

# TISSNET 2022

## General Awareness

1. \_\_\_\_\_ is India's official entry for the Oscars 2022 and has made it into the top five nominated in its category.

- A Marakkar: Arabikadalinte Simham (Marakkar: Lion of the Arabian Sea)
- B Jai Bhim
- C Writing with Fire
- D Jallikattu

**Answer: C**

2. The Nobel Peace Prize 2021 was awarded for \_\_\_\_\_

- A promoting child rights
- B social activism
- C fearless journalism
- D protection of the environment

**Answer: C**

3. Who was the recipient of Padma Shri from the transgender community for reviving one of the traditional folk dance art form?

- A Matha Manjamma Jogati
- B Kalki Subramaniam
- C Akkai Padmashali
- D Laxmi Narayan Tripathi

**Answer: A**

4. Who among the following persons is best known for contribution to afforestation in India by planting trees along a state highway?

- A Tulasi Gowda
- B Harshwanti Bisht
- C Saalumarada Thimmakka
- D Aleesha Gadhiya

**Answer: C**

5. The latest British colonial state to proclaim itself as a Republic is \_\_\_\_\_.

- A Jamaica
- B Barbados
- C British Guyana
- D Mauritius

**Answer:** B

6. The movie Gangubai Kathiawadi is adapted from a chapter from the book titled Mafia Queens of Mumbai written by \_\_\_\_\_.

- A Chitra Banerjee Divakaruni
- B Hussain Zaidi
- C Sachin Kundalkar
- D Vikas Swarup

**Answer:** B

7. Which Kathak Gharana did the Late Padma Vibhushan Pandit Birju Maharaj belong to?

- A Jaunpur
- B Jaipur
- C Banaras
- D Lucknow

**Answer:** D

8. United Nations Public Service Award was given to the Department of Women, Child Development and Social Welfare, Government of West Bengal for \_\_\_\_\_Prakalpa.

- A Kanyashree
- B Ujjwala
- C Rupashree
- D Lakshmir Bhandar

**Answer:** A

9. Who was adjudged the ICC women cricketer of the year award for 2021?

- A Beth Mooney
- B Smriti Mandhana

**C** Alyssa Healy

**D** Ellyse Perry

**Answer:** B

10. An explosive underwater volcano in 2021 erupted in \_\_\_\_\_.

**A** Indian Ocean

**B** South Atlantic Ocean

**C** Pacific Ocean

**D** Antartic Ocean

**Answer:** C

11. Which Indian athlete has been nominated for the 2022 Laureus World Breakthrough Award?

**A** Rani Rampal

**B** P.R. Sreejesh

**C** P.V. Sindhu

**D** Neeraj Chopra

**Answer:** D

12. The PM Gati Shakti scheme is primarily intended to \_\_\_\_\_.

**A** ushering in automation in transportation

**B** develop multi-modal connectivity

**C** expand National Highway networks in India

**D** build bullet trains

**Answer:** B

13. The Van Dhan Start-ups is a master plan for the socio-economic development of the \_\_\_\_\_ population of the country.

**A** women

**B** tribal

**C** Scheduled Caste

**D** minorities

**Answer:** B

14. 'Khuang' is a traditional musical instrument of which Indian state?

- A Nagaland
- B Meghalaya
- C Manipur
- D Mizoram

**Answer:** D

15. Which among the following is NOT the correct option?

A circular economy favours activities that preserve value of \_\_\_\_\_.

- A labour
- B material
- C energy
- D profits

**Answer:** D

16. 'Mitali Express', a new passenger train inaugurated in 2021, that connects Dhaka with India starts from which Indian railway station?

- A Guwahati
- B Agartala
- C New Jalpaiguri
- D Kolkata

**Answer:** C

17. UNESCO 2021 State of the Education Report for India is titled \_\_\_\_\_.

- A Status of Indian Schools
- B No Teacher, No Class
- C Teachers and Teaching in India
- D No Digital Access, No Learning

**Answer:** B

18. Sankaranarayana Menon Chundayil was conferred Padma Shri for teaching and promoting \_\_\_\_\_.

- A Pari-Khanda
- B Silambam

**C** Kalaripayattu

**D** Mardani Khel

**Answer: C**

19. **The National Education Policy (NEP) 2020 has recommended to set up National Assessment PARAKH Centre as a Standard setting body. What does PARAKH stand for?**

**A** Personal Assessment, Revaluation and Analysis for Knowledge for Holistic Development

**B** Performance Assessment, Rating and Analysis for Knowledge for Holistic Deveelopment

**C** Preparing Analytical Reports for Assessing Knowledge for Holistic Development

**D** Performance Assessment, Review, and Analysis of Knowledge for Holistic Development

**Answer: D**

20. **The recently launched Bhuvan Panchayat web portal's new version 3:0 uses the technology of which organisation?**

**A** Defence Research and Development Organisation

**B** Hindustan Aeronautics Limited

**C** Bharat Electronics Limited

**D** Indian Space Research Organisation

**Answer: D**

21. **E-SHRAM seeks to create a database of \_\_\_\_\_**

**A** Both in the Organised and Unorganised Sector

**B** Workers in Unorganised Sector

**C** Migrant workers

**D** Workers in the Organised Sector

**Answer: B**

22. **The 'Surakshit Dada-Dadi Nana-Nani Abhiyaan' in all 112 Aspirational Districts was spearheaded by NITI Aayog and \_\_\_\_\_ to reach out to more than 1.5 million senior citizens residing in these districts.**

**A** Swasth India Foundation

**B** Piramal Foundation

**C** India Health Foundation

**D** Narayana Hrudalaya

**Answer: B**

23. **The motto of the Indian National Army formed by Netaji Subhash Chandra Bose was \_\_\_\_\_.**

**A** Itehad (Unity), Khudmukhtari (Sovereignty), Salmiyat (Integrity)

**B** Itehad (Unity), Etmad (Faith), Qurbani (Sacrifice)

**C** Himmat (Courage), Salmiyat (Integrity), Qurbani (Sacrifice)

**D** Khudmukhtari (Sovereignty), Bahadari (Bravery), Etmad (Faith)

**Answer: B**

24. **Which of the following was NOT the objective of the India's New Economic Reforms introduced in the year 1991?**

**A** Liberalisation

**B** Globalisation

**C** Centralisation

**D** Privatisation

**Answer: C**

25. **The 'Father of Indian Football' is \_\_\_\_\_.**

**A** Sailen Manna

**B** Syed Abdul Rahim

**C** Shabbir Ali

**D** Nagendra Prasad Sarbadhikary

**Answer: D**

26. **Which among the following is the key underlying reason for agrarian distress in India?**

**A** irregular outputs

**B** connections with value chains

**C** terms of trade agriculture

**D** inclusive banking systems

**Answer: A**

27. Fintech app development does not depend on \_\_\_\_\_.

- A Blockchain
- B Artificial Intelligence
- C Data Analytics
- D E-commerce

**Answer:** D

28. India's first Open Rock Musuem is located in \_\_\_\_\_.

- A Hyderabad
- B Ahmedabad
- C Faridabad
- D Chandigarh

**Answer:** A

29. Asian Games 2022 will be held in \_\_\_\_\_.

- A Malaysia
- B Singapore
- C China
- D India

**Answer:** C

30. The Farmers' Produce Trade and Commerce (Promotion and Facilitation) Act 2020 will ensure better prices to farmers and a better deal for consumers by\_\_\_\_\_.

- A promoting options to sell to the government procuremet centre
- B promoting barrier-free collaboration among buyers
- C promoting barrier-free inter and intra state trade and commerce
- D promoting barrier-free international trade

**Answer:** C

31. In which year was 'Operation Flood' launched in India?

- A 1970
- B 1980
- C 1960

**D** 1990

**Answer:** A

32. **Income Tax in India was introduced by \_\_\_\_\_.**

**A** Nicholas Kaldor

**B** Mahair Tyagi

**C** William Jones

**D** James Wilson

**Answer:** D

33. **The third vaccine approved by Indian government for vaccinating children is named \_\_\_\_\_.**

**A** Corbevax

**B** Covishield

**C** Covaxin

**D** ZyCov-D

**Answer:** A

34. **The first genetically modified crop to be introduced in India was \_\_\_\_\_.**

**A** Bt Brinjal

**B** Bt Okra

**C** Bt Cabbage

**D** Bt Cotton

**Answer:** D

35. **Under which scheme can an individual from SC/ST community and/or a woman borrower, get a bank loan of between Rs.10 lakh and Rs.1 crore to set up an enterprise?**

**A** PM Jan Dhan Yojana

**B** Start up India scheme

**C** Stand Up India scheme

**D** MUDRA Scheme

**Answer:** C



36. Which of the following is the southern most point of India's mainland?

- A Campbell Point
- B Cape Comorin
- C Vivekananda Rock
- D Sir Creek Estuary

**Answer:** B

37. Bandhan Bank was started in India in 2011 for \_\_\_\_\_.

- A provide easy loans to all marginalised sections
- B promoting financial inclusion and women empowerment
- C promoting saving behavior of migrant workers
- D ensuring bank loans to micro entrepreneurs

**Answer:** B

38. Which land-based ecosystem has the most biodiversity?

- A Tundra region
- B Grassland region
- C Desert region
- D Tropical region

**Answer:** D

39. The first female Speaker of Lok Sabha is \_\_\_\_\_.

- A Tarakeshwari Sinha
- B Sumitra Mahajan
- C Najma Heptulla
- D Meira Kumar

**Answer:** D

40. Startup India Seed Fund Scheme (SISFS) was launched to provide financial assistance to startups for \_\_\_\_\_.

- A Pilot launching, prototype development, market entry, marketing and commercialisation
- B Proof of Concept, prototype development, product trials, market entry, and commercialisation

- Pilot launching, Beta prototype development, market entry, marketing and commercialisation
- C** Pilot launching, Beta prototype development, market entry, marketing and commercialisation
- D** Proof of Concept, Alfa prototype development, Market creation, and commercialisation

**Answer: B**

## Maths & Logical Reasoning

41. If the cost price of 20 articles is equal to the selling price of 25 articles, then the percentage profit or loss made is\_\_\_\_\_.

- A** 20% profit
- B** 25% loss
- C** 25% profit
- D** 20% loss

**Answer: D**

### Explanation:

Let the cost price of one article be C.P and selling price of one article be S.P

It is given that,

$$20C.P = 25S.P$$

$$\text{Loss\%} = \frac{C.P - S.P}{C.P} \times 100 = \frac{5}{4} \frac{S.P - S.P}{5 S.P} \times 100 = 20\%$$

Answer is option D.

42. There are some benches and some students in a classroom. If one student sits on one bench, 10 students will be left without a bench. If two students sit on a bench, 10 benches will have no students sitting on them. What is the ratio of students and benches in the class room?

- A** 5:4
- B** 3:4
- C** 2:5
- D** 4:3

**Answer: D**

### Explanation:

Let the number of benches be 'b' and number of students be 's'

From first statement,

$$b(1) + 10 = s$$

$$b + 10 = s \dots\dots (i)$$

From second statement,

Let us consider x benches are occupied with two students, i.e.

$$x(2) + (b-x)0 = s$$

$$2x = s \dots\dots (ii)$$

It is given,

$$b - x = 10 \dots\dots (iii)$$

Solving (i), (ii) and (iii), we get

$$x = 20, b = 30 \text{ and } s = 40$$

$$\text{students:benches} = 40:30 = 4:3$$

Answer is option D.

43. What is the eighth term of the sequence 5, 7, 11, 19 \_\_\_\_\_?

- A 256
- B 67
- C 131
- D 259

**Answer:** D

**Explanation:**

$$5 \times 2 - 3 = 7$$

$$7 \times 2 - 3 = 11$$

$$11 \times 2 - 3 = 19$$

$$19 \times 2 - 3 = 35$$

$$35 \times 2 - 3 = 67$$

$$67 \times 2 - 3 = 131$$

$$131 \times 2 - 3 = 259$$

Answer is option D.

44. In a national park 150 tigers were caught, tagged with electronic markers, then released. A week later, 50 tigers were captured in the same national park. Of these 50 tigers, it was found that 5 had been tagged with the electronic markers. If the percentage of tagged tigers in the second sample approximates the percentage of tagged tigers in the national park, and if no tiger had either left or entered the national park over the preceding week, what is the approximate number of tigers in the national park?

- A 2500
- B 750
- C 1250
- D 1500

**Answer:** D

**Explanation:**

$$\text{The percentage of tagged tigers in second sample} = \frac{5}{50} \times 100 = 10\%$$

It is mentioned that there are 150 tagged tigers and approximately 10% of all the tigers in national park are tagged.

$$\text{Therefore, approximate number of tigers in national park} = 10 \times 150 = 1500$$

Answer is option D.

45. The incomes of two persons is in the ratio of 9:7 and their expenditures is in the ratio of 4:3. If each of them manages to save Rs. 3000 per month, find the difference in their income.

- A 10000

**B** 5000

**C** 6000

**D** 3000

**Answer:** C

**Explanation:**

Let the incomes of two persons be  $9x$  and  $7x$ .

Let the expenditures of two persons be  $4y$  and  $3y$

It is given that,

$$9x - 4y = 7x - 3y = 3000$$

$$9x - 4y = 7x - 3y$$

$$y = 2x \dots\dots\dots (i)$$

$$7x - 3y = 3000 \dots\dots\dots (ii)$$

Solving (i) and (ii), we get

$$x = 3000 \text{ and } y = 6000$$

$$\text{Difference in income} = 2x = 2 \times 3000 = \text{Rs } 6000$$

Answer is option C.

46. **Present ages of Shibu and Sohail are in the ratio of 4:5. Eight years from now the ratio of their ages will be 5:6. Find the difference in their ages?**

**A** 5

**B** 7

**C** 10

**D** 8

**Answer:** D

**Explanation:**

Let the present ages of Shibu and Sohail be  $4x$  and  $5x$

It is given that,

$$\frac{4x + 8}{5x + 8} = \frac{5}{6}$$

$$24x + 48 = 25x + 40$$

$$x = 8$$

$$\text{Age difference} = x = 8$$

Answer is option D.

47. **What is the probability that a leap year has 53 Sundays and 53 Mondays?**

**A** 2/7

**B** 1

**C** 0

**D** 1/7

**Answer:** D

**Explanation:**

Number of days in leap year = 366

There are 2 odd days in a leap year. For a year to have 53 sundays and 53 mondays, 2 odd days should be sunday and monday.

This is only possible when the first day of the year is Sunday.

Therefore, the probability of the first day is Sunday =  $\frac{1}{7}$

Answer is option D.

48. Four different clocks beep after every 25 minutes, 50 minutes, 1 hour 40 minutes and 2 hour 5 minutes. If all clocks beep together at 5 a.m., then when will they next beep together?

A 12:00 noon

B 5:00 p.m.

C 1:20 p.m.

D 11.20 a.m

**Answer:** C

**Explanation:**

It is mentioned that four clocks beep for every 25 minutes, 50 minutes, 100 minutes and 125 minutes.

All four clocks beep together for every LCM(25,50,100,125) minutes, i.e. 500 minutes.

500 minutes = 8 hours 20 minutes

All clocks next beep together at 5 am + 8 hours 20 minutes, i.e. 1:20 pm.

Answer is option C.

49. A tree bends due to heavy storm and now its peak touches the ground making an angle of  $30^\circ$  with it. If the bent part is 20 metre long, find the original height of the tree in metres.

A 10

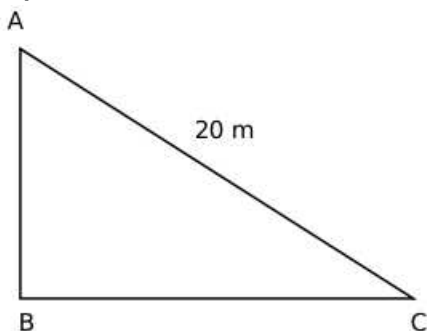
B  $20/\sqrt{3}$

C 40

D 30

**Answer:** D

**Explanation:**



BC is ground and it is given that  $\angle ACB = 30^\circ$

Actual length of the tree = AB + AC

$$\sin 30^\circ = \frac{AB}{AC}$$

$$AB = 20/2 = 10 \text{ cm}$$

$$\text{Length of the tree} = AB + AC = 10 + 20 = 30 \text{ cm}$$

Answer is option D.

50. The following observations are arranged in ascending order: 26, 29, 42, 53, X, X+2, X+5, 75, 82, 93: If the median is 65; Find the value of X.

- A 70
- B 55
- C 64
- D 58

**Answer:** C

**Explanation:**

There are even number of observations in the given data. Therefore, median is the average of X and X+2.

$$\frac{X+X+2}{2} = 65$$

$$X + 1 = 65$$

$$X = 64$$

Answer is option C.

51. In a charity show, tickets numbered consecutively from 101 through 350 are placed in a box. What is the probability that a ticket selected randomly will have a number with a hundredth digit as two?

- A 100/250
- B 99/249
- C 100/249
- D 99/250

**Answer:** A

**Explanation:**

$$350 = 101 + (n-1)1$$

$$n = 250$$

Total number of tickets = 250

There are 100 tickets(200 to 299) between the tickets 101 and 350 whose hundredth digit is 2.

$$\text{Probability} = \frac{100}{250}$$

Answer is option A.

52. The missing character in the series A D I \_ Y is

- A Q
- B P
- C R
- D O

**Answer:** B

**Explanation:**

There are two alphabets between A and D.

There are four alphabets between D and I.

There must be six alphabets between I and next letter.

I, J, K, L, M, N, O, P

There are eight alphabets between P and Y  
Therefore, missing character is 'P'.

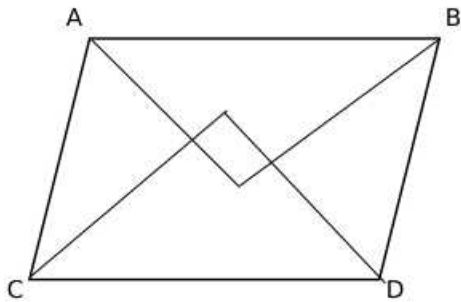
Answer is option B.

53. Angle bisectors of a parallelogram form a \_\_\_\_\_.

- A parallelogram
- B square
- C rhombus
- D rectangle

**Answer:** D

**Explanation:**



Angular bisectors from A and B intersect at P, B and D intersect at Q, C and D intersect at R, and A and C intersect at S.

In a parallelogram ABCD, AC is parallel to BD.

$$\angle CAB + \angle ACD = 180^\circ$$

$$\angle CAS + \angle ACS = 90^\circ$$

In triangle CAS,

$$\angle ASC = 180^\circ - 90^\circ = 90^\circ$$

As all the angles of PQRS are  $90^\circ$ , PQRS is a rectangle.

Answer is option D.

54. In a class of 45 students, 25 are girls. In a test, 30 students scored above 90% marks and 18 of them are girl students. A student is selected at random. The probability of selecting a girl scoring above 90% marks is \_\_\_\_\_

- A 18/45
- B 12/45
- C 18/30
- D 30/45

**Answer:** A

**Explanation:**

It is given,

Total number of students = 45

Number of girls who scored above 90% marks = 18

Therefore, probability =  $\frac{18}{45}$

Answer is option A.

55. How many two-digit numbers are divisible by 3?

- A 30
- B 20
- C 29
- D 19

**Answer:** A

**Explanation:**

The least 2-digit number divisible by 3 = 12  
 The highest 2-digit number divisible by 3 = 99  
 $99 = 12 + (n-1)3$   
 $(n-1)3 = 87$   
 $n = 30$   
 There are 30 2-digit numbers divisible by 3.

Answer is option A.

56. **Three years ago, the population of a town was 1 lakh. If the annual increase during three successive years was at the rate of 4%, 2% & 2% per annum respectively, find the approximate present population.**

- A 110100
- B 112300
- C 108202
- D 108000

**Answer:** C

**Explanation:**

Three years back population = 1 lakh  
 Present population =  $100000 \times \frac{104}{100} \times \frac{102}{100} \times \frac{102}{100} = 104 \times 102 \times 10.2 = 108201.6 \approx 108202$

Answer is option C.

57. **The following five candidates have applied for a position in an organisation: Male 30 years, Male 32 years, Female 45 years, Female 20 years, and Male 40 years. What is the probability that the candidate selected for the position will be either female or over 35 years?**

- A 4/5
- B 2/5
- C 1/5
- D 3/5

**Answer:** D

**Explanation:**

Female - A  
 above 35 years - B  
 $n(A \cup B) = n(A) + n(B) - n(A \cap B) = 2 + 2 - 1 = 3$   
 Probability =  $\frac{3}{5}$

Answer is option D.



58. If a cuboidal box has height, length and width as 20 cm, 15 cm and 10 cm respectively. Then its total surface area is\_\_\_\_\_.

- A  $1300cm^2$
- B  $1400cm^2$
- C  $1200cm^2$
- D  $1100cm^2$

**Answer:** A

**Explanation:**

$$\text{Total surface area} = 2(lb + bh + hl) = 2(150 + 200 + 300) = 1300 \text{ cm}^2$$

Answer is option A.

59. A car uses 18 litres of petrol in travelling 270 kilometers. In order for the car to travel the same distance using 10 litres of petrol, by how many kilometers per litre must the car's fuel mileage be increased?

- A 12
- B 27
- C 9
- D 15

**Answer:** A

**Explanation:**

$$\text{Mileage when car uses 18 litres to travel 270 km} = \frac{270}{18} = 15 \text{ km/litre}$$

$$\text{Mileage required to travel 270 km using 10 litres} = \frac{270}{10} = 27 \text{ km/litre}$$

$$\text{Mileage should be increased by } 27 - 15 = 12 \text{ km/litre}$$

Answer is option A.

60. In an election, the candidate from Party A received one and half times as many votes as the candidate from Party B. The candidate from Party B received one-third more votes than the independent candidate. 900 votes were cast for the independent candidate. How many votes were cast for the candidate from Party A?

- A 900
- B 1600
- C 1400
- D 1800

**Answer:** D

**Explanation:**

$$\text{Votes received by independent candidate} = 900$$

$$\text{Votes received by B} = (4/3) * 900 = 1200$$

$$\text{Votes received by A} = (3/2) * 1200 = 1800$$

61. Vijay's total annual shopping budget is Rs 2,00,000. If 'food and grocery' items take up 54 degrees in a pie chart, then how much budget is allocated to 'food and grocery' items?

- A Rs. 40,000
- B Rs. 32,000
- C Rs. 24,000
- D Rs. 30,000

**Answer:** D

**Explanation:**

The ratio of budget allocated to food and grocery =  $(54/360) = 3/20$

Budget allocated to food and grocery =  $(3/20) * 200000 = 30000$

62. There are two branches of a bank employing 100 and 80 persons respectively. If the arithmetic me of the monthly salaries paid by these two branches are Rs. 275 and Rs. 225 respectively, the arithmetic mean of all employees of two branches together is \_\_\_\_\_.

- A Rs. 253.78
- B Rs. 252.78
- C Rs. 254.78
- D Rs. 251.78

**Answer:** B

**Explanation:**

Arithmetic means of both the branches together =  $\{(275*100)+(225*80)\}/180 = 252.78$

63. Which of the given options is NOT CORRECT?

- A  $\log_{10}(6) = \log_{10}(1) + \log_{10}(2) + \log_{10}(3)$
- B  $\log_{10} 1 = 0$
- C  $\log_{10} (2 + 3) = \log_{10} (2 \times 3)$
- D  $\log_{10} 10 = 1$

**Answer:** C

**Explanation:**

$\log(1) + \log(2) + \log(3) = \log(1*2*3) = \log(6)$

$\log 1 = 0$

$\log 10 = 1$

$\log(2+3) = \log(5)$

64. The average temperature of Tuesday, Wednesday and Thursday was  $45^{\circ}C$ . The average temperature of Wednesday, Thursday and Friday was  $46^{\circ}C$ . If the temperature on Friday was  $47^{\circ}C$ , what was the temperature on Tuesday?

- A  $44^{\circ}C$

- B  $48^{\circ}C$
- C  $40^{\circ}C$
- D  $46^{\circ}C$

**Answer:** A

**Explanation:**

Sum of temperatures on Wednesday, Thursday and Friday=  $46 \times 3 = 138$

The temperature on Friday= 47

So, the sum of temperatures on Wednesday and Thursday=  $138 - 47 = 91$

Sum of temperatures on Tuesday, Wednesday and Thursday=  $45 \times 3 = 135$

The temperature on Tuesday=  $135 - 91 = 44$

**Instructions [65 - 67]**

Please answer the following three questions based on the data given in the following table and the notes below.

**Table: Survey Results of Various Modes of Travel**

Mode	Walk	Bus	Car	Cycle
Number	55	35	18	72

Notes:

- A. 1 in 8 of the people who cycled to work were found to be over 65 years of age.
- B. 1 in 3 of the cyclists stated that they travelled to work by bus on rainy days.

65. On rainy days, the ratio of people who went by bus and by cycle is approximately \_\_\_\_\_

- A 0.75:1
- B 1:0.9
- C 1.5:1
- D 1.25:1

**Answer:** D

**Explanation:**

It is mentioned that 1 in 3 of the cyclists stated that they travelled to work by bus on rainy days.

On rainy days, number of people who went by bus =  $35 + \frac{1}{3}(72) = 59$

On rainy days, number of people who went by cycle =  $72 - 24 = 48$

Ratio =  $59 : 48 \approx 1.25 : 1$

Answer is option D.

66. What is the share of respondents who cycled to work and were 65 years old?

- A 0.07
- B 0.125
- C 0.05
- D 0.4

**Answer:** C

**Explanation:**

Number of people who cycled to work and were 65 years old =  $\frac{1}{8} \times 72 = 9$

Share =  $\frac{9}{55+35+18+72} = \frac{9}{180} = 0.05$

Answer is option C.

67. If this data is represented in a pie chart, then how many degrees of arc in the pie chart represent each response in the survey results?

- A 4
- B 8
- C 6
- D 2

**Answer: D**

**Explanation:**

There are total 360 degrees in pie chart and there are total of 180 responses. Therefore, each response is represented by two degrees of arc in the pie chart.

Answer is option D.

**Instructions [68 - 70 ]**

The table below shows the data on Government expenditure on the insurance scheme, total expenditure and State's own expenditure on health and family welfare. Read the table carefully and answer the following three questions.

**Table: Government Expenditure Across Various Budget Heads**

Year	Central Government Expenditure on the Insurance Scheme	Total Expenditure on Health and Family Welfare	State's Own Expenditure on Health and Family Welfare (excluding centrally sponsored scheme)
2010-11	670	4882	4003
2011-12	327	4920	3936
2012-13	750	5852	4804
2013-14	739	7008	5291
2014-15	758	7509	6594
2015-16	953	8383	7531
2016-17	928	8756	7996

68. In which two years, the Central Government expenditure on insurance scheme as a percentage of State's own expenditure on health and family welfare was most similar?

- A 2015-16 and 2016-17
- B 2012-13 and 2013-14
- C 2014-15 and 2016-17
- D 2010-11 and 2012-13

**Answer: C**

**Explanation:**

2010-2011 -  $\frac{67000}{4003} = 16.73\%$

2011-2012 -  $\frac{32700}{3936} = 8.3\%$

2012-2013 -  $\frac{75000}{4804} = 15.61\%$

$$2013-2014 - \frac{73900}{5291} = 13.97\%$$

$$2014-2015 - \frac{75800}{6594} = 11.49\%$$

$$2015-2016 - \frac{95300}{7531} = 12.65\%$$

$$2016-2017 - \frac{92800}{7996} = 11.6\%$$

Answer is option C.

69. In which year, the Central Government expenditure on the insurance scheme as a percentage of the total expenditure on health and family welfare was highest?

A 2013-14

B 2010-11

C 2016-17

D 2012-13

**Answer: B**

**Explanation:**

$$2010-2011 - \frac{67000}{4882} = 13.72\%$$

$$2011-2012 - \frac{32700}{4920} = 6.64\%$$

$$2012-2013 - \frac{75000}{5852} = 12.82\%$$

$$2013-2014 - \frac{73900}{7008} = 10.54\%$$

$$2014-2015 - \frac{75800}{7509} = 10\%$$

$$2015-2016 - \frac{95300}{8383} = 11.37\%$$

$$2016-2017 - \frac{92800}{8756} = 10.6\%$$

Answer is option B.

70. In which year, the Central Government expenditure on the insurance scheme as a percentage of State's own expenditure was three percentage more than the Central Government expenditure on the insurance scheme as a percentage of total expenditure on health and family welfare?

A 2010-11

B 2012-13

C 2011-12

D 2013-14

**Answer: A**

**Explanation:**

As a percentage of State's own expenditure

$$2010-2011 - \frac{67000}{4882} = 13.72\%$$

$$2011-2012 - \frac{32700}{4920} = 6.64\%$$

$$2012-2013 - \frac{75000}{5852} = 12.82\%$$

$$2013-2014 - \frac{73900}{7008} = 10.54\%$$

$$2014-2015 - \frac{75800}{7509} = 10\%$$

$$2015-2016 - \frac{95300}{8383} = 11.37\%$$

$$2016-2017 - \frac{92800}{8756} = 10.6\%$$

As a percentage of total expenditure on health and family welfare

$$2010-2011 - \frac{67000}{4882} = 13.72\%$$

$$2011-2012 - \frac{32700}{4920} = 6.64\%$$

$$2012-2013 - \frac{75000}{5852} = 12.82\%$$

$$2013-2014 - \frac{73900}{7008} = 10.54\%$$

$$2014-2015 - \frac{75800}{7509} = 10\%$$

$$2015-2016 - \frac{95300}{8383} = 11.37\%$$

$$2016-2017 - \frac{92800}{8756} = 10.6\%$$

3% is more in 2010-2011

Answer is option A.

## English Proficiency

71. **Spot the Error.**

**He has won more medals than them. No Error.**

- A more medals than
- B No Error
- C has won
- D them

**Answer:** D

**Explanation:**

The sentence should have been, "He has won more medals than they."

Hence, the answer is option D.

72. **Fill in the blank/s to complete the sentence:**

**The horrid tasting medicine cured the boy \_\_\_ his annoying habit \_\_\_ biting his nails.**

- A from; of
- B of; of
- C for; of
- D through; for

**Answer:** B

**Explanation:**

Since the habit and nails belong to the boy, we have to use words which show possessiveness to the boy.

Hence, the suitable choice is option B.

73. **Spot the Error.**

The turn was a blind spot and many accidents occurred there. No Error.

- A many accidents occurred there
- B The turn was
- C No Error
- D a blind spot

**Answer:** C

**Explanation:**

The sentence is grammatically and syntactically correct.

Hence, the answer is option C.

74. **Fill in the blank/s to complete the sentence:**

Climate change is a long-term shift in \_\_\_\_\_ and \_\_\_\_\_ climate patterns.

- A global; regional
- B time; space
- C land; water
- D temporary; permanent

**Answer:** A

**Explanation:**

Among the options, the most suitable words for the given sentence are "global" and "regional".

Hence, the answer is option A.

**Instructions [75 - 76 ]**

Fill in the blank/s to complete the sentence:

75. **There was no way that the company could take them for \_\_\_\_\_ and cheat them of their dues.**

- A naivety
- B being foolish
- C granted
- D a ride

**Answer:** A

**Explanation:**

Options C and D are completely out of context for the sentence and are eliminated.

Among options A and B, A is more suitable for the tone of the sentence.

Hence, the answer is option A.

76. He will pass \_\_\_ his old school on his way to play \_\_\_ his new football team.

- A through; for
- B by; with
- C from; for
- D from; with

**Answer:** B

**Explanation:**

The prepositions that are used with "pass" and "play" are "by" and "with", respectively.

Hence, the required answer is option B.

77. Which of the following indicates that the sole activity they enjoyed was running?

- A They only liked running.
- B Only they liked running.
- C They singularly liked running.
- D They liked only running.

**Answer:** D

**Explanation:**

The sole activity they enjoyed was running means they like only running.

Answer is option D.

78. Read the following information and answer the question based on it.

**A baby has eight stuffed animals and has placed them into groups of two or three. He has separated the monkey, the llama and the dog into different piles. The first pile includes a lion and a mouse. The elephant and the fish are in the same pile. The eighth animal is a turtle.**

**Based only on the information above, which of the following must be true?**

- A The fish and the llama are in the same pile.
- B The elephant and the turtle are in the same pile.
- C Three animals may be there in the first pile.
- D Exactly two animals are there in the second pile.

**Answer:** C

**Explanation:**

The first pile has a lion and mouse. As the monkey, the llama and the dog are in different piles so one among them should be in the first pile.

The elephant and fish are in the same pile and one among monkey, llama and dog will be in that pile but we cannot say if they will be in 2nd pile or 3rd pile. So there will 2 piles of 3 animals of which one is the first pile.

79. Fill in the blank/s to complete the sentence:

**70 percent of the planet is covered \_\_\_ ocean.**



- A with
- B from
- C by
- D of

**Answer: A**

**Explanation:**

Among the options, "with" and "by" are the only suitable ones.

"covered by" is used when the object covering the entity encompasses it so that it is not visible.

"covered with" is used to mention a large portion of an entity covered by an object.

Hence, the answer is option A.

80. **Read the following information and answer the question based on it.**

**The medicines would not work. The medical staff had already deprioritised visits to this room filled with patients. These were ones with high mortality chances. They had many other pre-existing conditions that were affected by this virus strain. The relatives had been told to not come in or visit. The morale was low in the room. It was all a waiting game. Caring for these patients was physically taxing and emotionally draining, but the nurses would not give up.**

**Identify which of the given options can be inferred from the passage.**

- A The patients were roomed together based on their survival chances.
- B The people with co-morbidities were not given adequate care by the hospital.
- C All the patients would die soon.
- D The ones who had caught the virus were likely to die.

**Answer: A**

**Explanation:**

Options B and C are not mentioned anywhere in the passage and thus, can be eliminated.

Option D states that all the people who had caught the virus were likely to die, whereas the passage talks about people who had pre-existing conditions and caught the virus. Hence, D is also eliminated.

Option A states that the patients are roomed together based on their survival chances which we can infer by the fact that the people with high mortality rates were roomed together.

Hence, the answer is option A.

81. **Identify the correct order of the following statements to make a coherent paragraph.**

**The lead sentence has been given.**

**The workers needed their concerns addressed immediately and would not budge.**

- A. The management was reluctant to capitulate since this would mean a sharp decline in the share market.
- B. The workers, in fact, had been agitating for safety measures for a long time.
- C. The workers were at fault, they felt.
- D. The number of accidents in the factory had, however, risen disproportionately in the last few months.
- E. The accidents were a concern and if the trend continued would pose problems, but there had been no deaths.

- A BEADC
- B ABDCE

**C** DABDE

**D** BACDE

**Answer:** A

**Explanation:**

Statement B is the opening statement as it builds on the lead sentence stating that workers were agitated for some time.

Statement E follows B as it explains the reason for the workers to be agitated.

Thus, the only possible answer is option A.

82. **Fill in the blank/s to complete the sentence:**

He confided \_\_\_ her and relied \_\_\_ her for keeping his secret.

**A** in; on

**B** of; upon

**C** of; on

**D** to; upon

**Answer:** A

**Explanation:**

The prepositions that are used with "confided" and "relied" are "in" and "on", respectively.

Hence, the answer is option A.

83. **Select the odd one out**

refulgent

dazzling

incandescent

ingenious

**A** refulgent

**B** ingenious

**C** dazzling

**D** incandescent

**Answer:** B

**Explanation:**

Among the given words, Refulgent, Dazzling and Incandescent all mean shining brightly whereas ingenious means clever.

Hence, the answer is option B.

84. **Fill in the blank to complete the sentence:**

In an age \_\_\_\_\_ technology can solve so many problems, is the human element still needed?

**A** of

**B** when

**C** where

**D** as

**Answer:** B

**Explanation:**

The sentence talks about the "age", which refers to a period. Hence, among the options, B is the best choice for the answer.

85. **Identify the correct order of the following statements to make a coherent paragraph.**

- A. The massive digital divide in education means great hindrance to the development of the underdeveloped world since they won't be capable of inventing new technologies and conducting researches aimed at promoting the living standards of inhabitants.**
- B. Also, the developing countries seek more donations to bridge the digital divide.**
- C. By acquiring knowledge, one gets capacitated to face life situations and provide solutions in promoting the development of a country.**
- D. Furthermore, the digital divide in education encourages the dependence syndrome; one will subscribe to unproven ideologies since they lack a mechanism of creating or scrutinizing.**
- E. Education should be liberating and is often seen as a standardizing factor in life.**

**A** ECADB

**B** CEABD

**C** ADBEC

**D** ABDCE

**Answer:** A

**Explanation:**

E-C forms a pair since E introduces the idea of education and C further explains the benefits of education and knowledge.

Similarly, A-D forms a pair since A mentions the digital divide in education and D further explains the situation.

E is the best choice for the opening statement of the sequence as it introduces the main point of focus of the paragraph.

Hence, the answer is option A and the required sequence is E-C-A-D-B.

86. **Which word from the given options is most similar in meaning to the word in capitals when used as an adjective?**

**INTIMATE**

**A** divulge

**B** proclaim

**C** inform

**D** personal

**Answer:** D

**Explanation:**

When "intimate" is used as an adjective, it means "close personally".

For example, "I know Aman intimately" means that I know Aman personally or closely.

Hence, the answer is option D.

87. Identify the correct order of the following statements to make a coherent paragraph.

The lead sentence has been given.

Today, we believe it is not only the obligation, but the right of the parent to raise his or her own children.

A. Social scientists, today, still do not agree on who the ideal parent really is.

B. This thought was echoed in Gulliver's Travels when the Lilliputians took the child away at twenty months and had government agencies take over.

C. It seems strange that no general consensus has yet been arrived at after thousands of years of considering this most basic of responsibilities.

D. However, 2400 years ago, the great philosopher, Plato, argued that it was too important to leave up to parents.

E. They often see no real difference in biological parents, nannies, grandparents, uncles and aunts, divorced parents and gay parents as far as their effectiveness is concerned.

A ACDBE

B BDEAC

C DBAEC

D CAEDB

**Answer:** C

**Explanation:**

The lead sentence talks about the right of a parent to raise their child.

Thus, statement D forms the first sentence in the sequence as it mentions the view that was put forth by Plato 2400 years ago.

Since only option C starts with D, it is the required answer.

Statement B follows the idea in D by mentioning the example of "Gulliver's Travels"

A-E-C forms a logical sequence as they talk about the question of "who is the ideal parent?".

Thus, the required sequence is D-B-A-E-C.

88. Fill in the blank/s to complete the sentence:

There was no other way out of the \_\_\_\_\_ than to fake it.

A squabble

B dispute

C conundrum

D clause

**Answer:** C

**Explanation:**

From reading the sentence, we can infer that the person was in a weird and difficult situation in which they had to fake something to escape.

Among the options, "conundrum" is the best possible choice for the answer.

Hence, the answer is option C.

89. Select the antonym for the word underlined in the statement given below:

The tracks were concealed by the snow.

A uncovered

B dissembled

- C disarrayed
- D surrounded

**Answer: A**

**Explanation:**

The word "concealed" means "hidden".

Thus, the antonym of the word would be to unhide or uncover.

Hence, the answer is option A.

**90. Spot the Error.**

The media was wrong regarding the assumptions made about the accused. **No Error**.

- A the assumptions made
- B was wrong
- C about the accused
- D No Error

**Answer: B**

**Explanation:**

The section of the sentence with an error is "was wrong".

The correct use would be "was in the wrong".

Hence, the answer is option B.

**Instructions [91 - 95 ]**

Read the following passage carefully and answer the questions that follow:

The COVID-19 pandemic will have significant financial implications for most communities around the world. We now have a global opportunity to declare war on climate change and to link our efforts to sustainable growth. Take the aviation industry as an example. For historic reasons, international air travel - along with the maritime industry - has not been part of government-led international emission reduction agreements such as the first Earth Summit in Rio in 1992 and the Paris agreement. Efforts are being made to change this through the International Civil Aviation Organization, and hopefully the industry's targets will align with the Paris agreement.

However, the efforts by the aviation sector to reduce emissions are still largely voluntary - despite good intentions from the industry. And now with the industry grounded - some airlines have, at least temporarily, reduced their capacity by as much as 85% - there is an opportunity for governments and airlines to cooperate on the projects that might change the industry, and to explore a world beyond what they could have imagined before the coronavirus.

We need to link financial aid packages with requirements for the development of zero- emission flight that for instance are powered sustainably - by electrofuels, for example - over time. The key to regulating well is not to decide on the type of fuel or design we want by law, but to make financial support and legislation conditional on the required amount of emission reductions or other such long-term goals that tie into a cleaner and healthier world. And we should be sure to make our response both design and technology agnostic. Any relevant law or policy should set goals, and then allow designers and engineers to create the innovations that will make a difference.

Financial stimuli across all sectors and industries must be purposed with creating a better world - one in which shareholder value isn't the only driver. Rescue measures should come with conditions attached; the French government's bailout of Air France is a good example. The rescue must be designed in such a way as to serve both public and planetary interests over the long term. Stimuli should be designed to reward value creation instead of value extraction by encouraging investment in sustainable growth and the reduction of carbon footprints. We must invest in design-led innovation so that the return on public investment is for the greater good.

Design innovation is already pushing boundaries in some sectors without stimuli, with an added benefit for the planet. Just look at how social distancing policies have sparked a virtual revolution; already, international companies are starting to step up the use of online meetings and collaboration. If we make it a part of our long-term work culture, we may in the future save ourselves many unnecessary

day trips by plane.

91. Which of the following is the author's belief about the airline industry?

- A Voluntary actions are quite effective in combating climate change.
- B Value extraction will best aid sustainable growth.
- C The role of the government is more important than private players.
- D Without financial aid climate change measures will not be implemented.

**Answer:** D

**Explanation:**

Option A: In the second paragraph, the author states that voluntary actions are not enough.

Option B: In the fourth paragraph, the author states that "value creation and not value extraction" is what should be encouraged.

Option C: Nowhere in the passage has the author mentioned that the government's role is more important than the private players.

Option D: In the third and fourth paragraphs, the author mentions the importance of financial aid for the implementation of sustainable technologies.

Hence, the answer is option D.

92. Why does the author mention social distancing policies?

- A To indicate how social distancing has affected the travel sector.
- B To exemplify the impact of design thinking.
- C To argue for the use of design thinking in the aviation sector.
- D To explain how designers may save the planet.

**Answer:** C

**Explanation:**

In the last paragraph, the author argues that design innovations like the virtual revolution can save a lot of unnecessary trips by plane in the future.

Hence, the answer is option C.

93. Which of the following does NOT reflect the author's perspective?

- A The reduction in emissions in the airline industry will need incentivisation.
- B Design thinking is useful to solve multiple problems.
- C The coronavirus pandemic is a blessing.
- D Policy needs to set goals.

**Answer:** C

**Explanation:**

In the third and fourth paragraphs, the author mentions the need for financial aid for the aviation sector for implementing sustainable measures.

In the last paragraph, the author states the importance of design thinking and the major role it could play.

In the third paragraph, the author states that any new law or policy should set goals.

Nowhere in the paragraph does the author mention the coronavirus pandemic being a blessing.

Hence, the answer is option C.

94. Which of the following is most similar to the rescue operation mentioned in the passage?

- A Virgin Atlantic's bid to ask support was rejected by the UK Treasury since the bid did not meet the criteria.
- B Howard Hughes' purchase of Trans World Airlines an American airline to expand operations to Europe, Middle East and Asia.
- C Tata Group's bid to purchase of Air India a public sector airline to expand market share.
- D Singapore Airlines stake in Virgin Australia airlines to counter competition.

**Answer:** A

**Explanation:**

*"Rescue measures should come with conditions attached; the French government's bailout of Air France is a good example. The rescue must be designed in such a way as to serve both public and planetary interests over the long term."*

Only option A mentions a deal similar to the one mentioned above.

Hence, the answer is option A.

95. Which of the following is the purpose of the passage?

- A To illustrate the purpose of design thinking.
- B To demonstrate the changes brought about in aviation industry.
- C To argue for climate change practices globally.
- D To highlight what practices in aviation industry need to change.

**Answer:** D

**Explanation:**

The passage is focused on the aviation sector. Hence, options A and C are eliminated.

The author does not discuss the changes brought in the aviation industry but rather the changes that need to be made to make the industry more sustainable.

Hence, the answer is option D.

### Instructions [96 - 100 ]

Read the following passage carefully and answer the questions that follow.

At its highest level, Push Hands inspires images of Jedi contests between Yoda and Obi-Wan Kenobi. At its worst, it looks more like bad sumo wrestling between two drunks. Too often, it resembles the latter.

Push Hands involves two people, usually in a similar weight class, who stand opposite each other with their hands on each other's arms. Each uses both his and his opponent's energy to force his opponent to lose his stance or fall over. It is a two-person exercise designed to develop the skills of the Chinese internal martial art of t'ai chi ch'uan. Why is t'ai chi considered an "internal" martial art? Like the fictional Star Wars characters, whose skill depends on mastering "the Force," the internal martial artist cultivates and directs internal energy, called chi. The use of muscular force actually interrupts the circulation of this energy. Push Hands, therefore, uses the least amount of physical force to produce the biggest effect.

It sounds paradoxical that you can become stronger by relaxing your muscles, but it is easily demonstrated by someone who has trained in t'ai chi ch'uan. The hard part is letting go of the security blanket of muscular tension that you have carried with you since

infancy. Even when we see a petite woman easily pushing two large, strong men, our minds are unconvinced. It is such an improbable event that we need to rationalize it some way.

That's where Push Hands comes in. At its simplest, the game is to keep my balance and make you lose yours. Losing your balance—even the threat of losing your balance—provokes a primitive stress response that causes you to tense your muscles as a form of protection. Tension comes from muscles in conflict. We get in our own way. Push Hands helps us overcome that primitive fearful tightening and replace it with something much more effective.

At its best, Push Hands is done with seemingly effortless grace, like walking a tightrope or diving from a high board. It allows us to overcome our fears to perform more calmly and effectively in anything we choose.

Push Hands comes very close to being the national pastime of China in that a very high percentage of its people has engaged in it over the years.

96. **Why does the author refer to The Force from Star Wars? The reason is that practitioners use \_\_\_\_\_.**

- A primitive stress response
- B balance
- C raw strength
- D internal energy (chi)

**Answer: D**

**Explanation:**

In the second paragraph, the author mentions, "Like the fictional Star Wars characters, whose skill depends on mastering "the Force," the internal martial artist cultivates and directs internal energy, called chi."

Hence, the answer is option D.

97. **The trick in Push Hands is to \_\_\_\_\_.**

- A create muscular tension
- B release the tension in your body
- C push harder than your opponent
- D provoke a primitive stress response

**Answer: B**

**Explanation:**

The author states how the use of muscular force is counterproductive in t'ai chi and hence, in Push Hands. He also mentions, "Push Hands helps us overcome that primitive fearful tightening and replace it with something much more effective."

Thus, the trick in Push Hands is to release the tension in your body and not let the body tighten up even in the most troublesome of situations.

Hence, the answer is option B.

98. **Why is t'ai chi considered an "internal martial art?"**

- A It is closer to meditation than battle
- B It uses energy rather than strength to produce its effect
- C It is more graceful than most martial arts
- D It cannot be used in actual combat

**Answer: B**



**Explanation:**

"Why is t'ai chi considered an "internal" martial art? Like the fictional Star Wars characters, whose skill depends on mastering "the Force," the internal martial artist cultivates and directs internal energy, called chi. The use of muscular force actually interrupts the circulation of this energy."

Thus, T'ai chi is more about controlling internal energy than using muscular strength.

Hence, the answer is option B.

99. **Which of the following shows the purpose of this passage?**

- A To show how t'ai chi is an internal martial art
- B To describe the t'ai chi exercise called Push Hands
- C To show the importance of balance
- D To indicate differences between various martial arts

**Answer: B**

**Explanation:**

Throughout the passage, the author mentions Push Hands and how it is related to T'ai Chi. They also mention the requirements and tricks for the exercise and how its practice can be beneficial to us in our lives.

Hence, the answer is option B.

100. **Which of the following are indicated as main components of Push Hands?**

- A force and flexibility
- B balance and energy
- C focus and balance
- D focus and energy

**Answer: B**

**Explanation:**

The author states that "Push Hands" is an exercise designed to develop the skills of T'ai Chi. They also explain that T'ai Chi is an internal art and deals with internal energy called "chi" rather than muscular strength.

They also mention that the major component of Push Hands is to maintain your balance and to break your opponents.

Hence, the answer is option B.