circ = \sqrt{3}$$

$$= \sqrt{3}$$

Hence, option b.

47. **Answer: (B)**

Given, $\cot 2A = \tan(A - 36^\circ)$
 Or, $\cot 2A = \cot\{90^\circ - (A - 36^\circ)\}$
 Or, $2A = 90^\circ - A + 36^\circ$
 So, $3A = 126^\circ$
 So, $A = 42^\circ$

48. **Answer: (A)**

Let the original number be '100x'.
 ATQ;
 $100x \times 2.5 \times 1.4 \times 0.2 = 245$
 Or, $70x = 245$
 So, $x = 3.5$
 So, original number = $3.5 \times 100 = 350$

49. **Answer: (B)**

Let $(p + q)$, $(q + r)$ and $(p + r)$ be '8x', '9x', and '7x', respectively
 So, $(p + q) + (q + r) + (p + r) = 8x + 9x + 7x$
 Or, $(p + q) + (q + r) + (p + r) = 24x$
 Or, $2 \times (p + q + r) = 24x$
 Or, $(p + q + r) = 12x$
 Or, 'r' = $(p + q + r) - (p + q) = 12x - 8x = '4x'$
 Or, 'p' = $(p + q + r) - (q + r) = 12x - 9x = '3x'$
 Or, 'q' = $(p + q + r) - (p + r) = 12x - 7x = '5x'$
 Now,
 $3p:2q:3r = (3 \times 3x):(2 \times 5x):(3 \times 4x) = 9x:10x:12x = 9:10:12$

50. **Answer: (B)**

Required ratio = $200:(340 - 140) = 200:200 = 1:1$

General Awareness

51. **Answer: (B)**

The Ramayana was translated by **Badauni** into Persian. Abdul Qadir Badauni translated the Ramayana and the Mahabharata and many Sanskrit

tales and Hindu epics in Persian in accordance with the wishes of Akbar.

According to Abul Fazl, these translations were ordered by Emperor Akbar to dispel the hatred between the Hindus and the Muslims, as he was convinced that it arose only from mutual ignorance.

52. **Answer: (C)**

A bit or binary digit is the smallest unit of computer memory. The main function of computer memory is to store data and information.

Computer memory is measured in both bits and bytes, they are just different units of measurement.

53. **Answer: (C)**

In Part III of the Indian Constitution, six **Fundamental Rights** are mentioned.

Under Article 32 of the Indian Constitution, provisions for the Constitutional Remedies for the protection of Fundamental Rights are given.

Dr. Bhimrao Ambedkar has called this Article the "Soul of the Indian Constitution".

54. **Answer: (B)**

National Agriculture Extension Project (NAEP):

National Agriculture Extension Project (NAEP) was started during the **year 1982-83**. It is a nodal agency for providing training and updating the knowledge and skills of field extension functionaries of the Karnataka State Department of Agriculture and other line departments.

The Extension Coordinator along with resource scientists identified under the core team participate in these programmes.

55. **Answer: (A)**

National Integration Council (NIC) is chaired by the **Prime Minister of India**

NIC was constituted to combat the evils of communalism, casteism, regionalism, and linguism as a follow up of National Integration Conference held under the chairmanship of the then Prime Minister Pt. Jawaharlal Nehru in 1961.

Composition: Council members include Cabinet ministers, Chief Ministers of states, political leaders, Chairman of the University Grants Commission, Commissioner for Scheduled Castes and Scheduled Tribes, representatives of industry, business and trade unions.

56. **Answer: (D)**

Rig-Vedic Rivers	Modern Name
Sindhu	Indus
Vitasta	Jhelum
Askini	Chenab
Purushni	Ravi
Vipas	Beas
Satudri, Shutudri	Satluj or Suttlej
Gumal / Gomal	Gomati
Krumu	Kurram

57. **Answer: (B)**

Road infrastructure is related to the Bharat Mala Project. Bharat Mala Project is a centrally sponsored and funded road and highways project of the Government of India.

58. **Answer: (B)**

Article 326 of the Constitution initially provides that the elections to the House of the People and to the Legislative Assembly of every State shall be based on adult suffrage, that is to say, a person should not be less than 21 years of age.

The 61st Amendment of the Constitution of India, officially known as The Constitution (Sixty-first Amendment) Act, 1989, lowered the voting age of elections to the Lok Sabha and to the Legislative Assemblies of States from 21 years to **18 years**.

59. **Answer: (C)**
Satya Shodhak Samaj is a social reform society established by **Mahatma Jyotiba Phule** in Pune on 24 September 1873. Its purpose was to liberate the Shudra and Untouchable castes from exploitation and oppression.
60. **Answer: (D)**
Calcium hypochlorite is an inorganic compound with formula $\text{Ca}(\text{ClO})_2$. It is commonly referred to as bleaching powder or calcium oxychloride. Bleaching powder is used for water treatment and acts as a bleaching agent. It is not highly soluble in water. It is a white solid, although commercial samples appear yellow.
61. **Answer: (D)**
 The Kamet peak lies in the Chamoli district of **Uttarakhand** owing to an inspiring elevation of 7,756 m above sea level. After Nanda Devi, it is the second tallest peak in the Garhwal region of Uttarakhand.
62. **Answer: (B)**
 The Union List contains subjects of national importance such as defense, foreign affairs, atomic energy, banking, currency and coinage, census, and **establishment of standards of weight and measure**. The other options mentioned are in the State List and Concurrent List of the 7th Schedule of the Indian Constitution.
63. **Answer: (A)**
 The BioTRIG, a revolutionary waste management technology, employs pyrolysis to combat indoor air pollution, enhance soil health, and generate clean power in rural India. Functioning at the community level, it utilizes locally generated waste, producing bio-oil, syngas, and biochar fertilizer. These products not only contribute to healthier living but also ensure sustainability by powering subsequent cycles and supplying surplus electricity to local homes and businesses. The clean-burning bio-oil serves as a green alternative for household cooking, while biochar aids in carbon storage and soil fertility improvement.
64. **Answer: (B)**
 Peru declares a health emergency as dengue fever cases surge. The government activates the emergency in 20 out of 25 regions due to the rapid rise in cases, totaling over 31,000 with 32 deaths. Health Minister Cesar Vasquez cites El Nino's impact, causing high temperatures and heavy rains since 2023, facilitating mosquito breeding. The declaration expedites fund transfers to affected areas and facilitates the swift deployment of medical personnel.
65. **Answer: (C)**
 The National Institute of Ayurveda (NIA) in Jaipur, India signed a Memorandum of Understanding (MoU) with the Department of Thai Traditional and Alternative Medicine, Thailand in February 2024. The MoU is for academic collaboration in Ayurveda and Thai traditional medicine. The NIA also has collaborations with other universities, institutes, and organizations in countries like Malaysia and Korea.
66. **Answer: (D)**

- Jatropha** oil can be used after extraction in diesel generators and engines. Jatropha oil has been used in India for several decades as biodiesel for the fuel requirements of remote rural and forest communities.
67. **Answer: (C)**
 On 16th August 1932 **Ramsay MacDonald** announced Communal Award. In this award, each minority group was given some reserved seats in legislative assemblies and elections to those seats were to be held by a separate electorate.
68. **Answer: (A)**
 The Directive Principles are non - justiciable. The Constitution says that these principles are fundamental in the governance of the country, and it shall be the duty of the State to apply these principles in making laws. They embody the concept of a 'Welfare State'. This will help India grow as a welfare state.
69. **Answer: (B)**
 The **Telecom Regulatory Authority of India (TRAI)** is a regulatory body set up by the Government of India under section 3 of the Telecom Regulatory Authority of India Act, 1997. It is the regulator of the telecommunications sector in India.
70. **Answer: (D)**
 Dilwara Temples is located amidst the lush green Aravalli hills of Mount Abu in Rajasthan. The Dilwara Temple is the most beautiful pilgrimage site for the followers of **Jainism**. The temple was built by Vimal Shah between the 11th and 13th centuries. This temple is renowned for its opulent use of marble and intricate carvings on every hook and corner. These Jain temples were built by Vastapul Tejpal who was the minister of Bhima, Chalukyas of Gujarat ruler.
71. **Answer: (A)**
A corporation tax is a direct tax imposed on the net income or profit that enterprises make from their businesses. Term company includes both private and public Companies which are registered in India under the Companies Act 1956 and are liable to pay corporate tax.
72. **Answer: (B)**
 National Security Act, of 1980 is a preventive detention law. The National Security Act of 1980 is an act of the Indian Parliament promulgated on 23 September 1980 whose purpose is "to provide for preventive detention in certain cases and for matters connected therewith". Preventive Detention involves the detainment (containment) of a person in order to keep him/her from committing future crimes and/or from escaping future prosecution. The act extends to the whole of India.
73. **Answer: (D)**
Ustad Ahmad Lahori, also known as Ahmad Ma'mar Lahori, was the chief Mughal architect during the reign of Emperor Shah Jahan. Ustad Ahmad Lahori was an architect from the South Asia-based Mughal Empire, who is said to have been the chief architect of the Taj Mahal in Agra, built between 1632 and 1648 during the rule of Emperor Shah Jahan.
74. **Answer: (B)**
Krishna River originates from Mount Mahabaleshwar from a height of about 1738m. The drainage basin of the Krishna basin is shared by Maharashtra, Karnataka and Andhra Pradesh. It is a 1300km long

river also known as Krishnaveni. The Krishna basin rises from a spring near Mahabaleshwar.

75. **Answer: (A)**

Thyroxine, also known as T4, is a type of thyroid **hormone**. It is the main hormone secreted into the bloodstream by the thyroid gland.

English Language

76. **Answer: (C)**

The word STERN means serious or severe in manner or bearing. The word GENIAL means friendly and easy-going, and expresses the opposite meaning of the given word. Thus, C is the right answer.

Horrid - unpleasant. STRICT is a synonym of the given word. Meagre - lacking in quantity or quality.

77. **Answer: (D)**

The word INEPTITUDE means inability or inefficacy. The word COMPETENCE means the ability to do something well, and best expresses the opposite meaning of the given word. Thus, D is the right answer.

Challenge - difficulty. Plot - a secret plan. Falsehood - lie.

78. **Answer: (A)**

The correct spelling of the given word is MORIBUND (no longer effective and about to come to an end). Thus, A is the right answer.

79. **Answer: (B)**

The correct spelling of the word is LUSCIOUS (delicious). Thus, B is the right answer.

80. **Answer: (A)**

DASHING means good-looking or attractive. HANDSOME (good-looking) will be its synonym. Thus, A is the right answer.

Deceitful - manipulative. Elated - ecstatic. Cowardly - easily frightened.

81. **Answer: (B)**

WARY means alert or watchful. CAUTIOUS is its synonym. Thus, B is the right answer.

Grateful - thankful. Daft - silly; foolish. Innocent - not guilty of a crime or offence.

82. **Answer: (C)**

The idiom PUT IN ONE'S TWO CENTS means to give one's opinion. Thus, C is the right answer.

None of the other options correctly conveys the meaning of the idiom.

83. **Answer: (A)**

The idiom COOK SOMEONE'S GOOSE means to spoil someone's plans and prevent them from succeeding. Thus, A is the right answer.

84. **Answer: (B)**

In B, replace the plural verb HAVE with the singular HAS as the subject THE LARGE NUMBER is singular. Thus, B is the right answer.

85. **Answer: (D)**

The sentence is grammatically correct and free of error. Thus, D is the right answer.

86. **Answer: (A)**

We need a third form verb to fit in the HAVE + VERB present perfect tense construction. DEVELOPED (started to experience) will fit here contextually as the sentence tells us how children have been experiencing obesity in the past two decades. Thus, A is the right answer.

Roamed - wandered. Adopted - embraced. Depicted - portrayed.

87. **Answer: (B)**

We need an adjective to modify the compound noun HEALTH PROBLEMS. The sentence tells us how obesity is a risk factor for severe health problems. SERIOUS (severe; grave) will fit here. Thus, B is the right answer.

Rigid - unchanging. Little - small. Certain - sure.

88. **Answer: (A)**

We need a noun to form the object of the verb RAISED. ALARMS (concerns) will fit here contextually as the sentence talks about how the increase of obesity among children raised concerns. Thus, A is the right answer.

Victories - triumphs. Flaws - weaknesses. Views - opinions.

89. **Answer: (A)**

We need a base form verb to fit in the TO + VERB infinitive construction. ADDRESS (tackle) will fit here as the sentence tells us how the American Academy of Pediatrics released guidelines to tackle the problem of childhood obesity. Thus, A is the right answer.

Immense (adj.) - great. Summon - call; send for. Brighten - illuminate.

90. **Answer: (D)**

We need a possessive pronoun to modify the noun GUIDELINES. The sentence talks about how the American Academy of Pediatrics released guidelines to tackle the problem of childhood obesity. ITS will fit here contextually. Thus, D is the right answer.

THEIR, HER and HIS are used to refer to people, not organisations.

91. **Answer: (D)**

A person who speaks less is called RETICENT. Thus, D is the right answer.

Hypocrite - one who pretends to be something he is not. Insatiable - that which cannot be satisfied. Convalescent - recovering from an illness.

92. **Answer: (B)**

(B) is the right answer. BEAT UP (criticise oneself mercilessly) will fit here as the sentence talks about how the speaker should not criticise himself because everyone makes mistakes.

Beat down - to weaken someone's enthusiasm. Beat out - produce a loud, rhythmic sound by striking something. C is grammatically incorrect.

93. **Answer: (C)**

The sentence is in the indicative mood, simple past tense, and active voice. To change the sentence to the passive voice, follow the rules below:

I. The object clause will become the subject clause. The object "THE MUSIC SYSTEM" will become the subject of the sentence and start the sentence.

II. The verb phrase TURNED ON will change to WAS TURNED ON, as the passive construction for the simple past tense in the indicative mood is WAS/WERE + PAST PARTICIPLE.

III. The preposition BY will be added to the sentence, and ANITA will become its object.

Thus, C is the right answer.

94. **Answer: (D)**

The sentence is in active voice and in past perfect tense (HAD PARKED). Follow the rules below to convert a sentence in indicative mood to passive voice:

I. The subject clause will become the object clause. Here, the subject THE DRIVER will change to the

object of the verb, and the object THE CAR will change into the subject and begin the sentence.

II. Replace HAD PARKED with HAD BEEN PARKED. The passive voice construction for past perfect tense is "HAD + BEEN + past participle".

III. Add the conjunction BY before THE DRIVER to link the verb with its object.

Option D is the right answer.

95. **Answer: (D)**

The sentence is in direct speech. Follow the instructions to change the sentence to indirect speech:

I. Remove the comma and inverted commas.

II. SAID TO will change to TOLD. Add THAT after the reporting clause PREETI TOLD ME.

III. The modal verb WILL will change to WOULD. The main verb GO will remain unchanged as it follows a modal verb.

IV. The first person pronoun I will change to the third person pronoun SHE.

Thus, D is the right answer.

96. **Answer: (D)**

The word CORTEGE is used to describe a funeral procession. Thus, D is the right answer.

Flotilla - a fleet of ships or boats. Congregation - a group of worshippers. Corsage - a spray of flowers worn pinned to a woman's clothes.

97. **Answer: (D)**

SPRQ is the correct sequence. S begins the passage by introducing the topic - culture determines the way people showcase their emotions. P comes next by giving us the example of Chinese people, and how their expression of emotions differs from other

cultures. R tells us that they believe that emotions disturb the normal functioning of the body. Q follows R by telling us the consequence of this - their culture discourages the expression of emotions. Thus, D is the right answer.

98. **Answer: (C)**

Option C is the right answer.

The sentence is in direct speech and in the indicative mood. To convert this sentence to the indirect speech, follow these rules:

I. Remove the comma and the inverted commas.

II. Begin the indirect speech sentence with the reporting speech clause SANIA TOLD ME.

III. Put THAT between the reporting and reported speeches.

IV. Change the present perfect tense HAVE HEARD to the past perfect tense HAD HEARD.

V. Change the first person pronoun I to the third person pronoun SHE.

99. **Answer: (A)**

We need a present participle verb to link the clauses of the sentence. INTENDING (aiming) will fit here contextually as the sentence talks about how she travelled around the city, without a specific plan to go anywhere. Thus, A is the right answer.

Approaching - coming towards. Praising - commending. Denying - rejecting.

100. **Answer: (A)**

The act of freeing someone from blame is called EXONERATING. Thus, A is the right answer.

Delegate - to transfer one's responsibility or power to another. Obsolete - no longer relevant. Radiate - emit; give out.