

## ACHIEVERS In Focus Vol.9 Issue-2



- 4. (b) Anemia is a condition in which one lacks enough healthy red blood cells to carry adequate oxygen to his/her body's tissues. Having anemia, also referred to as low hemoglobin, can make one feel tired and weak. There are many forms of anemia, each with its own cause.
- 5. (c) Article 76 of the Indian Constitution under its Part-V deals with the position of Attorney General of India. Article 76 of the constitution mentions that he/she is the highest law officeer in India. ACHIEVERS In Focus As a chief legal advisor to the government of India, he advises the union government on all legal matters. He also is the primary lawyer representing the Union Government in the Supreme Court of India. 14. (a)
- (a) After flowing through Tibet Brahmaputra enters India through Arunachal Pradesh and flows through Asam and Bangladesh before it joins Bay of Bengal. The catchments area of Brahmaputra in Tibet is 2,93,000 Sq. Km in India and in Bhutan it is 2,40000 Sq. Km and in Bangladesh it is 47000 Sq. Km.
- 7. (a) On 29th August 1947, the Constitutent Assembly through a resolution appointed a Drafting Committee.

The Drafting Committee had seven members: Alladi Krishnaswami Ayyar, N. Gopalaswami, B. R. Ambedkar, K. M. Munshi, Mohammand Saadulla, B. L. Mitter and D. P. Khaitan.

AT its first meeting on 30th August 1947, the Drafting Committee elected B. R. Ambedkar as its Chairman.

- (b) As per the report of the 2011 census of India, the population density has increased from 324 persons per sq km. (in 2001 census) to 382 persons per sq. km. Bihar is the most thickly populated state (1106 persons/sq km.) followed by West Bengal-1028 persons per sq. km. and Kerala 860 persons per sq. km.
- 9. (b) The Company annexed the state of Awadh in 1856 on the charges of misgorvernance by the Nawab of Awadh. It was captured on the order of Lord Dalhousie under the Doctrine of lapse.
  Wajid Ali Shah was the ruler of Awadh during the annexation and was later deported to Garden Reach in Metiabruz,

Kolkata. ACHIEVERS In

10. (c) Pradhan Mantri Jeevan Jyoti Bima Yojana has completed seven years.

It is a one-year life insurance scheme offering coverage for death for any reason.

It provides 2 lakh life cover against a premium of Rs. 330 per year.

The age group between 18-50 years is covered under this scheme.

- (b) Raja Todar Mal was Emperor Akbar's revenue minister. Akbar introduced numerous reforms in his revenue department with the assistance of Raja Todar Mal.
- 12. (b) The Constitution of India states that a Legislative Assembly must have no less than 60 and no more than 500 members. However an exception may be granted via an Act of Parliament as in the case of the states of Goa,

Sikkim, Mizoram and the union territory of Puducherry which have fewer than 60 members.

13. (b) Sea-waves continuously strike at the rocks. Cracks develop. Over time they become larger and wider. Thus, hollow like caves are formed on the rocks. They are called sea caves.

As these cavities become bigger and bigger only the roof of the caves remain, thus forming sea arches.

**cus** Further, erosion breaks the roof and only walls are left. These wall-like features are called stacks.

The steep rocky coast rising almost vertically above seawater is called sea cliff.

14. (a) Rukmini Devi Arundale was the first woman to be nominated to the Rajya Sabha.

Rukmini Devi Arundale was an Indian theosophist, dancer, and choreographer of the Indian classical dance form of Bharatanatyam.

She was an activist for animal rights and welfare.

- 15. (b) Nazira Banoo, from Lato, Kargil in Ladakh, won the gold medal in the under-30 Poomsae category at the first Khelo India Women's Taekwondo League held in Vadodara, Gujarat. Nazira's victory not only earned her the gold medal but also secured her qualification for the Khelo India Women's League Nationals Phase-III, which will take place in Bhubaneswar, Odisha. ACHIEVERS In Focus
- 16 (a) 2<sup>nd</sup> December is observed as 'International Computer Literacy Day'. It was started in 2001 by NIIT, a worldfamous Indian computer firm. The day is entirely devoted to Computers and how they are a significant source of concern with the modernisation of the planet. The aim is to highlight the importance of computer literacy, which is essential for the present times.
- 17. (a) Bihar is setting up its second tiger reserve in Kaimur district, as approved by the central government. The Kaimur Wildlife Sanctuary will be upgraded to a tiger reserve to alleviate the pressure on the existing Valmiki Tiger Reserve, which currently houses 54 tigers. Kaimur's vast forests, covering 1,134 square km, offer suitable terrain for the reserve, boasting the highest green cover in Bihar at 34%.
- 18. (d) India ranks 105<sup>th</sup> out of 127 countries in the 2024 Global Hunger Index, falling under the 'Serious' hunger category with a GHI score of 27.3. This ranking indicates that 13.7% of India's population is undernourished, with alarming rates of child malnutrition, including 35.5% stunted, 18.7% wasted, and 2.9% child mortality.
- 19. (a) Nima Rinji Sherpa achieved this remarkable feat at the age of 18 by summiting Shisha Pangma (8,027 m) on 9 October, 2024. This record-breaking accomplishment surpasses the previous record held by Mingma Gyabu 'David' Sherpa, who completed the same feat at age 30 in 2019. Nima Rinji Sherpa's mountaineering journey began when he was 16, with his first high-altitude climb being Mount Manaslu in 2022.
- 20. (b) Air Marshal SP Dharkar has been appointed as the Vice

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Chief of the Air Staff, bringing with him a wealth of experience as a distinguished fighter pilot with over 3,600 hours of flying time. He succeeds Air Chief Marshal Amar Preet Singh, who has taken on the role of Chief of Air Staff. Air Marshal Dharkar's experience includes commanding a MiG-27 squadron and flying various fighter jets and trainer aircraft.

## **Elementary Mathematics**

1. (d) 21st number = 21 × 61.5 + 21 × 65.5 - 41 × 63  
= 2667 - 2583 = 84  
Required average = 
$$\frac{41 \times 63 - 84}{40} = \frac{2499}{40} = 62.475$$
  
2. (d) Required percent =  $\frac{600 \times \frac{70}{100} + 400 \times \frac{82}{100}}{600 + 400} \times 100$   
ACHIEVERS IN FOCUS =  $\frac{420 + 328}{1000} \times 100$   
ACHIEVERS IN FOCUS =  $\frac{420 + 328}{1000} \times 100 = 74.8\%$   
3. (d) Given 2  $\pi$ th = 176  
 $\therefore$  r =  $\frac{176}{2} \times \frac{7}{22} \times \frac{1}{28} = 1$  cm  
 $\therefore$  Volume =  $\frac{22}{7} \times (1)^2 \times 28 = 88$  cm<sup>3</sup>  
4. (c) According to question  
 $\frac{P \times 2 \times 4 + P \times 4 \times 6 + P \times 3 \times 8}{100} = 1120$   
 $P = \frac{1120 \times 100}{56} = 2000$   
5. (a) A's expenses =  $\frac{2000}{2} \times 8 = ₹8000$   
B's expenses =  $\frac{2000}{3} \times 5 = ₹5000$   
B's income =  $5700 \times 5 = ₹5000$   
A's income =  $\frac{5700}{3} \times 5 = ₹9500$   
A saves =  $9500 - 8000 = ₹1500$   
6. (c) Let mean be 2x and median be 3x  
Mode = 3 Median - 2 Mean =  $3(3x) - 2(2x) = 9x - 4x = 5x$   
Required ratio = Mode : Mean =  $5x : 2x = 5 : 2$   
7. (a) Let the distance be x km  
According to question  
 $\frac{x}{10} - \frac{x}{15} = \frac{15}{60}$   
 $\frac{2x}{60} = \frac{15}{60}$   
ACHIEVERS IN FOCUS  
 $x = 7.5$ 

8. (d) L.C.M of 21, 28, 30 and 35 = 420 Least number 420k + 10 is divisible by 17  $=420 \times 2+10=850$ Required sum = 8 + 5 + 0 = 13

9. (a) 
$$[52 - 4 \text{ of } (17 - 12) + 4 \times 7] \div [30 \div 15 \times 5]$$
  
=  $[52 - 4 \text{ of } 5 + 28] \div 10 = 60 \div 10 = 6$   
10. (c) Required area  $= \frac{300}{10} \times \frac{18}{10} = 72 \text{ km/k}$ 

10. (a) Required speed  $=\frac{300}{15} \times \frac{10}{5} = 72 \text{ km} / \text{ h}$ 11. (a) Let to form alloy Z, alloy X and alloy Y are taken 4xand x units respectively

Ratio of copper and tin in alloy Z

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$$=\frac{\frac{7}{10} \times 4x + \frac{3}{5} \times x}{\frac{3}{10} \times 4x + \frac{2}{5} \times x} = \frac{34}{16} = \frac{17}{8}$$
 ACHIEVERS In Focus  
Required percent =  $\frac{17}{17+8} \times 100 = 68$   
 $20 + 20 + 24$ 

12. (b) 
$$S = \frac{20+20+24}{2} = 32$$
Area of triangular field
$$= \sqrt{32(32-20)(32-20)(32-24)} = 192$$
According to question
$$\pi t^{2} = 3 \pi \times 192$$

$$r = 24$$
Perimeter of circular park
$$= 2 \times \frac{22}{7} \times 24 \simeq 151 \text{m}$$
13. (b) A : B = 2 : 5
B : C = 3 : 7

C: D = 5: 8  
A: B: C: D = 6: 15: 35: 56  
C's share = 
$$\frac{35}{6+15+35+56} \times 3392 = ₹1060$$
  
14. (b) A alone can complete the work in  $3 \times 5 = 15$  days  
B alone can complete the work in  $10 \times \frac{5}{2} = 25$  days  
(A + B)'s 5 days work =  $\frac{5}{15} + \frac{5}{25} = \frac{1}{3} + \frac{1}{5} = \frac{8}{15}$   
Remaining work =  $1 - \frac{8}{15} = \frac{7}{15}$   
A alone can complete the remaining work in  
 $\frac{7}{15} \times 15 = 7$  days  
15. (c)  
16. (d)  
17. (c) Let their bases are 3x and 2x and their heights and an

re h<sub>1</sub> and h<sub>2</sub> respectively.

$$\frac{\frac{1}{2} \times 3x \times h_1}{\frac{1}{2} \times 2x \times h_2} = \frac{6}{1}$$

$$\Rightarrow \frac{h_1}{h_2} = \frac{4}{1}$$

$$x = \frac{32}{128} \times 100 = 25$$

19. (b) After 1st discount SP 
$$=\frac{600 \times 90}{100} = 540$$
  
2nd discount  $=\frac{540 - 459}{540} \times 100 = 15\%$ 

18. (c)



