SSC HS Level (Prelims) Exam. Practice Set – 2024

Answer with Explanation

1. (b) Here working place - worker relationship has been shown. Teacher teaches in school and banker manages bank.

2. (c) Feminine refers to a class of words that are female persons, animals etc. Similarly, Masculine refers to a class of words that are male persons, animals etc.

3. (b) Carpentry is considered to be a skill. Similarly, Singing is considered to be a talent.

4. (c) Wings are parts of a fan, Similarly, spokes are parts of a wheel.

5. (d) Coil is an important part of the motor. Similarly, bearing is an important part of wheel.

6. (b) Husband of Suresh's mother means father of Suresh.
Mother of Suresh's father means grandmother of Suresh.
The son of grandmother means either father or uncle.
Therefore, Suresh is the son of that man.
[Note : Nephew is not mentioned in the options]

7. (c) The only son of grandfather (paternal) of Vikas means father of Vikas.
Therefore, the girl is sister of Vikas.

8. (b) T $\Rightarrow$ $\boxed{20}$
↓
Position Number in English alphabet.

T	E	N
↓	↓	↓

$20 + 5 + 14 = \boxed{39}$

Similarly,

T	I	P
↓	↓	↓

$20 + 9 + 16 = \boxed{45}$

9. (c)

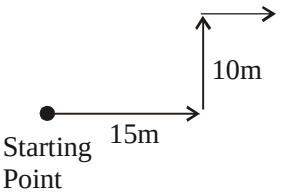
9	2	4	0	7	1
↓	↓	↓	↓	↓	↓
B	S	E	U	A	C

10. (c)

÷ → +	− → ×
× → −	+ → ÷

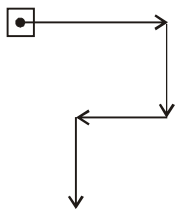
Option (a)
$10 \times 4 = 06 \Rightarrow 10 - 4 = 06$
Option (b)
$10 - 4 = 40 \Rightarrow 10 \times 4 = 40$
Option (c)
$10 + 5 = 50 \Rightarrow 10 \div 5 = 2$ and $2 \neq 50$
Option (d)
$10 \div 5 = 15 \Rightarrow 10 + 5 = 15$

11. (b)



He is walking towards East.

12. (c) Starting
Point



13. (b) Number of days from September 15, 2000 to September 15, 2001
= 365 + 1 = 366
366 ÷ 7 = 2 odd days
∴ September 15, 2001
$\Rightarrow$ Saturday

14. (a) The numbers 1, 2, 4 and 6 are on the adjacent faces of number 5.
Therefore, number 3 will lie opposite 5.
The numbers 2, 5 and 6 are on the adjacent faces of number 1.
Therefore, 4 lies opposite 1.

15. (a) There is only one 'N' in the given word. Therefore, the word NATION cannot be formed.
S E $\boxed{\text{G R E}}$ G $\boxed{\text{A T}}$ I O N
$\Rightarrow$ GREAT
$\boxed{\text{S E G R E G}}$ A $\boxed{\text{T I}}$ O $\boxed{\text{N}}$
$\Rightarrow$ GREETINGS

S E G R EGATI O N
⇒ SEATING

16. (d) There is only one 'N' in the given word. Therefore, the word NATION cannot be formed.

S EGRE G A T I O N
⇒ EAGER

SE G R E G A T I O N
⇒ SEA

S E G R EGAT I O N
⇒ GATE

17. (c) Suppose, the present age of Vishal be x years.
According to question,
$x + 1 = 2(x - 12)$
or, $2x - x = 25$
$\therefore x = 25$ years

18. (a) Total age of husband, wife and their child 3 years ago was $27 \times 3 = 81$ years
Total age of wife and child five years ago was $20 \times 2 = 40$ years
$\therefore$ Total age of wife and child 3 years ago
$= 40 + (2 \times 2)$
$= 40 + 4 = 44$ years
$\therefore$ Age of husband three years ago
$= 81 - 44 = 37$ years
Therefore, the present age of husband
$= 37 + 3 = 40$ years

19. (b) Suppose the age of son is x years
Therefore, age of father = 10x years
According to question

$$\frac{10x + x}{2} = 22$$

$\Rightarrow 11x = 44$

$$\therefore x = \frac{44}{11} = 4 \text{ years}$$

Age of father = $10 \times 4 = 40$ years

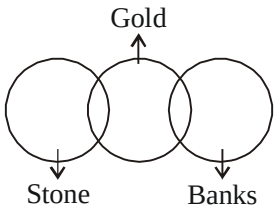
20. (d) $0 + 3 = 3$
$3 + 5 = 8$
$8 + 7 = 15$
$15 + 9 = 24$
$24 + 11 = 35$
$35 + 13 = 48$

21. (d) $12 \times 2 + 3 = 27$
$27 \times 3 + 4 = 85$
$85 \times 4 + 5 = 345$
$345 \times 5 + 6 = 1731$

22. (a)

H	E	I	G	H	T
↓	↓	↓	↓	↓	↓
=	÷	(	×	=	||

23. (b)



24. (b) First column
$9 \times 6 \times 5 = 270$
Second column
$8 \times 7 \times 4 = 224$
Third column
$8 \times 7 \times ? = 336$

$$\therefore ? = \frac{336}{56} = 6$$

25. (b) $4 - 3 = 1^3 - 1 = 0$
$9 - 6 = 3^3 - 1 = 26$
$12 - 8 = 4^3 - 1 = 63$
$12 - 10 = 2^3 - 1 = 7$

26. (b) Pali is the language in which the texts of the Theravada school of Buddhism are preserved. The Pali texts are the oldest collection of Buddhist scriptures preserved in the language in which they were written down.

27. (a) Pandit Hariprasad Chaurasia is an Indian classical instrumentalist. He is a player of the bansuri, the Indian bamboo flute. He is considered a rare combination of innovator and traditionalist. He has expanded the expressive possibilities of the bansuri through his masterful blowing technique.

28. (c) The Constitution of India was adopted by Constituent Assembly on November 26,1949 and came into force on January 26,1950.

29. (d) Anthracite is usually considered to be the highest grade of coal and is actually considered to be metamorphic. Compared to other coals it is much harder, has a glassy luster, and is denser and blacker with few impurities. It is largely used for heating domestically as it burns with little smoke.

30. (b) India's President, Smt Droupadi Murmu, launched the nation's inaugural home-grown gene therapy for cancer at IIT Bombay. The ground breaking "CAR-T cell therapy" offers affordable hope in the cancer fight. This medical milestone, a part of 'Make in India,' embodies

'Atmanirbhar Bharat.' Developed collaboratively by IIT Bombay, Tata Memorial Hospital, and Immuno ACT, it marks a significant achievement in research and development. Gene therapy holds promise in treating various diseases, heralding a new era in healthcare. অ্যাচিভার্স

31. (d) Vijay Kelkar, former finance secretary and advisor to the finance minister almost a decade ago, was mandated by the finance minister to give a report outlining a roadmap for fiscal consolidation. Kelkar, who headed the 13th Finance Commission, was told to present a fiscal road map for the medium term. অ্যাচিভার্স

32. (c) Taxila dates back to the Gandhara period when it was an important Hindu and Buddhist centre, and is still considered a place of religious and historical sanctity in those traditions. Gandhara art was a style of Buddhist visual art that developed in what is now northwestern Pakistan and eastern Afghanistan between the 1st century B.C and the 7th century A.D. The style, of Greco-Roman origin, seems to have flourished largely during the Kushana dynasty.

33. (b) The Forty-second Amendment of the Constitution of India, enacted in 1976, laid down the Fundamental Duties of Indian citizens to the nation. The amendment inserted Article 51A to create a new part called IV-A in the Constitution, which prescribed the fundamental duties to the citizens. অ্যাচিভার্স

34. (c) Blizzards are characterized by low temperatures (usually below 20 degrees Fahrenheit) and accompanied by winds that are at least 35 mph or greater. Blizzards also have sufficient falling and/or blowing snow that reduces visibility to 1/4 mile or less at least three hours and is main feature of Antarctic region. অ্যাচিভার্স

35. (d) The Jaina literature is known as Angas. The first attempts to systematise the preachings of Lord Mahavira, were made in the Pataliputra Council in the 4th century BC, but they were finally rearranged, redacted and committed to writing in the Valabhi Council in 512 AD under the presidentship of Devardhi Kshamasramana.

36. (a) The Andhra Pradesh government is taking measures to prevent forest fires in Papikonda National Park (PNP), receiving technical assistance. PNP, located in the Eastern Ghats, is crucial for high precipitation and hosts the River Godavari. Established as a wildlife sanctuary in 1978 and upgraded to a national park in 2008, it's recognized as an Important Bird and Biodiversity Area (IBA) by BirdLife International. The region also boasts a unique dwarf goat breed, the "kanchumekha."

37. (d) Surface tension is a contractive tendency of the surface of a liquid that allows it to resist an external force. It is revealed, for example, in the floating of some objects on the surface of water, even though they are denser than water, and in the ability of some insects (e.g. water striders) to run on the water surface. This property is caused by cohesion of similar molecules, and is responsible for many of the behaviors of liquids. Surface tension is responsible for the shape of liquid droplets. Although easily deformed, droplets of water tend to be pulled into a spherical shape by the cohesive forces of the surface layer. Water has the greatest surface tension, due to greater forces between the molecules of water compared to oil (mainly due to hydrogen bonding of water molecules to each other). So an oil dropletspreads over it. অ্যাচিভার্স

38. (a) The Constitution (Forty-second Amendment) Act, 1976 added ten Fundamental Duties of Indian citizens to the nation in Part IV of the Constitution. These duties, set out in Part IV–A of the Constitution (under a constitutional amendment) concern individuals and the nation. Like the Directive Principles, they are not legally enforceable.

39. (b) Shivaji created an independent Maratha kingdom with Raigarh as its capital, and was crowned chhatrapati ("paramount sovereign") of the Marathas in 1674. Raigarh is a hill fortress situated in the modern day near Mahad, Raigarh district of Maharashtra. It is located in the Sahyadri mountain range. অ্যাচিভার্স

40. (c) Rihand Dam is a concrete gravity dam located at Pipri in Sonbhadra District in Uttar Pradesh, India. It is on the border of Chhattisgarh and Uttar Pradesh. It is on the Rihand River which is the tributary of the Son River. The Rihand River flows through the Indian states of Chhattisgarh and Uttar Pradesh. The Rihand rises from Matiranga hills, in the region south west of the Mainpat plateau, which is about 2,100 meters above mean sea level. The river flows north roughly through the central part of Surguja district for 160 kilometres. The Rihand and its tributaries form a fertile plain in the central

part of the district stretching from around Ambikapur to Lakhanpur and Pratappur. Thereafter, it flows north into Sonbhadra district of Uttar Pradesh via Singrauli district of Madhya Pradesh, where it is called Rhed and finally joins the Son. অ্যাচিভার্স

41. (a) The ingredient or monomer is ethylene (IUPAC name ethene). It has the formula $C2H_4$, consisting of a pair of CH_2 groups connected by a double bond. Because the catalysts are highly reactive, the ethylene must be of high purity. Typical specifications are <5 ppm for water, oxygen, as well as other alkenes. Acceptable contaminants include N_2, ethane (common precursor to ethylene), and methane. Ethylene is usually produced from petrochemical sources, but also is generated by dehydration of ethanol. Polyethylene (abbreviated PE) or polythene (IUPAC name polyethene or poly (methylene)) is the most common plastic. Its primary use is within packaging (plastic bag, plastic films, geomembranes, containers including bottles, etc.). অ্যাচিভার্স

42. (d) In a bilateral monopoly there is both a monopoly (a single seller) and monopsony (a single buyer) in the same market. The one supplier tends to act as a monopoly power, and looks to charge high prices to the one buyer. The lone buyer looks towards paying a price that is as low as possible. Since both parties have conflicting goals, the two sides negotiate based on the relative bargaining power of each, with a final price settling in between the two sides' points of maximum profit. অ্যাচিভার্স

43. (a) NICES programme, operated by ISRO and the Department of Space, called upon Indian researchers to combat climate change. Launched in 2012 under the National Action Plan on Climate Change, NICES monitors climate variability using Earth Observation satellites. Its objectives include disseminating Essential Climate Variables crucial for understanding Earth's climate. With over 70 accessible geophysical variables, NICES focuses on space-based indicators, weather extremes, and climate services. অ্যাচিভার্স

44. (c) Liquefied petroleum gas, also called LPG, GPL, LP Gas, liquid petroleum gas or simply propane or butane, is a flammable mixture of hydrocarbon gases used as a fuel in heating appliances and vehicles. It is increasingly used as an aerosol propellant and a refrigerant, replacing chlorofluorocarbons in an effort to reduce damage to the ozone layer. When specifically used as a vehicle fuel it is often referred to as autogas. LPG can be used as a power source for combined heat and power technologies (CHP). CHP is the process of generating both electrical power and useful heat from a single fuel source. This technology has allowed LPG to be used not just as fuel for heating and cooking, but also for de-centralised generation of electricity. LPG can be stored in a variety of ways. LPG, as with other fossil fuels, can be combined with renewable power sources to provide greater reliability while still achieving . . . . . $_2$ emissions. অ্যাচিভার্স

45. (a) Sardar Vallabhbhai Jhaverbhai Patel was known as the "Iron Man of India" or "Bismarck of India." He showed exemplary statesmanship in the integration of princely states with the Union of India.

46. (a) The Gavari dance-drama of Bhils has its origin in the story of Shiva and Bhasmasur. অ্যাচিভার্স

47. (c) The richest sources of protein are animal foods such as chicken, meat, fish, cheese and eggs. However, plant proteins are believed to be healthier because of their lower fat content. Plant protein is found (e.g.) in beans (esp. soy beans), lentils, nuts, quorn and seeds. Fish and seafood are some of the richest sources of protein. One-half of a typical fillet of halibut or salmon provides approximately 41g of protein. Soybeans are legumes that provide a valuable protein-rich food option for vegetarians and nonvegetarians alike. One cup of boiled soybeans provides over 28g of protein. অ্যাচিভার্স

48. (b) Professor Meena Charanda, Principal of Kalindi College, Delhi University, received the 'International Culture Award' in 2024 for her exceptional contributions to education and social service. The honor was bestowed upon her at the India International Center on March 30, 2024.

49. (a) Surat, previously known as Suryapur, is a well developed commercial city of the Indian state of Gujarat. The city is located 306 km south of state capital Gandhinagar, and is situated on the left bank of the Tapti River (Tapi). The city is largely recognized for its textile and diamond businesses. It is also known as the diamond capital of the world and the textile capital/ Manchester textile city of India, a distinction it

took over from Ahmedabad. It is also known as the "Embroidery capital of India" with the highest number of embroidery machines than any other city.

50. (d) Generally, Ministers are appointed from the legislature. But, an exception to this rule is carved out by the Constitution itself. The combined effect of Articles 75(5) and 88 is that a person not being a Member of either House of Parliament can be a Minister only up to a period of 6 months before which he has to get elected.

51. (b) Decimal equivalents :

$\frac{4}{9} = 0.\dot{4}; \sqrt{\frac{9}{49}} = \frac{3}{7} = 0.43$

$0.\dot{4}\dot{5}; (0.8)^2 = 0.64$

$\therefore$ Least number = 0.43

$= \sqrt{\frac{9}{49}}$

52. (c) The least number X in this case will be determined as follows:

4	X
5	Y – 1
	1 – 4

$Y = 5 \times 1 + 4 = 9$

$X = 4 \times Y + 1 = 4 \times 9 + 1 = 37$

Now,

5	37
4	7 – 2
	1 – 3

Hence, the respective remainders are 2, 3.

53. (a) $\frac{2}{5}$ and $\frac{4}{9}$ = 0.40 and 0.44

Fraction between these two $= \frac{3}{7} = 0.42$

54. (c) Here, Divisor – remainder = 1

e.g., 10 – 9 = 1, 9 – 8 = 1, 8 – 7 = 1

$\therefore$ Required number

= (L.C.M. of 10, 9, 8) –1

= 360 – 1 = 359

55. (a) Required time = LCM of 200, 300, 360 and 450 seconds = 1800 seconds

56. (a) $\frac{4\frac{1}{7} - 2\frac{1}{4}}{3\frac{1}{2} + 1\frac{1}{7}} = \frac{\frac{29}{7} - \frac{9}{4}}{\frac{7}{2} + \frac{8}{7}}$

$= \frac{\frac{116-63}{28}}{\frac{49+16}{14}} = \frac{53}{28} \times \frac{14}{65} = \frac{53}{130}$

Again,

$\frac{1}{2 + \frac{1}{2 + \frac{1}{\frac{25-1}{5}}}} = \frac{1}{2 + \frac{1}{2 + \frac{5}{24}}}$

$= \frac{1}{2 + \frac{1}{\frac{48+5}{24}}} = \frac{1}{2 + \frac{24}{53}}$

$= \frac{1}{\frac{106+24}{53}} = \frac{53}{130}$

$\therefore$ Expression $= \sqrt{\frac{53}{130} \div \frac{53}{130}} = 1$

57. (a) $\frac{2}{3} \times \frac{3}{\frac{5}{6} \div \frac{2}{3} \text{ of } 1\frac{1}{4}}$

$= \frac{2}{3} \times \frac{3}{\frac{5}{6} \div \frac{2}{3} \text{ of } \frac{5}{4}}$

$= \frac{2}{3} \times \frac{3}{\frac{5}{6} \div \frac{10}{12}}$

$= \frac{2}{3} \times \frac{3}{\frac{5}{6} \times \frac{12}{10}} = \frac{2}{3} \times \frac{3}{1} = 2$

58. (a) Expression

$= \frac{\frac{13}{4} - \frac{4}{5} \times \frac{5}{6}}{\frac{13}{3} \times 5 - \left(\frac{3}{10} + \frac{106}{5}\right)}$

$= \frac{\frac{13}{4} - \frac{2}{3}}{\frac{65}{3} - \frac{3}{10} - \frac{106}{5}}$

$= \frac{\frac{39-8}{12}}{\frac{650-9-636}{30}}$

$= \frac{31}{12} \times \frac{30}{5} = \frac{31}{2} = 15\frac{1}{2}$

$\therefore$ Required answer $= 15\frac{1}{2} - 15 = \frac{1}{2}$

59. (b) Last number = Sum of 20 numbers – sum of first 12 numbers – sum of next 7 numbers
= 20 × 12 – 11 × 12 – 7 × 10
= 240 – 132 – 70 = 38

60. (c) Required average

$= \frac{2+3+5+7+11+13+17+19+23+29}{10}$

$= \frac{129}{10} = 12.9$

61. (a) A : B = 3 : 4
B : C = 6 : 5
A : B : C = (3 × 6) : (4 × 6) : (4 × 5)
= 18 : 24 : 20
$\therefore$ C : A = 20 : 18
= 10 : 9

62. (b) Let the numbers be x and y.
According to the question,
x + y = 3(x – y)
$\Rightarrow$ x + y = 3x – 3y
$\Rightarrow$ 3x – x = y + 3y
$\Rightarrow$ 2x = 4y
$\Rightarrow$ x = 2y

$\Rightarrow \frac{x}{y} = \frac{2}{1}$

63. (c) Let the number be x.
According to the question,

$\frac{x \times 50}{100} + 50 = x$

$\Rightarrow \frac{x}{2} + 50 = x$

$\Rightarrow x - \frac{x}{2} = 50$

$\Rightarrow \frac{x}{2} = 50$

$\Rightarrow x = 100$

64. (b) Required number

$= 60\%$ of $90 = \frac{90 \times 60}{100} = 54$

65. (a) $x - y = \frac{x+y}{7} = \frac{xy}{4} = k$

$\Rightarrow x - y = k$
$x + y = 7k$
$\therefore (x + y)^2 - (x - y)^2 = 49k^2 - k^2$
$\Rightarrow 4xy = 48k^2$
$\Rightarrow 16k = 48k^2$
$\Rightarrow k = \frac{1}{3}$

$\therefore xy = 4k = 4 \times \frac{1}{3} = \frac{4}{3}$

66. (d) $\frac{a}{b} \times \frac{b}{c} = \frac{4}{5} \times \frac{15}{16}$

$\frac{a}{c} = \frac{3}{4}$

$\Rightarrow a = \frac{3}{4}c$

Put in the given equation,

$= \frac{18c^2 - 7\left(\frac{3}{4}c\right)^2}{45c^2 + 20\left(\frac{3}{4}c\right)^2}$

$= \frac{18c^2 - \frac{63}{16}c^2}{45c^2 + \frac{180}{16}c^2} = \frac{1}{4}$

67. (b) $\tan 2\theta \cdot \tan 3\theta = 1$

$\Rightarrow \tan 3\theta = \frac{1}{\tan 2\theta} = \cot 2\theta$
$\Rightarrow \tan 3\theta = \tan (90° - 2\theta)$
$\Rightarrow 3\theta = 90° - 2\theta$
$\Rightarrow 3\theta + 2\theta = 5\theta = 90°$

$\Rightarrow \theta = \frac{90^\circ}{5} = 18^\circ$

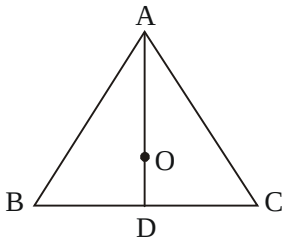
68. (c) $\sec\theta - \cos\theta = \frac{3}{2}$

$\Rightarrow \sec\theta - \frac{1}{\sec\theta} = \frac{3}{2}$

$\Rightarrow \frac{\sec^2\theta - 1}{\sec\theta} = \frac{3}{2}$

$\Rightarrow 2\sec^2\theta - 2 = 3\sec\theta$
$\Rightarrow 2\sec^2\theta - 3\sec\theta - 2 = 0$
$\Rightarrow 2\sec^2\theta - 4\sec\theta + \sec\theta - 2 = 0$
$\Rightarrow 2\sec\theta(\sec\theta - 2) + 1(\sec\theta - 2) = 0$
$\Rightarrow (2\sec\theta + 1)(\sec\theta - 2) = 0$
$\Rightarrow \sec\theta = 2$ because $2\sec\theta + 1 \neq 0$
θ is positive acute angle.

69. (c)



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Point 'O' is centroid and AD is median.

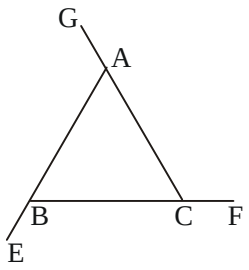
$\therefore AO = \frac{2}{3}AD$

$\Rightarrow 10 = \frac{2}{3}AD$ অ্যাচিভার্স

$\Rightarrow AD = \frac{10\times 3}{2} = 15 \text{ cm}$

$\therefore OD = \frac{1}{3}AD = \frac{15}{3} = 5 \text{ cm}$

70. (a)



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$\angle CBE = 130°$

$\therefore \angle ABC = 180° - 130° = 50°$

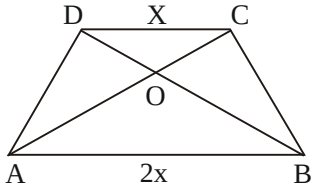
$\angle ACF = 130°$ অ্যাচিভার্স

$\therefore \angle ACB = 180° - 130° = 50°$

$\therefore \angle BAC = 180° - 50° - 50° = 80°$

$\therefore \angle GAB = 180° - 80° = 100°$

71. (a)



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Let CD = x

$\Rightarrow$ AB = 2x. Δ COD ~ Δ AOB

because CD || AB and take BD and AC as transversals.

$\therefore \frac{ar(COD)}{ar(AOB)} = \frac{CD^2}{AB^2} = \frac{x^2}{4x^2} = \frac{1}{4}$

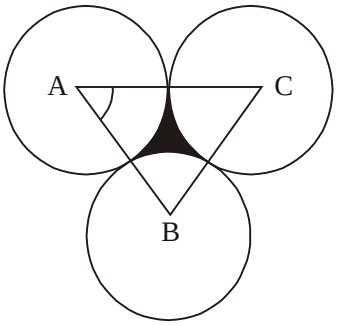
$\Rightarrow \Delta ABD - \Delta AOD$

$= \Delta ACB - \Delta BOC$ অ্যাচিভার্স

$\Rightarrow \Delta AOB = \Delta AOB$

$\Rightarrow \frac{\Delta AOB}{\Delta COD} = \frac{1}{1}$ or 1:1

72. (d)



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Let AB = BC = CA = 2a cm.

$\angle BAC = \angle ACB = \angle ABC = 60°$

Area of $\Delta ABC = \frac{\sqrt{3}}{4}\times (\text{side})^2$

$= \frac{\sqrt{3}}{4}\times 4a^2$ অ্যাচিভার্স

$= \sqrt{3}a^2$ sq.cm.

Area of three sectors

$= 3\times \frac{60}{360}\times \pi \times a^2$

$= \frac{\pi a^2}{2}$ sq.cm.

Area of the shaded region অ্যাচিভার্স

$= \sqrt{3}a^2 - \frac{\pi}{2}a^2$

$= \left(\frac{2\sqrt{3}-\pi}{2}\right)a^2$ sq.cm.

73. (c) $x^4 + \frac{1}{x^4} = 119$ অ্যাচিভার্স

$\Rightarrow \left(x^2 + \frac{1}{x^2}\right)^2 - 2 = 119$

$\Rightarrow \left(x^2 + \frac{1}{x^2}\right)^2 = 119 + 2 = 121$

$\Rightarrow \left(x^2 + \frac{1}{x^2}\right)^2 = 11^2$

$\Rightarrow x^2 + \frac{1}{x^2} = 11$ অ্যাচিভার্স

$\Rightarrow \left(x - \frac{1}{x}\right)^2 + 2 = 11$

$\Rightarrow \left(x - \frac{1}{x}\right)^2 = 11 - 2 = 9 = 3^2$ অ্যাচিভার্স

$\Rightarrow x-\frac{1}{x}=3$

On cubing both sides,

$\left(x-\frac{1}{x}\right)^3=3^3$

$\Rightarrow x^3-\frac{1}{x^3}-3x.\frac{1}{x}\left(x-\frac{1}{x}\right)=27$

$\Rightarrow x^3-\frac{1}{x^3}-3\times3=27$

$\Rightarrow x^3-\frac{1}{x^3}=27+9=36$

74. (d) $x+\frac{1}{x}=0$

On squaring both sides,

$\left(x+\frac{1}{x}\right)^2=0$

$\Rightarrow x^2+\frac{1}{x^2}+2=0$

$\Rightarrow x^2+\frac{1}{x^2}=-2$..... (i)

(not admissible)

On cubing $\left(x+\frac{1}{x}\right)^3=0$,

$x^3+\frac{1}{x^3}+3\times0=0$

$\Rightarrow x^3+\frac{1}{x^3}=0$

$\therefore\left(x^2+\frac{1}{x^2}\right)\left(x^3+\frac{1}{x^3}\right)=0$

$\Rightarrow x^5+\frac{1}{x^5}+x+\frac{1}{x}=0$

$\Rightarrow x^5+\frac{1}{x^5}=0$

75. (c) $x+\frac{1}{x}=\sqrt{3}$

On cubing both sides,

$\left(x+\frac{1}{x}\right)^3=\left(\sqrt{3}\right)^3=3\sqrt{3}$

$\Rightarrow x^3+\frac{1}{x^3}+3\left(x+\frac{1}{x}\right)=3\sqrt{3}$

$\Rightarrow x^3+\frac{1}{x^3}+3\sqrt{3}=3\sqrt{3}$

$\Rightarrow x^3+\frac{1}{x^3}=3\sqrt{3}-3\sqrt{3}=0$

76. (c) ..... **of one century and a half** is the right usage

77. (a) **write somebody/something off** : to decide that somebody/something is a failure or not worth paying any attention to; dismiss.
Here, **write him off** is the right usage

78. (a) Here, **some of our latest canons (Plural)** is the right usage **some of** is foll owed by a **Plural Noun/Pronoun.**

79. (d) **impart (to)** : to pass information, knowledge etc. to other people; convey; lend.
Look at the sentence :
This spice **imparts** an Eastern flavour **to** the dish.
Here, **to** is the right usage.

80. (b) **comprises** : consists of
Here, **comprises** is the right usage.

81. (a) **reversal (Noun)** : opposite of what it was.
Look at the sentence :
The government suffered a total **reversal** of fortune(s) last year.
Here, **reversal** is the right usage.

82. (b) **timid (Adjective)** : shy and nervous; not brave.
Here, **timid** is the right usage.

83. (d) **dispirited (Adjective)** : having no hope or enthusiasm.
Here, **dispirited** is the right usage.

84. (d) misery
adversity (Noun) : a difficult or unpleasant situation; calamity.

85. (a) make merry
revel (Verb) : to spend time enjoying yourself in a noisy, enthusiastic way.

86. (c) walk
stroll (Verb) : to walk somewhere in a slow relaxed way.

87. (c) **bad blood :** feelings of hatred or strong dislike
- There is no **bad blood** between us.

The best option is **angry feeling.**

88. (b) **a good samaritan :** a person who gives help and sympathy to people who need it
- He's such a **good samaritan**. He goes shopping for his granny when she is ill.

The best option is **a helpful person.**

89. (b) **ended in a fiasco :** a total failure
fiasco : something that does not succeed

- The party **ended in a fiasco**.
  The best option is **was an utter failure.**

90. (a) **put hi s foot down :** to be very strict in opposing what somebody wishes to do; take a firm stand
- She **put her foot down** and said we could not go to the carnival.
  The best option is **asserted his authority.**

91. (a) **realness (N.)** : the true situation and the problems that usually exist in life ; existing as fact; actual rather than imaginary.
apparition (N.) : a ghost or an image of a person who is dead; appearance; emergence.
perceptible (Adj.) : noticeable
illusion (N.) : a false idea/belief
undetectable (Adj.) : impossible to see/find

92. (d) **opulent (Adj.)** : luxurious; wealthy; extremely rich.
penurious (Adj.) : very poor; destitute; penniless.

93. (a) **disparage (V.)** : belittle; to suggest that something is not important or valuable.
accentuate (V.) : to emphasize something or make it more noticeable.
enunciate (V.) : to express an idea clearly and exactly
aggrandize (V.) : add details to
exacerbate (V.) : make worse.

94. (a) **hypochondriac**
hypochondriac (N.) : worried all the time about your health and believing that you are ill/sick when there is nothing wrong with you
neophyte (N.) : a person who has recently started an activity
maniac (N.) : an insane person
misanthrope (N.) : someone who dislikes people in general

95. (a) **mint**
mint (N.) : a place where money is coined by authority of the government
cannery (N.) : a factory where food is canned
monetary (Adj.) : involving money.

96. (a) **throne (N.)**
97. (a) **gone (V.)**
98. (c) **at (Prep.)**
99. (d) **find (V.)**
100. (a) **tiny (Adj.)**
substantial (Adj.) : large in amount, value/ importance
corporeal (Adj.) : can be touched
humungous (Adj.) : enormous; very big

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