

# IIFT 2012 Question Paper

## Section 1 part 2

### Instructions [1 - 5]

Analyse the following chart showing the exports and imports of Sono Ltd. and answer the questions based on this chart



1. Approximately by what percentage are the total Exports greater/ smaller than the total imports for the given period?

- A Greater by 9 percent
- B Smaller by 10 percent
- C Smaller by 9 percent
- D Greater by 10 percent

**Answer: C**

#### Explanation:

Total Imports during the given period =  $275 + 250 + 225 + 225 + 275 + 200 + 175 + 175 + 200 + 175 = 2175$

Total Exports during the given period =  $112.5 + 150 + 150 + 275 + 200 + 175 + 200 + 200 + 262.5 + 250 = 1975$

$$\frac{2175 - 1975}{2175}$$

Thus, Total exports is smaller than Total imports by  $\approx 9\%$

Hence, option C is the correct answer.

2. If the absolute difference between imports and exports are ranked in ascending order, which year gets 4th rank?

- A 2010
- B 2008

**C** 2009

**D** None of the above

**Answer: A**

**Explanation:**

The absolute difference year wise is:-

$$2002 = 275 - 112.5 = 162.5$$

$$2003 = 250 - 150 = 100$$

$$2004 = 225 - 150 = 75$$

$$2005 = 225 - 200 = 25$$

$$2006 = 275 - 175 = 100$$

$$2007 = 200 - 200 = 0$$

$$2008 = 275 - 175 = 100$$

$$2009 = 200 - 175 = 25$$

$$2010 = 262.5 - 200 = 62.5$$

$$2011 = 250 - 175 = 75$$

Thus, in ascending they'll be 2007, 2009/2005, 2005/2009, 2010, 2006/2008/2003, 2006/2008/2003, 2006/2008/2003, 2002

Thus, year 2010 will rank 4th.

Hence, option A is the correct answer.

**3. In which year was the fifth largest annual percentage increase in exports recorded?**

**A** 2007

**B** 2005

**C** 2009

**D** None of the above

**Answer: A**

**Explanation:**

The annual % increase in exports is as shown below:-

$$2003 = \frac{150 - 112.5}{112.5} = 33.33\%$$

$$2004 = 0\%$$

$$2005 = \frac{200 - 150}{150} = 33.33\%$$

$$2006 = -ve$$

$$2007 = \frac{200 - 175}{175} = 14.28\%$$

$$2008 = \frac{275 - 200}{200} = 37.5\%$$

$$2009 = -ve$$

$$2010 = \frac{262.5 - 200}{200} = 31.5\%$$

Thus, In 2007 was the fifth largest annual percentage increase in exports recorded.

Hence, option A is the correct answer.

**4. Which year saw the second largest annual percentage increase in imports?**

- A** 2010
- B** 2005
- C** 2006
- D** None of the above

**Answer: A**

**Explanation:**

The annual % increase in exports is as shown below:-

2003 = -ve

2004 = -ve

2005 = 0%

2006 =  $-\frac{275-200}{200} = 22.22\%$

2007 = -ve

2008 = -ve

2009 = 0%

2010 =  $\frac{200-175}{175} = 14.28\%$ .

Thus, year 2010 saw the second largest annual percentage increase in imports.

5. What is the approximate percentage point difference in the maximum annual percentage increase in export and the minimum annual percentage decrease in Imports?

- A** 28
- B** 48
- C** 64
- D** 12

**Answer: A**

**Explanation:**

The annual % increase in exports is as shown below:-

2003 =  $\frac{150-112.5}{112.5} = 33.33\%$

2004 = 0%

2005 =  $\frac{200-150}{150} = 33.33\%$

2006 = -ve

2007 =  $\frac{200-175}{175} = 14.28\%$

2008 =  $\frac{275-200}{200} = 37.5\%$

2009 = -ve

2010 =  $\frac{262.5-200}{200} = 31.5\%$ .

Thus, the maximum % increase in exports = 37.5%

The lowest % decrease in the year 2003 and =  $\frac{275-200}{275} = 9.09\%$

Thus, the required difference =  $37.5 - 9.09 \approx 28\%$

Hence, option A is the correct answer.

### Instructions [6 - 11 ]

Answer the questions on the basis of the table given below Table: Production of Major Minerals and Metals (Million Tonnes)

Year	Aluminium	Coal	Copper	Gold	Iron Ore
2005	69	91	71	15	100
2006	75	88	75	18	120
2007	81	97	79	21	102
2008	98	107	88	25	131
2009	93	110	92	24	143
2010	99	116	97	20	154
2011	105	122	103	25	163

6. Which mineral/metal witnessed highest growth rate in production from 2005 to 2011?

- A Iron Ore
- B Aluminium
- C Gold
- D Copper

**Answer: C**

**Explanation:**

$$163 - 100$$

$$\text{Growth of Iron Ore} = \frac{105 - 69}{100} = 63\%$$

$$\text{Growth of Aluminum} = \frac{25 - 15}{69} \approx 50\%$$

$$\text{Growth of Gold} = \frac{25 - 15}{103 - 71} = 66.66\%$$

$$\text{Growth of Copper} = \frac{71 - 15}{71} \approx 45\%$$

Thus, Gold witnessed highest growth rate in production from 2005 to 2011.

Hence, option C is the correct answer.

7. Which year has witnessed highest absolute increase in total production of minerals and metals?

- A 2006
- B 2008
- C 2011
- D None of the above

**Answer: B**

**Explanation:**

The year wise total production of minerals and metals is as shown below:-

$$2005 = 69+91+71+15+100 = 346$$

$$2006 = 75+88+75+18+120 = 376$$

$$2007 = 81+97+79+21+102 = 380$$

$$2008 = 98+107+88+25+131 = 449$$

$$2009 = 93+110+92+24+143 = 462$$

$$2010 = 99+116+97+20+154 = 486$$

$$2011 = 105+122+103+125+103 = 518$$

The y-o-y increase in the total production of minerals and metals is as shown below:-

$$2006 = 376-346 = 30$$

$$2007 = 380-376 = 4$$

$$2008 = 449-380 = 69$$

$$2009 = 462-449 = 13$$

$$2010 = 486-462 = 24$$

$$2011 = 518-486 = 32$$

Thus, year 2008 has witnessed highest absolute increase in total production of minerals and metals.

Hence, option B is the correct answer.

#### 8. Highest annual growth rate in production is recorded in

**A** Iron Ore in 2008

**B** Gold in 2011

**C** Aluminium in 2008

**D** Gold in 2006

**Answer:** A

**Explanation:**

$$131 - 102$$

$$\text{The Growth rate of Iron Ore in 2008} = \frac{131 - 102}{102} \approx 30\%$$

$$25 - 20$$

$$\text{The Growth rate of Gold in 2011} = \frac{25 - 20}{98 - 81} = 25\%$$

$$98 - 81$$

$$\text{The Growth rate of Aluminium in 2008} = \frac{81 - 18}{18 - 15} \approx 21\%$$

$$18 - 15$$

$$\text{The Growth rate of Iron Ore in 2008} = \frac{15}{15} = 20\%$$

Hence, Highest annual growth rate in production is recorded in Iron Ore in 2008.

Hence, option A is the correct answer.

#### 9. If annual average growth rate in production exhibited during 2006 to 2011 continues for next 4 years, then what will be the approximate production of aluminium in the year 2015?

**A** 125 million tonnes

**B** 140 million tonnes

**C** 155 million tonnes

**D** 160 million tonnes

**Answer: B**

**Explanation:**

$$\frac{105-75}{75}$$

The average growth rate of aluminum from 2006-2011 =  $5 = 8\%$

Thus, the average production of aluminum in 2015 =  $105 \times (1+0.08 \times 4) = 140$  tonnes

Hence, option B is the correct answer.

10. **In which year is the proportion of copper production in the total mineral and metal production the highest?**

**A** 2010

**B** 2008

**C** 2009

**D** 2007

**Answer: D**

**Explanation:**

The year wise total production of minerals and metals is as shown below:-

$$2005 = 69+91+71+15+100 = 346$$

$$2006 = 75+88+75+18+120 = 376$$

$$2007 = 81+97+79+21+102 = 380$$

$$2008 = 98+107+88+25+131 = 449$$

$$2009 = 93+110+92+24+143 = 462$$

$$2010 = 99+116+97+20+154 = 486$$

$$2011 = 105+122+103+125+103 = 215$$

79

Thus, the proportion of Copper in 2007 =  $\frac{360}{88} > 20\%$

88

The proportion of Copper in 2008 =  $\frac{449}{92} < 20\%$

92

The proportion of Copper in 2009 =  $\frac{462}{97} < 20\%$

97

The proportion of Copper in 2010 =  $\frac{486}{97} < 20\%$

Thus, as we can see the proportion of Copper in 2007 is the highest.

Hence, option A is the correct answer.

11. **Which mineral/metal witnessed the minimum growth rate in production from 2006 to 2010?**

- A** Aluminium
- B** Coal
- C** Copper
- D** Gold

**Answer:** D

**Explanation:**

$$\frac{99 - 75}{75}$$

The growth rate of Aluminum from 2006-2010 =  $\frac{99 - 75}{75} \approx 33.33\%$

$$\frac{116 - 88}{88}$$

The growth rate of Coal from 2006-2010 =  $\frac{116 - 88}{88} \approx 28.8\%$

$$\frac{97 - 75}{75}$$

The growth rate of Copper from 2006-2010 =  $\frac{97 - 75}{75} \approx 29.33\%$

$$\frac{20 - 18}{18}$$

The growth rate of Gold from 2006-2010 =  $\frac{20 - 18}{18} \approx 11.11\%$

Thus, Gold witnessed the minimum growth rate in production from 2006 to 2010. Hence, option D is the correct answer.

**Instructions [12 - 14 ]**

Answer the questions on the basis of the following table.

**Table : Region Wise Origin of Foreign Tourists Arriving Into India**

	Region	Number of Arrivals			
		2007	2008	2009	2010
1	North America	1,007,276	1,027,297	1,051,209	1,173,664
2	Central and South America	42,319	43,505	46,604	54,728
3	Western Europe	1,686,083	1,709,525	1,634,042	1,750,342
4	Eastern Europe	152,764	185,110	183,475	227,650
5	Africa	157,485	141,750	164,474	204,525
6	West Asia	171,661	210,542	204,843	235,317
7	South Asia	982,428	1,051,846	1,001,401	1,047,444
8	South East Asia	303,475	332,925	360,191	409,043
9	East Asia	352,037	355,230	322,797	411,947
10	Australasia	167,063	178,308	182,451	210,275
11	Others	58,913	35,565	16,212	12,757

12. Which region witnessed the highest compound annual growth rate (CAGR) of tourists arriving into India?

- A** Eastern Europe
- B** Central and South America
- C** West Asia
- D** South East Asia

**Answer: A**

**Explanation:**

Let us solve the options one by one.

Option A:

Number of foreign tourists arriving into India from Eastern Europe in 2007 = 152764

Number of foreign tourists arriving into India from Eastern Europe in 2010 = 227650

$$\text{CAGR} = \frac{227650 - 152764}{152764} \times \frac{1}{3} * 100$$

$$= 16.34\%$$

Option B:

Number of foreign tourists arriving into India from Central and South America in 2007 = 42319

Number of foreign tourists arriving into India from Central and South America in 2010 = 54728

$$\text{CAGR} = \frac{54728 - 42319}{42319} \times \frac{1}{3} * 100$$

$$= 9.77\%$$

Option C:

Number of foreign tourists arriving into India from West Asia in 2007 = 171661

Number of foreign tourists arriving into India from West Asia in 2010 = 235317

$$\text{CAGR} = \frac{235317 - 171661}{171661} \times \frac{1}{3} * 100$$

$$= 12.36\%$$

Option D:

Number of foreign tourists arriving into India from South East Asia in 2007 = 303475

Number of foreign tourists arriving into India from South East Asia in 2010 = 409043

$$\text{CAGR} = \frac{409043 - 303475}{303475} \times \frac{1}{3} * 100$$

$$= 11.59\%$$

A is the correct answer.

13. **Tourists arriving into India from how many regions experienced CAGR of more than 10%?**

**A** Three

**B** Four

**C** Five

**D** Two

**Answer: A**

**Explanation:**

$$\text{CAGR of North America} = \frac{1173664 - 1007276}{1007276} \times \frac{1}{3} * 100 = 5.5\%$$

$$\text{CAGR of Central and South America} = \frac{54728 - 42319}{42319} \times \frac{1}{3} * 100 = 9.7\%$$

$$\text{CAGR of Western Europe} = \frac{1750342-1686083}{1686083} \times \frac{1}{3} * 100 = 1.3\%$$

$$\text{CAGR of Eastern Europe} = \frac{227650-152764}{152764} \times \frac{1}{3} * 100 = 16.34\%$$

$$\text{CAGR of Africa} = \frac{204525-157484}{157484} \times \frac{1}{3} * 100 = 9.9\%$$

$$\text{CAGR of West Asia} = \frac{235317-171661}{171661} \times \frac{1}{3} * 100 = 12.36\%$$

$$\text{CAGR of South Asia} = \frac{1047444-982428}{982428} \times \frac{1}{3} * 100 = 2.2\%$$

$$\text{CAGR of South East Asia} = \frac{409043-303475}{303475} \times \frac{1}{3} * 100 = 11.59\%$$

$$\text{CAGR of East Asia} = \frac{411947-352037}{352037} \times \frac{1}{3} * 100 = 5.6\%$$

$$\text{CAGR of North America} = \frac{210275-167063}{167063} \times \frac{1}{3} * 100 = 8.6\%$$

$$\text{CAGR of Others} = \frac{12757-58913}{58913} \times \frac{1}{3} * 100 = -26.11\%$$

Only 3 countries have CAGR more than 10%.

A is the correct answer.

14. The highest annual growth rate recorded in tourists arriving from any region in any year is

- A Africa
- B Eastern Europe
- C West Asia
- D East Asia

**Answer: D**

**Explanation:**

**Africa:**

The growth recorded in 2008 is negative.

$$\text{The growth recorded in 2009} = \frac{(164474-141750)}{141750} \times 100 = 16.03\%$$

$$\text{The growth recorded in 2010} = \frac{(204525-164474)}{164474} \times 100 = 24.35\%$$

**Eastern Europe:**

$$\text{The growth recorded in 2008} = \frac{(185110-152764)}{152764} \times 100 = 21.17\%$$

The growth recorded in 2009 was negative.

$$\text{The growth recorded in 2010} = \frac{(227650-183475)}{183475} \times 100 = 24.08\%$$

**West Asia:**

$$\text{The growth recorded in 2008} = \frac{(210542-171661)}{171661} \times 100 = 22.64\%$$

The growth recorded in 2009 was negative.

$$\text{The growth recorded in 2010} = \frac{(235317 - 204843)}{204843} \times 100 = 14.8\%$$

**East Asia:**

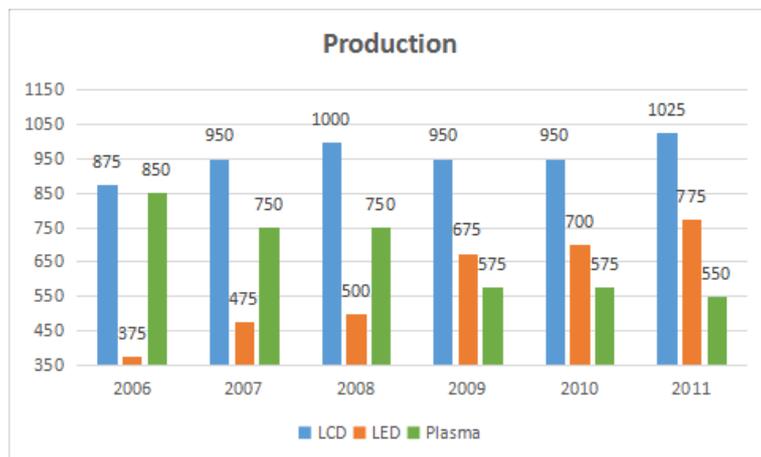
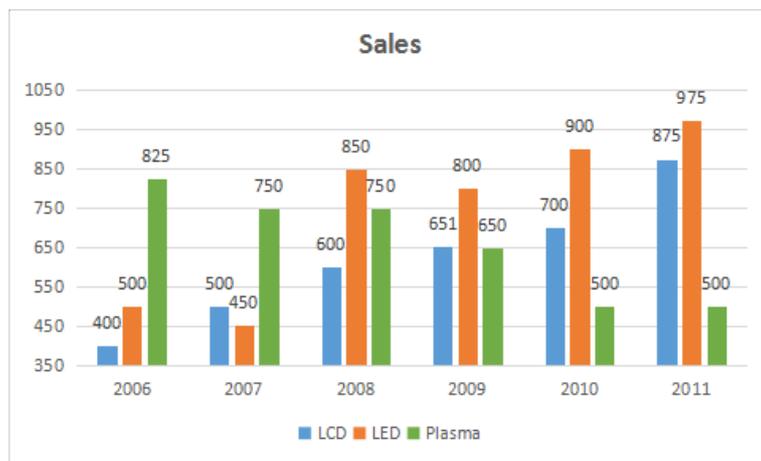
$$\text{The growth recorded in 2010} = \frac{(411947 - 322797)}{322797} \times 100 = 27.6\%$$

Since the growth recorded in 2010 in East Asia is the highest, the correct option is D.

**Instructions [15 - 17]**

Read the information given below, analyse the following chart of Domestic sales and production of a country and answer the questions

Following charts present data about the domestic sales and production of LCD, LED and Plasma TVs produced and sold in a country (in number of units). Differences in production and sales will be bridged through external trade (i.e. exports and imports) of the TV category during a given year.



15. What year has registered the highest external trade in total number of TV units?

- A 2006
- B 2007
- C 2008
- D 2010

**Answer: C**

**Explanation:**

The given information in table format is as shown below:-

	LCD			LED			Plasma			Net
	Produced	Sold	Import/Export	Produced	Sold	Import/Export	Produced	Sold	Import/Export	
<b>2006</b>	875	400	475	375	500	-125	850	825	25	375
<b>2007</b>	950	500	450	475	450	25	750	750	0	475
<b>2008</b>	1000	600	400	500	850	-350	750	750	0	50
<b>2009</b>	950	651	299	675	800	-125	575	650	-75	99
<b>2010</b>	950	700	250	700	900	-200	575	500	75	125
<b>2011</b>	1025	875	150	775	975	-200	550	500	50	0

The negative sign in Import/Export signifies Import.

The net external trade of 2006 =  $475+125+25 = 625$

Net export of 2007 =  $450+25 = 475$

Net export in 2008 =  $400+350 = 750$

Net export in 2010 =  $250+200+75 = 525$

Thus, The external trade was the highest in the year 2008

Hence, option C is the correct answer.

16. In which year are the net exports (exports - imports) of all the categories taken together the highest?

**A** 2006

**B** 2007

**C** 2009

**D** 2010

**Answer: B**

**Explanation:**

The given information in table format is as shown below:-

	LCD			LED			Plasma			Net
	Produced	Sold	Import/Export	Produced	Sold	Import/Export	Produced	Sold	Import/Export	
<b>2006</b>	875	400	475	375	500	-125	850	825	25	375
<b>2007</b>	950	500	450	475	450	25	750	750	0	475
<b>2008</b>	1000	600	400	500	850	-350	750	750	0	50
<b>2009</b>	950	651	299	675	800	-125	575	650	-75	99
<b>2010</b>	950	700	250	700	900	-200	575	500	75	125
<b>2011</b>	1025	875	150	775	975	-200	550	500	50	0

The negative sign in Import/Export signifies Import

Thus, in the year 2007 are the net exports (exports - imports) of all the categories taken together the highest.

Hence, option B is the correct answer.

17. Examine the following statements

**I. LCD TVs were always exported**

**II. Net exports of all the categories of TVs for all the years is 1275**

**III. In only one year the production of plasma TVs fell short of sales Select the best option**

**A** Statement I alone is correct

**B** Statement I and II are correct

**C** Statement I and III are correct

**D** All three statements are correct

**Answer: C**

**Explanation:**

The given information in table format is as shown below:-

	LCD			LED			Plasma			Net
	Produced	Sold	Import/Export	Produced	Sold	Import/Export	Produced	Sold	Import/Export	
2006	875	400	475	375	500	-125	850	825	25	375
2007	950	500	450	475	450	25	750	750	0	475
2008	1000	600	400	500	850	-350	750	750	0	50
2009	950	651	299	675	800	-125	575	650	-75	99
2010	950	700	250	700	900	-200	575	500	75	125
2011	1025	875	150	775	975	-200	550	500	50	0

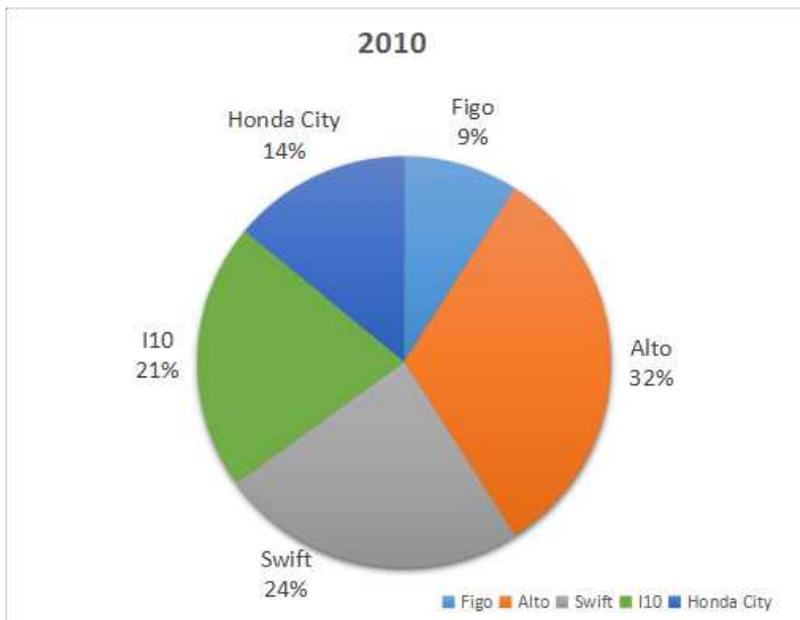
The negative sign in Import/Export signifies Import

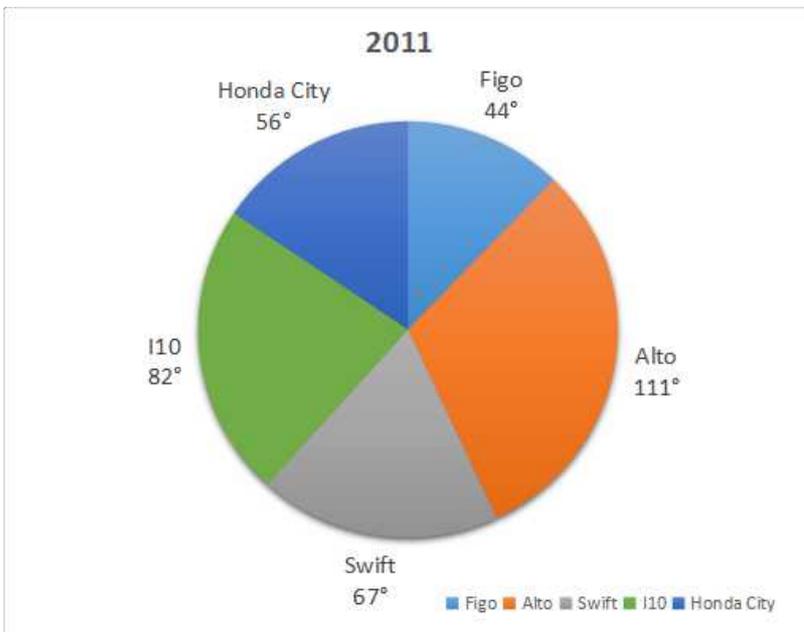
Thus, from the table we can see that Statement I and Statement III are correct whereas Statement II is false.

Hence, option C is the correct answer.

**Instructions [18 - 19]**

Study the following pie charts regarding to sales of 5 models of cars for the years 2010 and 2011, and answer the question





18. If the 2010 sales for all car models is 80,000 and these have grown by 25% in 2011, then what is the approximate increase in the number of Figo cars sold in 2011 over 2010?

- A 4,860
- B 12,200
- C 4,500
- D 2,200

**Answer:** A

**Explanation:**

	2010	2011	Growth
<b>Figo</b>	7200	12222	69.75%
<b>Alto</b>	25600	30833	20.44%
<b>Swift</b>	19200	18611	-3.06%
<b>I10</b>	16800	22777	35.58%
<b>Honda City</b>	11200	15555	38.88%

Thus, the approximate increase in the number of Figo cars sold in 2011 over 2010 =  $12222 - 7200 = 5002$ . Thus, the closest option is option A and is thus the answer.

19. If the 2010 sales for all car models is 80,000 and these have grown by 25% in 2011, then how many models have grown more than the average growth rate for all the models taken together?

- A 2
- B 3

**C** 4

**D** None of the above

**Answer: B**

**Explanation:**

	<b>2010</b>	<b>2011</b>	<b>Growth</b>
<b>Figo</b>	7200	12222	69.75%
<b>Alto</b>	25600	30833	20.44%
<b>Swift</b>	19200	18611	-3.06%
<b>I10</b>	16800	22777	35.58%
<b>Honda City</b>	11200	15555	38.88%

Thus, we can see that 3 models have grown more than the average growth rate(of 25%) for all the models taken together.

Hence, option B is the correct answer.

## Section 2

20. If  $k$  is an integer and  $0.0010101 \times 10^k$  is greater than 1000, what is the least possible value of  $k$ ?

**A** 4

**B** 5

**C** 6

**D** 7

**Answer: C**

**Explanation:**

0.0010101 to make it greater than 1000 we will have to shift the decimal point by 6 places.

Thus, we will have to multiply the given number by  $10^6$ .

Hence, option C is the correct answer.

21. Ashish is studying late into the night and is hungry. He opens his mother's snack cupboard without switching on the lights, knowing that his mother has kept 10 packets of chips and biscuits in the cupboard. He pulls out 3 packets from the cupboard, and all of them turn out to be chips. What is the probability that the snack cupboard contains 1 packet of biscuits and 9 packets of chips?

- A 6/55
- B 12/73
- C 14/55
- D 7/50

**Answer: C**

**Explanation:**

We are given that  $C+B = 10$

Thus, the cases are  $C=3$  and  $B = 7$

$C = 4$  and  $B = 6$

$C = 5$  and  $B = 5$

$C = 6$  and  $B = 4$

$C = 7$  and  $B = 3$

$C = 8$  and  $B = 2$

$C = 9$  and  $B = 1$

$C = 10$  and  $B = 0$

Our required case =  $C = 9$  and  $B = 1$

$$\begin{aligned} \text{Thus, the required probability} &= {}^{10}C_3 + {}^9C_3 + {}^8C_3 + {}^7C_3 + {}^6C_3 + {}^5C_3 + {}^4C_3 + {}^3C_3 \\ &= 14 \\ &= \frac{14}{55} \end{aligned}$$

Hence, option C is the correct answer.

22. **The equation  $7^{x-1} + 11^{x-1} = 170$  has**

- A no solution
- B one solution
- C two solutions
- D three solutions

**Answer: B**

**Explanation:**

Let us start by putting the value of  $x$ .

When  $x = 1$ ,

$$7^{x-1} + 11^{x-1} = 1 + 1 = 2$$

When  $x=2$ ,

$$7^{x-1} + 11^{x-1} = 7 + 11 = 17$$

When  $x=3$ ,

$$7^{x-1} + 11^{x-1} = 49 + 121 = 170$$

When  $x=4$ ,

$$7^{x-1} + 11^{x-1} = 243 + 1331 = 1574$$

As we can see  $7^{x-1} + 11^{x-1}$  is an increasing function and the only value that satisfies  $7^{x-1} + 11^{x-1} =$

170 is  $x=3$

Thus, the given equation has only 1 solution.

Hence, option B is the correct answer.

23. The annual production in cement industry is subject to business cycles. The production increases for two consecutive years consistently by 18% and decreases by 12% in the third year. Again in the next two years, it increases by 18% each year and decreases by 12% in the third year. Talking 2008 as the base year, what will be the approximate effect on cement production in 2012?

A 24% increase

B 37% decrease

C 45% increase

D 60% decrease

**Answer: C**

**Explanation:**

Let 100 be the value in 2008.

In 2009 it will become  $100 \times 1.18$

In 2010 it will become  $100 \times 1.18 \times 1.18$

In 2011 it will become  $100 \times 1.18 \times 1.18 \times 0.88$

In 2012 it will become  $100 \times 1.18 \times 1.18 \times 0.88 \times 1.18 \approx 145$

thus, the effect = 45%

Hence, option C is the correct answer.

24. If  $\log 3, \log(3^x - 2)$  and  $\log(3^x + 4)$  are in arithmetic progression, then x is equal to

A  $\frac{8}{3}$

B  $\log_3 8$

C  $\log_2 3$

D 8

**Answer: B**

**Explanation:**

If  $\log 3, \log(3^x - 2)$  and  $\log(3^x + 4)$  are in arithmetic progression

Then,  $2 * \log(3^x - 2) = \log 3 + \log(3^x + 4)$

Thus,  $\log(3^x - 2)^2 = \log 3(3^x + 4)$

Thus,  $(3^x - 2)^2 = 3(3^x + 4)$

$\Rightarrow 3^{2x} - 4 * 3^x + 4 = 3 * 3^x + 12$

$\Rightarrow 3^{2x} - 7 * 3^x - 8 = 0$

$\Rightarrow (3^x + 1) * (3^x - 8) = 0$

But  $3^x + 1 \neq 0$

Thus,  $3^x = 8$

Hence,  $x = \log_3 8$

Hence, option B is the correct answer.

25. **A student is required to answer 6 out of 10 questions in an examination. The questions are divided into two groups, each containing 5 questions. She is not allowed to attempt more than 4 questions from each group. The number of different ways in which the student can choose the 6 questions is**

**A** 100

**B** 160

**C** 200

**D** 280

**Answer: C**

**Explanation:**

There are 3 ways in which she can answer the questions:-

1. 3 from group 1 and 3 from group 2

She can select 3 questions from each group in  ${}^5C_3$  ways and thus the total number of ways =  ${}^5C_3 * {}^5C_3 = 100$

2. 4 questions from group 1 and 2 questions from group 2.

She can select 4 questions from group 1 in 5 ways and 2 questions from group 2 in 10 ways and thus, total number of ways = 50

Same will be the case for 4 questions from group 2 and 2 questions from group 1

Thus, the total number of ways =  $100 + 50 + 50 = 200$

Hence, option C is the correct answer.

26. **The answer sheets of 5 engineering students can be checked by any one of 9 professors. What is the probability that all the 5 answer sheets are checked by exactly 2 professors?**

**A** 20/2187

**B** 40/2187

**C** 40/729

**D** None of the above

**Answer: B**

**Explanation:**

Each of the 5 papers can be checked by any of the 9 professors and thus the total number of way =  $9^5$

Selecting exactly 2 of the 9 professors can be done in  ${}^9C_2$  way = 36

They can correct the 5 papers in  $2^5 - 2$  (all the 5 papers checked by the same professor) = 30 ways.

Thus, the total number of ways =  $\frac{36 * 30}{40}$

Hence, the required probability =  $\frac{36 * 30}{9^5} = \frac{40}{2187}$

Hence, option B is the correct answer.

27. Mr. Mishra invested Rs.25,000 in two fixed deposits X and Y offering compound interest @ 6% per annum and 8% per annum respectively. If the total amount of interest accrued in two years through both fixed deposits is Rs.3518, the amount invested in Scheme X is

- A Rs. 12,000
- B Rs. 13,500
- C Rs. 15,000
- D Cannot be determined

**Answer: C**

**Explanation:**

Let the amount invested in X =  $x$

Thus, the amount invested in Y =  $25000 - x$

The interest incurred = 3518 Rs, thus the total amount at the end of the 2nd year = 28518 Rs.

$$\text{Thus, } x * (1.06)^2 + (25000 - x) * (1.08)^2 = 28518$$

$$\Rightarrow x * 1.1236 + 25000 * 1.1664 - x * 1.1664 = 28518$$

$$\Rightarrow -0.0428x + 29160 = 28518$$

$$\Rightarrow 642 = 0.0428x$$

Hence,  $x = 15000Rs$

Hence, option C is the correct answer.

28. The probability that in a household LPG will last 60 days or more is 0.8 and that it will last at most 90 days is 0.6. The probability that the LPG will last 60 to 90 days is

- A 0.40
- B 0.50
- C 0.75
- D None of the above

**Answer: A**

**Explanation:**

The probability that the LPG will last atmost 90 days = 0.6

Thus, the probability that the LPG will last more than 90 days = 0.4

The probability that the LPG will last more than 60 days = 0.8 = The probability that the LPG will last 60 to 90 days + The probability that the LPG will last more than 90 days

Hence,  $0.4 + \text{The probability that the LPG will last 60 to 90 days} = 0.8$

Hence, The probability that the LPG will last 60 to 90 days =  $0.8 - 0.4 = 0.4$

Hence, option A is the correct answer.

29. In 2011, Plasma - a pharmaceutical company - allocated  $Rs.4.5 \times 10^7$  for Research and Development. In 2012, the company allocated Rs.60,000,000 for Research and Development. If each year the funds are evenly divided among  $2 \times 10^2$  departments, how much more will each department receive this year than it did last year?

A  $Rs.2.0 \times 10^5$

B  $Rs.7.5 \times 10^5$

C  $Rs.7.5 \times 10^4$

D  $Rs.2.5 \times 10^7$

**Answer: C**

**Explanation:**

Total amount allotted in 2011 =  $4.5 \times 10^7$

Total number of departments = 200

Thus, the amount received by each department = 225000

Total amount allotted in 2012 = 60000000

The amount received by each department = 300000

Thus the excess of amount each department is getting =  $300000 - 225000 = 750000 = Rs. 7.5 \times 10^4$

Hence, option C is the correct answer.

30. In a circular field, there is a rectangular tank of length 130 m and breadth 110 m. If the area of the land portion of the field is  $20350 \text{ m}^2$  then the radius of the field is

A 85 m

B 95 m

C 105 m

D 115 m

**Answer: C**

**Explanation:**

The area covered by the rectangular tank =  $130 \times 110 = 14300 \text{ m}^2$

The total area of the field =  $20350 + 14300 = 34650 \text{ m}^2$

We know,  $34650 \text{ m}^2 = \pi * r^2$

Thus,  $r^2 = \frac{34650 * 7}{22}$

Thus,  $r = 105 \text{ m}$

Hence, option C is the correct answer.

31. A hemispherical bowl is filled with hot water to the brim. The contents of the bowl are transferred into a cylindrical vessel whose radius is 50% more than its height. If diameter of the bowl is the same as that of the vessel, the volume of the hot water in the cylindrical vessel is

- A** 60% of the cylindrical vessel
- B** 80% of the cylindrical vessel
- C** 100% of the cylindrical vessel
- D** None of the above

**Answer:** C

**Explanation:**

The volume of the hot water in the hemispherical bowl =  $\frac{2*\pi*r^3}{3}$

Given that Radius of the hemispherical bowl and that of the cylindrical vessel is the same.

Also, radius is 50% more than its height.

Thus,  $h = \frac{2r}{3}$

Thus, the volume of the cylindrical vessel =  $\frac{2*\pi*r^3}{3}$

Hence, the volume of the hot water in the cylindrical vessel is 100% of the cylindrical vessel.

Hence, option C is the correct answer.

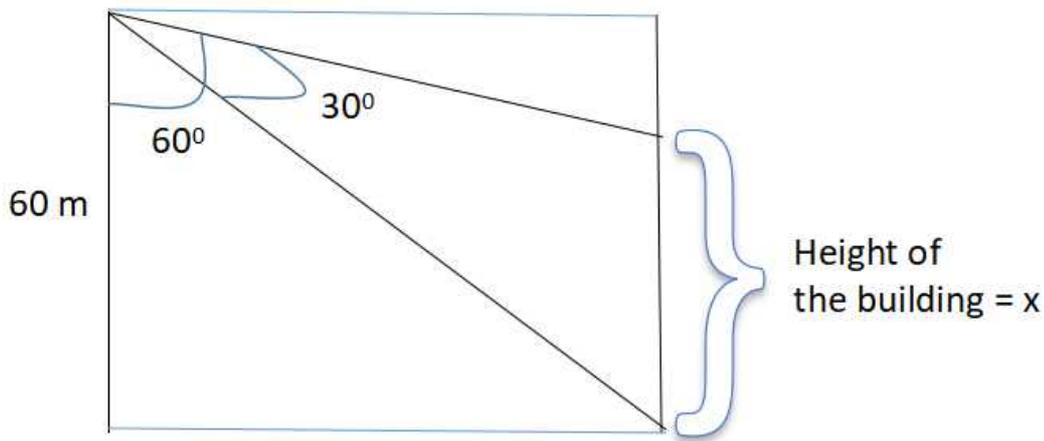
32. **There are two buildings, one on each bank of a river, opposite to each other. From the top of one building - 60 m high, the angles of depression of the top and the foot of the other building are 30° and 60° respectively. What is the height of the other building?**

- A** 30 m
- B** 18 m
- C** 40 m
- D** 20 m

**Answer:** C

**Explanation:**

The given situation is as shown:-



Width of the river =  $\tan 30^\circ * 60 = 20\sqrt{3}$

Now  $\tan 30^\circ = \frac{60-x}{20\sqrt{3}}$

Solving we get  $x = 40$ m

Thus, the height of the building = 40m

Hence, option C is the correct answer.

33. It takes 15 seconds for a train travelling at 60 km/hour to cross entirely another train half its length and travelling in opposite direction at 48 km/hour. It also passes a bridge in 51 seconds. The length of the bridge is

A 550 m

B 450 m

C 500 m

D 600 m

**Answer: A**

**Explanation:**

Speed of train 1 = 60 km/hr =  $\frac{50}{3}$  m/s

Speed of train 2 = 48 km/hr =  $\frac{40}{3}$  m/s

Thus, their relative speed =  $\frac{90}{3} = 30$  m/s

Let, Length of train 1 =  $l$

Thus, the length of train 2 will be  $0.5l$

Time taken by them to cross each other = 15 s

Thus,  $15 * 30 = 1.5l$

Thus,  $l = 300$

Train 1 takes 51s to cross a bridge

Let the length of the bridge be  $b$

Thus,  $\frac{50 * 51}{3} = 300 + b$

Hence,  $850 = 300 + b$

Hence,  $b = 550$  m

Thus, option A is the correct answer.

34. 12 men can complete a work in ten days. 20 women can complete the same work in twelve days. 8 men and 4 women started working and after nine days 10 more women joined them. How many days will they now take to complete the remaining work?

- A 2 days
- B 5 days
- C 8 days
- D 10 days

**Answer:** A

**Explanation:**

12 men can complete a work in ten days. Thus, 1 men will take 120 days.

In 1 day 1 men will complete  $\frac{1}{120}$  of the work.

20 women can complete the same work in twelve days.

Thus, 1 women will take 240 days to complete the work.

Thus, In 1 day 1 women will complete  $\frac{1}{240}$  of the work.

8 men and 4 women work for 9 days completing  $\frac{8*9}{120} + \frac{4*9}{240} = \frac{3}{4}$  of the work.

Thus,  $\frac{1}{4}$  of the work is remaining.

Now 8 men and 14 women work completing  $\frac{8}{240} + \frac{14}{240} = \frac{1}{8}$  of the work in 1 day.

To complete  $\frac{1}{4}$  they'll take 2 days.

Hence, option A is the correct answer.

35. The Howrah-Puri express can move at 45 km/hour without its rake, and the speed is diminished by a constant that varies as the square root of the number of wagons attached. If it is known that with 9 wagons, the speed is 30 km/hour, what is the greatest number of wagons with which the train can just move?

- A 63
- B 64
- C 80
- D 81

**Answer:** C

**Explanation:**

Given that,  $(45 - x) \propto \sqrt{n}$

$\Rightarrow (45 - x) = k * \sqrt{n}$

Where x is the speed of the train, k is the proportionality constant and n is the number of wagon wheels attached.

Now given that when  $n = 9$ ,  $x = 30$

Thus,  $15 = k * 3$

thus,  $k = 5$

Thus,  $45 - x = 5\sqrt{n}$

Thus, when  $n = 81$   $x = 0$

Thus, for the train to move the maximum number of wagon wheels = 80

Hence, option C is the correct answer.

36. At a reputed Engineering College in India, total expenses of a trimester are partly fixed and partly varying linearly with the number of students. The average expense per student is Rs.400 when there are 20 students and Rs.300 when there are 40 students. When there are 80 students, what is the average expense per student?

- A Rs.250
- B Rs.300
- C Rs.330
- D Rs.350

**Answer:** A

**Explanation:**

Let the total fees = T, the fixed fees = F, the number of students = n and let x be the varying fees.

Thus,  $T = F + nx$

Given, when  $n = 20$ ,  $T = 8000$

Thus,  $8000 = F + 20x$

Also, when  $n = 40$ ,  $T = 12000$

Thus,  $12000 = F + 40x$

Solving we get  $F = 4000$  and  $x = 200$

Thus, the average rent when 80 students are staying =  $4000/80 + 200 = 250$  Rs

Hence, option A is the correct answer.

37. Rohit bought 20 soaps and 12 toothpastes. He marked-up the soaps by 15% on the cost price of each, and the toothpastes by Rs.20 on the cost price each. He sold 75% of the soaps and 8 toothpastes and made a profit of Rs.385. If the cost of a toothpaste is 60% the cost of a soap and he got no return on unsold items, what was his overall profit or loss?

- A Loss of Rs.355
- B Loss of Rs.210
- C Loss of Rs.250
- D None of the above

**Answer:** A

**Explanation:**

Let the CP of 1 soap = S

Thus, the CP of 1 toothbrush =  $0.6S$

Given that, SP of 1 soap =  $1.15S$  and SP of 1 toothbrush =  $0.6S + 20$

Also,  $15 \times 1.15 \times S + 8 \times (0.6S + 20) - 15S - 8 \times 0.6 \times S = 385$

Thus, solving we get  $S = 100$

Hence, Total CP of 20 soaps and 12 toothbrush =  $20 \times 100 + 12 \times 60 = 2720$

SP of 15 soaps and 8 toothbrush =  $15 \times 1.15 \times 100 + 8 \times 80 = 2365$

Thus, the overall loss =  $2365 - 2720 = 355$  Rs.

Hence, option A is the correct answer.

38. The value of  $\sqrt{7 + \sqrt{7 - \sqrt{7 + \sqrt{7 - \dots \infty}}}}$  is

A 1

B 2

C 3

D 4

**Answer: C**

**Explanation:**

Let,  $\sqrt{7 + \sqrt{7 - \sqrt{7 + \sqrt{7 - \dots \infty}}}} = x$

Thus,  $\sqrt{7 + \sqrt{7 - x}} = x$

$\Rightarrow 7 + \sqrt{7 - x} = x^2$

$\Rightarrow 7 - x = (x^2 - 7)^2$

Putting options we get,

$x=1 \Rightarrow 6 \neq (-6)^2$

$x=2 \Rightarrow 5 \neq (-3)^2$

$x=3 \Rightarrow 4 = (9 - 7)^2$

$x=4 \Rightarrow 3 \neq (9)^2$

Hence, option C is the correct answer.

39. The unit digit in the product of  $(8267)^{153} \times (341)^{72}$  is

A 1

B 2

C 7

D 9

**Answer: C**

**Explanation:**

The unit digit in the product of  $(8267)^{153} \times (341)^{72}$  is the same as the unit digit in the product of

$$(7)^{153} \times (1)^{72}$$

1 raised to anything is 1.

7 has a cyclicity of 4. Thus,  $7^{153} = 7^1 = 7$

Hence, option C is the correct answer.

40. **Z is the product of first 31 natural numbers. If  $X = Z + 1$ , then the numbers of primes among  $X + 1, X + 2, \dots, X + 29, X + 30$  is**

**A** 30

**B** 2

**C** Cannot be determined

**D** None of the above

**Answer:** D

**Explanation:**

It is given that  $Z = 31!$

$$X = 31! + 1$$

$X+1 = 31!+2$  this is divisible by 2

$X+2 = 31!+3$  this is divisible by 3

$X+3 = 31!+4$  this is divisible by 4

.  
. .  
. .  
. .

$X+29 = 31!+30$  this is divisible by 30

$X+30 = 31!+31$  this is divisible by 31

Hence, none of  $X + 1, X + 2, \dots, X + 29, X + 30$  is a prime number.

Hence, option D is the correct answer.

41. **A 10 litre cylinder contains a mixture of water and sugar, the volume of sugar being 15% of total volume. A few litres of the mixture is released and an equal amount of water is added. Then the same amount of the mixture as before is released and replaced with water for a second time. As a result, the sugar content becomes 10% of total volume. What is the approximate quantity of mixture released each time?**

**A** 1 litres

**B** 1.2 litres

**C** 1.5 litres

**D** 2 litres

**Answer:** D

**Explanation:**

Initially in the 10L solution there is 1.5L sugar and 8.5L water.

We know that:-

Final volume of sugar = Initial volume of sugar\*(Volume of solution that is not drawn out/total volume of solution)<sup>n</sup>

$$10 - x$$

i.e  $1 = 1.5 * (10 - x)^2$  Where x is the volume of the solution drawn out.

$$\text{Thus, } 200 = 3 * (10^2 - 20x + x^2)$$

Solving we get  $x \approx 1.873$

The closest value in the option is option D.

Thus, option D is the correct answer.

42. **Eight points lie on the circumference of a circle. The difference between the number of triangles and the number of quadrilaterals that can be formed by connecting these points is**

- A 7
- B 14
- C 32
- D 84

**Answer: B**

**Explanation:**

The number of quadrilaterals that can be made using any 4 points out of total 8 points on the given circle =  ${}^8C_4 = 70$

The number of triangle that can be made using any 3 points out of total 8 points on the given circle =  ${}^8C_3 = 56$

Thus, the required difference =  $70 - 56 = 14$

Hence, option B is the correct answer.

43. **The perimeter of a right-angled triangle measures 234 m and the hypotenuse measures 97 m. Then the other two sides of the triangle are measured as**

- A 100 m and 37 m
- B 72 m and 65 m
- C 80 m and 57 m
- D None of the above

**Answer: B**

**Explanation:**

Hypotenuse = 97 m and perimeter = 234 m

Let the other two sides be  $a$  m and  $b$  m. \$\$

So,  $a + b = (234 - 97) \text{ m} = 137 \text{ m} \dots\dots\dots(i)$

Also, by Pythagoras Theorem,  $a^2 + b^2 = 97^2$

Or,  $(a + b)^2 - 2ab = 9409$

$$\text{Or, } 2ab = 137^2 - 9409$$

$$\text{Or, } 2ab = 9360 \dots\dots (ii)$$

$$(a - b)^2 = a^2 + b^2 - 2ab = 97^2 - 9360 = 49$$

$$\text{So, } (a - b) = 7 \text{ [Assuming } a > b \text{]} \dots\dots (iii)$$

Solving (i) and (iii), we get

$$a = 72m \text{ and } b = 65m$$

Hence, option B is the correct answer.

44. A sum of Rs.1400 is divided amongst A, B, C and D such that A's share : B's share = B's share : C's share = C's share = D's share =  $\frac{3}{4}$  how much is C's share?

- A Rs.72
- B Rs.288
- C Rs.216
- D Rs.384

**Answer: D**

**Explanation:**

$$A:B = B:C = C:D = 3:4$$

Let C be 3x and D be 4x

$$B : C = 3 : 4 \text{ and } C = 3x \text{ So, } B = 9x/4$$

$$A : B = 3 : 4 \text{ and } B = 9x/4 \text{ So, } A = 27x/16$$

Therefore, A : B : C : D is  $27x/16 : 9x/4 : 3x : 4x$

$$\text{Also, } A + B + C + D = \text{Rs. } 1400$$

On solving, we get  $x = 128$

$$\text{Therefore, C's share} = 3x = \text{Rs. } 384$$

Hence, option D is the correct answer.

## Section III part 1

### Instructions [45 - 46 ]

A number of sentences are given below, which when properly sequenced, form a coherent paragraph. Choose the most logical order of sentences from the choice given to construct a coherent paragraph.

45. I. Have you ever gone through a book that was so good you kept hugging yourself mentally as you read?
- II. Now, notice the examples I have used
- III. Have you ever seen a play or motion picture that was so charming that you felt sheer delight as you watched?
- IV. I have not spoken of books that grip you emotionally, of plays and movies that keep you on the edge of your seat in surprise, or of food that satisfies a ravenous hunger.
- V. Or perhaps you have had a portion of pumpkin pie, light and airy and mildly flavoured, and with a flaky, delicious crust, that was the last word in gustatory enjoyment?

- A** I, V, III, IV, II
- B** III, V, II, IV, I
- C** IV, II, I, III, V
- D** I, III, V, II, IV

**Answer:** D

**Explanation:**

I, III and V form a pair as they are the examples to what the author is describing.

V follows I and III as it starts with perhaps and thus, has to have some examples preceding it.

II and IV follow a mandatory pair where IV follows II as IV talks about what is given in II.

Now II and IV follows I, III and V as the "examples" talked about in II are I, III and V.

Between I and III, I will precede III as in IV the author says, "I have not spoken of books that grip you emotionally, of plays and movies that keep you on the edge of your seat in surprise, or of food that satisfies a ravenous hunger".

The order in which is goes is books, movies and plays and then food.

This is the order in I, III and V.

Thus, the correct sequence is I, III, V, II, IV

Hence, option D is the correct answer.

46. **I. All these help hasten download and optimize the farmer's usage of the internet within the available bandwidth.**
- II. ITC has learnt invaluable lessons from finding creative local solutions on the ground, to some of these apparently intractable problems.**
- III. Solutions include the use of RNS kits in the telephone exchanges or, setting up VSAT to tide over connectivity problems, and using solar power as the back-up source of electricity.**
- IV. It has also adopted special imaging techniques.**
- V. It has applied the template approach to manage content.**

- A** V, IV, I, II, III
- B** V, IV, III, I, II
- C** II, IV, I, V, III
- D** II, III, V, IV, I

**Answer:** D

**Explanation:**

II is the opening statement of the given paragraph as it talks about how ITC solved the problems which is mentioned in the remaining paragraphs.

III follows II as it then goes into particulars of what is given in II.

Between IV and V, IV will follow V as IV starts with also and thus, it is most likely be the end of the examples.

I is the obvious closing statement as it gives the effect of what solutions used by ITC.

Thus, the correct sequence is II, III, V, IV and I.

Hence, option D is the correct answer.

### Instructions [47 - 48 ]

In each question, a sentence is written in four different ways. Choose the option which gives the most effective and grammatically correct sentence. Pay attention to grammar, word choice and sentence construction.

**A** It was thought that freedom and prosperity would spread gradually throughout the world through an orderly process, and it was hoped that tyranny and injustice would continually diminish.

**B** It was gradually thought that throughout the world, freedom and prosperity would spread through an orderly process, and it was hoped that tyranny and injustice would continually diminish.

**C** Through an orderly process, it was thought that freedom and prosperity would spread gradually throughout the world, and it was hoped that tyranny and injustice would continually diminish.

**D** It was thought, through an orderly process that freedom and prosperity would spread gradually throughout the world and it was hoped that tyranny and injustice would continually diminish.

**Answer: A**

### Explanation:

We know that the adverb 'gradually' modifies 'spread' . Thus, 'gradually' should come after 'spread' and not before 'thought'

But in B the reverse is the case and thus, option B is incorrect.

Now, the adverbial phrase, 'through an orderly process' also modifies 'spread' and should be placed it after that. This is not the case either in C or D

In Both C and D it modifies 'thought' which is incorrect.

Thus, only option A is correct.

**A** He must again learn to invoke the energy of growing things and to recognize, that one can be taking from the earth and the atmosphere only so much as one puts back into them, as did the ancient in India centuries ago.

**B** As did the ancient in India centuries ago, he must again learn to invoke the energy of growing things and to recognize that one can take from the earth and the atmosphere, only so much as they put into them.

**C** He must again learn to invoke the energy of growing things and to recognize, as did the ancient in India centuries ago, that one can take from the earth and the atmosphere, only so much as one puts back into them.

**D** He must again learn, as did the ancient in India centuries ago, to invoke the energy of growing things and to recognize, that one can be taking from the earth and the atmosphere, only so much as one puts back into them.

**Answer: C**

**Explanation:**

From the context of the given sentences we can understand that the given sentence is a comparative advice.

It advises someone to learn to invoke and to recognize as his/her ancestors did.

The structure given in B and D is 'He must learn as they learnt' which is incorrect as the correct structure should be 'He must learn to recognize as they did'.

In A we are given that 'as did the ancient in India centuries ago'. This is unclear as we not sure what 'it' here is referring to. It may either mean invoke or recognize.

Thus, only option B is correct.

**Instructions [47 - 48 ]**

From the choices provided, identify the pair of words with a relationship similar to that of the given word pair.

47. **INDEFATIGABLE: INVETERATE::**

- A** Tireless: Tired
- B** Tired: Habitual
- C** Tireless: Habitual
- D** Impoverished: Habitual

**Answer: C**

**Explanation:**

'Indefatigable' means 'tireless' whereas 'inveterate' means 'having a particular habit, activity, or interest that is long-established and unlikely to change' i.e 'habitual'

Thus, option A and B can be eliminated.

Between option C and D. Impoverished in D means 'make (a person or area) poor' which is different from tireless.

Thus, option C is the correct answer.

48. **MISANTHROPE: HUMANITY::**

- A** Chauvinist: Patriot
- B** Misogynist: Women
- C** Agnostic: God
- D** Witch: Magic

**Answer: B**

**Explanation:**

Misanthrope is someone who hates the whole humanity.

The second word given is humanity. Thus, the relation between the given words is - 1st word will describe

the hate for the second word.

Among the given option only option B satisfies this condition and is thus the right answer.

In Chauvinist: Patriot here Chauvinist is someone who expresses aggressive patriotism and thus is opposite of our condition.

In Agnostic: God, Agnostic is someone who believes that there is no proof that God does not exist. This does not mean he hates God he just doubts his existence. Thus, this is not the right answer.

Witch: Magic is exactly opposite of our condition and hence cannot be the right answer.

Hence, option B is the correct answer.

### Instructions [49 - 50 ]

Choose the option which gives the correct meaning in the same order as the words.

49.

1	Arrogate	i.	clinch or seize without right
2	Arraign	ii.	embarrassment due to disappointment
3	Chagrin	iii.	to enroll for compulsory service
4	Conscript	iv.	to swing back and forth
5	Vacillate	v.	To bring before court of law

**A** 1 - v, 2 - i, 3 - iv, 4 - iii, 5 - ii

**B** 1 - i, 2 - v, 3 - ii, 4 - iii, 5 - iv

**C** 1 - ii, 2 - v, 3 - iii, 4 - i, 5 - iv

**D** 1 - iii, 2 - iv, 3 - ii, 4 - v, 5 - i

**Answer: B**

### Explanation:

Meaning of Arrogate is 'clinch or seize without right'

Meaning of Arraign is 'to bring before court of law'

Meaning of Chagrin is 'embarrassment due to disappointment'

Meaning of Conscript is 'to enroll for compulsory service'

Meaning of Vacillate is 'to swing back and forth'.

These are matched correctly only in option B and is thus our answer.

50.

1	Ephemeral	i.	an alcoholic drink taken before a meal
2	Ethereal	ii.	fleeting/short lived
3	Aperitif	iii.	frankness
4	Candour	iv.	illusion
5	Chimera	v.	spiritual/not of this world

- A** 1 - v, 2 - ii, 3 - iii, 4 - i, 5 - iv
- B** 1 - ii, 2 - iv, 3 - i, 4 - iii, 5 - v
- C** 1 - iv, 2 - v, 3 - i, 4 - ii, 5 - iii
- D** 1 - ii, 2 - v, 3 - i, 4 - iii, 5 - iv

**Answer: D**

**Explanation:**

Meaning of Ephemeral is 'fleeting/short lived'

Meaning of Ethereal is 'spiritual/not of this world'

Meaning of Aperitif is 'an alcoholic drink taken before a meal'

Meaning of Candour is 'frankness'

Meaning of Chimera is 'illusion'

These are correctly matched only in option D.

Thus, option D is the correct answer.

**Instructions [51 - 52 ]**

Each question has five sentences. Identify the sentence which is grammatically correct.

- A** Each of the six boys in the class has finished their task.
- B** One must finish his task in time.
- C** Either Ram or Shyam will give their book.
- D** Each of the girls must carry her own bag.

**Answer: D**

**Explanation:**

In Sentence A we are given 'each of the six boys' i.e. here we are referring to each of the boy i.e. singular quantity and thus, instead of 'their' it should be 'his'.

In Sentence B we have 'One' as the subject. Thus, instead of the pronoun 'his' 'one's' should be used.

In Sentence C we have used the correlative conjunction 'either—or', the verb and the pronoun should agree with the subject nearer to the verb.

Thus, Since Shyam (a singular) is nearer to the verb, the word 'their'(a plural) can't be used instead a singular word should have been used(his)

Sentence D has no error.

Hence, option D is the correct answer.

- A** The reason why he missed his classes was that he overslept.
- B** Before the rain would stop, they would have reached home.
- C** When you will come to see me, we will go to Mumbai.
- D** I have written both to their branch office and head office

**Answer: A**

**Explanation:**

Sentence A is grammatically correct.

In Sentence B there is a tense mismatch. It should be either 'Before the rain stopped, they had reached home'(past report) or 'Before the rain stops, they will have reached home'(present possibility). The only other possibility is 'Before the rain stopped, they would reach home'(a habitual past action).

In Sentence C too there is a mismatch error. As a conditional or a possible future action it should be 'When you come to see me, we will go to Mumbai.'

Sentence D should be 'I have written both to their branch office and their/the head office'.

Hence, option A is the correct answer.

**Instructions [51 - 52 ]**

Choose the most appropriate option for filling in the blanks. The sequence of words in the correct option should match the sequence of the sentences in which they should be used.

51. i. **There is so much love.....the two of them.**  
ii. **I have not seen Aditi.....Friday.**  
iii. **I started my exam preparation.....January.**  
iv. **The three sisters did not look for new friend as they were quite happy playing..... themselves.**  
v. **I have not seen Mohan.....six months.**

- A** between, from, since, among, for  
**B** among, from, for, between, since  
**C** among, since, for, between, from  
**D** between, since, from, among, for

**Answer: D**

**Explanation:**

We use 'between' to refer to two things which are clearly separated. We use 'among' to talk about things which are not clearly separated because they are part of a group or crowd or mass of objects

Thus, in i Between should be used and Among should be used in iv.

In ii the tense is 'present perfect' and the starting point of time of the action is mentioned thus, the correct word use in ii will be 'since'.

In iii the tense is simple past and the starting point of time is mentioned—January and thus, we should use 'from'.If in iii instead present perfect tense was used like in ii then we would have to use 'since'.

In v 'six months', a period of time, warrants the use of 'for'.

The only option in which all of this is correctly used is option D.

Hence, option D is the correct answer.

52. i. He succeeded.....perseverance and sheer hard work.  
ii. ....the power vested in me, I hereby declare these premises sealed.  
iii. ....his illness he could not finish his work in time.  
iv. ....need, please contact me at the emergency number indicated.

- A** by virtue of, by dint of, in case of, in consequence of  
**B** by dint of, by virtue of, in consequence of, in case of  
**C** by virtue of, in consequence of, by dint of, in case of  
**D** by dint of, in consequence of, by virtue of, in case of

**Answer: B**

**Explanation:**

In i we are given that he succeeded because of his perseverance and hand work and thus, both 'by dint of' or 'by virtue of' can be used.

In ii we are given that the person declares the power he has and thus, both 'by dint of' or 'by virtue of' can be used.

In iii we are given that the illness was the case and thus, 'in consequence of' should be used.

In iv 'in case of' should be clearly used.

Only in option B all of these are correctly used.

Hence, option B is the correct answer.

53. **Which of the following is a metaphor?**

- A** He fought like a lion  
**B** She is as cool as a cucumber  
**C** Man proposes, God disposes  
**D** He was a lion in the fight

**Answer: D**

**Explanation:**

Metaphor is a figure of speech in which a word or phrase is applied to an object or action to which it is not literally applicable. Hence, option D is correct answer.

54. **Which of the following is an oxymoron?**

- A** She accepted it, as the kind cruelty of a surgeon's knife  
**B** The camel is the ship of the desert  
**C** Art lies in concealing art

**D** Death lays his icy hands on Kings

**Answer: A**

**Explanation:**

Oxymoron : a figure of speech in which apparently contradictory terms appear in conjunction (e.g. *faith unfaithful kept him falsely true*). In option A, the term 'kind cruelty' is an oxymoron. Hence, option A is the correct answer.

**Instructions [55 - 56 ]**

Pick the correct antonym for the word given

55. **PUERILE**

**A** Adult

**B** servile

**C** Peaceful

**D** Ambiguous

**Answer: A**

**Explanation:**

Meaning of Puerile is Childishly silly and immature.

Thus, the correct antonym among the given options will be Adult.

Ambiguous is not clear or undecided.

Servile is showing excessive willingness to serve

Hence, option A is the correct answer.

56. **PROSAIC**

**A** Predisposed

**B** Useful

**C** Interesting

**D** Mundane

**Answer: C**

**Explanation:**

Prosaic means Overly plain, simple or commonplace, to the point of being boring.

Thus, the correct antonym among the given options will be Interesting.

Hence, option C is the correct answer.

**Instructions [57 - 58 ]**

Pick the word with the correct spelling

- A** Exorbitant
- B** Exhorbitant
- C** Exhobitant
- D** Exxorhbitant

**Answer:** A

**Explanation:**

The correct spelling among the given options is Exorbitant which means unreasonably high. Thus, option A is the correct answer.

- A** Acqueisence
- B** Acquiescence
- C** Acaueisence
- D** Acquescience

**Answer:** B

**Explanation:**

The correct spelling among the given words is Acquiescence which means The reluctant acceptance of something without protest.

Hence, option C is the correct answer.

**Instructions [57 - 58 ]**

Pick the odd word out

- A** Perilous
- B** Precarious
- C** Hazardous
- D** Copious

**Answer:** D

**Explanation:**

Meaning of Perilous is Full of danger or risk.

Meaning of Precarious is Not securely held or in position; dangerously likely to fall or collapse i.e. at a risk or danger.

Meaning of Hazardous is Risky; dangerous.

Meaning of Copious is Abundant in supply or quantity.

As we can clearly see option A, B and C mean the same and thus, option D is the odd man out.

Hence, option D is the correct answer.

- A** Propitiate
- B** Appreciate
- C** Appease
- D** Conciliate

**Answer: B**

**Explanation:**

Meaning of the word Propitiate is Win or regain the favour of (a god, spirit, or person) by doing something that pleases them.

Meaning of the word Appreciate is Recognize the full worth of or be grateful(for something)

Meaning of the word Appease is Pacify or placate (someone) by acceding to their demands.

Meaning of the word Conciliate is gain (esteem or goodwill).

Thus, as we can see Propitiate, Appease and Conciliate mean the same whereas Appreciate is different in meaning.

Hence, option B is the correct answer.

## **Section III part 2**

### **Instructions [57 - 60 ]**

**Read the following passages carefully and answer the questions at the end of each passage**

Asked what a business is, the typical businessman is likely to answer, "An organisation to make a profit." The typical economist is likely to give the same answer. This answer is not only false, it is irrelevant. The prevailing economic theory of the mission of business enterprise and behaviour, the maximization of profit which is simply a complicated way of phrasing the old saw of buying cheap and selling dear – may adequately explain how Richard Sears operated. But it cannot explain how Sears, Roebuck or any other business enterprise operates, or how it should operate. The concept of profit maximization is, in fact, meaningless. The danger in the concept of profit maximization is that it makes profitability appear a myth.

Profit and profitability are, however, crucial for society even more than for the individual business. Yet profitability is not the purpose of, but a limiting factor on business enterprise and business activity. Profit is not the explanation, cause, or rationale of business behaviour and business decisions, but rather the test of their validity. If archangels instead of businessmen sat in directors' chairs, they would still have to be concerned with profitability, despite their total lack of personal interest in making profits.

The root of the confusion is the mistaken belief that the motive of a person – the so called profit motive of the businessman is an explanation of his behaviour or his guide to right action. Whether there is such a thing as a profit motive at all is highly doubtful. The idea was invented by the classical economists to explain the economic reality that their theory of static equilibrium could not explain. There has never been any evidence for the existence of the profit motive, and we have long since found the true explanation of the phenomena of economic change and growth which the profit motive was first put forth to explain.

It is irrelevant for an understanding of business behaviour, profit, and profitability, whether there is a profit

motive or not. That Jim Smith is in business to make a profit concerns only him and the Recording Angel. It does not tell us what Jim Smith does and how he performs. We do not learn anything about the work of a prospector hunting for uranium in the Nevada desert by being told that he is trying to make his fortune. We do not learn anything about the work of a heart specialist by being told that he is trying to make a livelihood, or even that he is trying to benefit humanity. The profit motive and its offspring maximisation of profits are just as irrelevant to the function of a business, the purpose of a business, and the job of managing a business.

In fact, the concept is worse than irrelevant: it does harm. It is a major cause of the misunderstanding of the nature of profit in our society and of the deep-seated hostility to profit, which are among the most dangerous diseases of an industrial society. It is largely responsible for the worst mistakes of public policy – in this country as well as in Western Europe – which are squarely based on the failure to understand the nature, function, and purpose of business enterprise. And it is in large part responsible for the prevailing belief that there is an inherent contradiction between profit and a company's ability to make a social contribution. Actually, a company can make a social contribution only if it is highly profitable.

To know what a business is, we have to start with its purpose. Its purpose must lie outside of the business itself. In fact, it must lie in society since business enterprise is an organ of society. There is only one valid definition of business purpose: to create a customer.

Markets are not created by God, nature, or economic forces but by business people. The want a business satisfies may have been felt by the customer before he or she was offered the means of satisfying it. Like food in a famine, it may have dominated the customer's life and filled all his waking moments, but it remained a potential want until the action of business people converted it into effective demand. Only then is there a customer and a market. The want may have been unfelt by the potential customer; no one knew that he wanted a Xerox machine or a computer until these became available. There may have been no want at all until business action created it – by innovation, by credit, by advertising, or by salesmanship. In every case, it is business action that creates the customer.

**57. The author of this passage is of the opinion that profits and profitability are:**

- A** The purpose of setting up a business
- B** The sole goal and responsibility of a businessman
- C** The test of validity of business existence
- D** The guiding factor for a businessman's actions and decisions

**Answer: C**

**Explanation:**

The author at the start of the 2nd paragraph says, "Profit and profitability are, however, crucial for society even more.....and business decisions, but rather the test of their validity".

From this we can conclude that The author of this passage is of the opinion that profits and profitability are The test of validity of business existence.

In 1st paragraph the author says , 'The prevailing economic theory of the mission of business enterprise and behaviour, the maximization of profit' from this we can conclude that option A is incorrect.

The author in the 3rd paragraph says, 'The root of the confusion is the mistaken belief that the motive of a person – the so called profit motive of the businessman is an explanation of his behaviour or his guide to right action'. From this we can conclude that option D is incorrect.

The author says, 'If archangels instead of businessmen sat in directors' chairs, they would still have to be concerned with profitability, despite their total lack of personal interest in making profits'.From this we can conclude that option B is incorrect.

Hence, option C is the correct answer.

**58. This passage highlights that the theory of profit maximisation and profit motive**

- A** Is largely responsible for the worst mistakes in public policy
- B** Is a synchronised goal with a company's ability to make a social contribution
- C** Is the main purpose and job of managing a business
- D** Was an idea not invented by classical economists

**Answer:** A

**Explanation:**

The author says: *{In fact, the concept is worse than irrelevant: it does harm. It is a major cause of the*

*misunderstanding of the nature of profit in our society and of the deep-seated hostility to profit, which are among the most dangerous diseases of an industrial society. It is largely responsible for the worst mistakes of public policy}* From the above, we can conclude that the theory of profit maximisation and profit motive is largely responsible for the worst mistakes in public policy. Thus, Option A can be concluded.

The author in the 2nd paragraph says { *And it is in large part responsible for the prevailing belief that there is an inherent contradiction between profit and a company's ability to make a social contribution. Actually, a company can make a social contribution only if it is highly profitable*}. From this, although we can conclude that the company's ability to make a social contribution is dependent on the profit it makes we cannot conclude that the theory of profit maximisation and profit motive is a synchronised goal with a company's ability to make a social contribution. Thus, Option B cannot be concluded.

In the 1st paragraph, the author says { *Asked what a business is, the typical businessman is likely to answer, "An organisation to make a profit." The typical economist is likely to give the same answer. This answer is not only false, it is irrelevant. The prevailing economic theory of the mission of business enterprise and behaviour*}. From this, we can say that the theory of profit maximisation and profit motive is not the main purpose and job of managing a business. Thus, Option C cannot be concluded.

It is given that { *The idea was invented by the classical economists to explain the economic reality that their theory of static equilibrium could not explain. There has never been any evidence for the existence of the profit motive, and we have long since found the true explanation of the phenomena of economic change and fig growth which the profit motive was first put forth to explain*}. From this, we can conclude that the theory of profit maximisation and profit motive was an idea invented by classical economists and thus, Option D cannot be concluded.

Hence, Option A is the correct answer.

59. **As stated in this passage, the purpose of a business is to**

- A** Make profits
- B** Increase wants
- C** Create customers
- D** Manage Demand

**Answer: C**

**Explanation:**

The author in the 2nd last paragraph states, 'There is only one valid definition of business purpose: to create a customer.'

From this we can conclude that the purpose of a business is to create customers.

Hence, option C is the correct answer.

60. **According to the author of this passage, what comes first?**

- A** Want
- B** Market
- C** Demand
- D** Customer

**Answer:** A

**Explanation:**

The author says in the last paragraph, 'want until the action of business people converted it into effective demand. Only then is there a customer and a market'.

From this it can be concluded that want comes before market, customer and demand.

Hence, option A is the correct answer.

**Instructions [61 - 64 ]**

Read the following passages carefully and answer the questions at the end of each passage

The first thing I learned at school was that some people are idiots; the second thing I learned was that some are even worse. I was still too young to grasp that people of breeding were meant to affect innocence of this fundamental distinction. and that the same courtesy applied to any disparity that might rise out of religious. racial, sexual class, financial and (latterly) cultural difference. So in my innocence I would raise my hand every time the teacher asked a question, just to make it clear I knew the answer.

After some months of this, the teacher and my classmates must have been vaguely aware I was a good student, but still I felt the compulsion to raise my hand. By now the teacher seldom called on me, preferring to give other children a chance to speak, too. Still my hand shot up without my even willing it, whether or not

I knew the answer. If I was putting on airs, like someone who even in ordinary clothes, adds a gaudy piece of jewellery, it's also true that I admired my teacher and was desperate to cooperate.

Another thing I was happy to discover at school was the teacher's 'authority'. At home, in the crowded and disordered Pamuk Apartments, things were never so clear; at our crowded table, everyone talked at the same time. Our domestic routines, our love for one another, our conversations, meals and radio hours; these 'were never debated – they just happened. My father held little obvious authority at home, and he was often absent. He never scolded my brother or me, never even raised his eyebrows in disapproval. In later years, he would introduce us to his friends as 'my two younger brothers', and we felt he had earned the right to say so. My mother was the only authority I recognised at home. But she was hardly a distant or alien tyrant: her power came from my desire to be loved by her. And so - I was fascinated by the power my teacher wielded over her twenty-five pupils.

Perhaps I identified my teacher with my mother, for I had an insatiable desire for her approval. 'Join your arms together like this and sit down quietly,' she would say, and I would press my arms against my chest and sit patiently all through the lesson. But gradually the novelty wore off; soon it was no longer exciting to have every answer or solve an arithmetic problem ahead of everyone else or earn the highest mark; time began to flow with painful slowness, or stop flowing altogether.

Turning away from the fat, half-witted girl who was writing on the blackboard, who gave everyone – teachers, school caretakers and her classmates – the same vapid, trusting smile, my eyes would float to the window, to the upper branches of the chestnut tree that I could just see rising up between the apartment buildings. A crow would land on a branch. Because I was viewing it from below, I could see the little cloud floating behind it – as it moved, it kept changing shape: first a fox's nose, then a head, then a dog. I didn't want it to stop looking like a dog, but as it was exciting, though sometimes painful, to get to know my classmates as individuals, and to find out how different they were from me. There was that sad boy who, whenever he was asked to read out loud in Turkish class, would skip every other line; the poor boy's mistake was as involuntary as the laughter it would elicit from the class. In first grade, there was a girl who kept her red hair in a ponytail, who sat next to me for a time. Although her bag was a slovenly jumble of half-eaten apples, simits, sesame seeds, pencils and hair bands, it always smelled of dried lavender around her, and that attracted me; I was also drawn to her for speaking so openly about the little taboos of daily life, and if I didn't see her at the weekend, I missed her, though there was another girl so tiny and delicate that I was utterly entranced by her as well. Why did that boy keep on telling lies even knowing no one was going to believe him'? How could that girl be so indiscreet about the goings-on in her house? And could this other girl be shedding real tears as she read that poem about Atatürk?'

Just as I was in the habit of looking at the fronts of cars and seeing noses, so too did I like to scrutinise my classmates, looking for the creatures they resembled. The boy with the pointed nose was a fox and the big one next to him was, as everyone said, a bear, and the one with the thick hair was a hedgehog... I remember a Jewish girl called Mari telling us all about Passover – there were days when no one in her grandmother's house was allowed to touch the light switches. Another girl reported that one evening, when she was in her room, she turned around so fast she glimpsed the shadow of an angel – a fearsome story that stayed with me. There was a girl with very long legs who wore very long socks and always looked as if she was about to cry; her father was a government minister and when he died in a plane crash from which Prime Minister Menederes emerged without a scratch, I was sure she'd been crying because she had known in advance what was going to happen. Lots of children had problems with their teeth; a few wore braces. On the top floor of the building that housed the lycée dormitory and the sports hall, just next to the infirmary, there was rumoured to be a dentist, and when teachers got angry they would often threaten to send naughty children there. For lesser infractions pupils were made to stand in the corner between the blackboard and the door

with their backs to the class, sometimes one leg, but because we were all so curious to see how long someone could stand on one leg, the lessons suffered, so this particular punishment was rare.

61. **The synonym for the term 'vapid' is**

- A** Lively
- B** Original
- C** Lacklustre
- D** Spicy

**Answer: C**

**Explanation:**

The meaning of the word 'vapid' is boring or dull.

The same is the meaning of Lackluster.

Hence, Lackluster is the synonym of the word 'vapid'

Hence, option C is the correct answer.

62. **Who is the least talked about character in this passage?**

- A** Mother
- B** Classmates
- C** Grandmother
- D** Teacher

**Answer: C**

**Explanation:**

In the 2nd, 3rd and the 4th paragraph the author talks about her teacher and her mother.

In the 2nd last and the last paragraph the author talks about her classmates.

Nowhere in the passage did she mention her grandmother.

She talks the least about her grandmother.

Hence, option C is the correct answer.

63. **Which among the following cannot be concluded from this passage?**

- A** The author was a good student but sometimes felt bored in class
- B** The author got along fairly well with his classmates
- C** The author came from a very authoritarian home environment
- D** The author had an imaginative mind

**Answer: C**

**Explanation:**

In the 2nd paragraph it is given that, 'After some months of this, the teacher and my classmates must have been vaguely aware I was a good student, but still I felt the compulsion to raise my hand' and in the 2nd last paragraph it is given that, 'Turning away from the fat, half-witted girl who was writing on the blackboard, who gave everyone – teachers, school caretakers and her classmates – the same vapid, trusting smile, my eyes would float to the window, to the upper branches of the chestnut tree that I could just see rising up between the apartment buildings.'

From both of this we can conclude that the author was a good student but sometimes felt bored in class. Thus, option A can be concluded.

In the 2nd last paragraph the author says, 'I didn't want it to stop looking like a dog, but as it It was exciting, though sometimes painful, to get to know my classmates as individuals, and to find out how different they were from me' and then in 2nd last and the last paragraph she continues to talk about her experiences with her classmates clearly indicating that the author got along fairly well with his classmates. Thus, option B can be concluded.

The author in the 2nd last paragraph says, 'Turning away from the fat, half-witted girl who was writing on the blackboard, who gave everyone – teachers, school caretakers and her classmates – the same vapid, trusting smile, my eyes would float to the window, to the upper branches of the chestnut tree that I could just see rising up between the apartment buildings. A crow would land on a branch. Because I was viewing it from below, I could see the little cloud floating behind it – as it moved, it kept changing shape: first a fox's nose, then a head, then a dog.'

From this we can conclude that the author had an imaginative mind. Thus, option D can be concluded.

In the second paragraph the author says, 'Another thing I was happy to discover at school was the teacher's 'authority'. At home, in the crowded and disordered Pamuk Apartments, things were never so clear; at our crowded table, everyone talked at the same time.' and then she talks about her dad had very little authority and the very little authority she had at her home was from her mom and that came from my desire to be loved by her. Thus, we cannot conclude that the author came from a very authoritarian home environment. Hence, option C cannot be concluded.

Hence, option C is the correct answer.

64. **What did the teachers do when they get angry?**

- A** Sent the students to the infirmary
- B** Denied them a chance to answer questions
- C** Made them' join their hands together and sit quietly
- D** Threatened to send them to the dentist.

**Answer: D**

**Explanation:**

In the last paragraph the author says, 'On the top floor of the building that housed the lycée dormitory and the sports hall, just next to the infirmary, there was rumoured to be a dentist, and when teachers got angry they would often threaten to send naughty children there.' From this it can be concluded that the teachers threatened to send the students to the dentist when they get angry.

Hence, option D is the correct answer.

## Instructions [65 - 68 ]

Read the following passages carefully and answer the questions at the end of each passage

Not many people saw it coming. It had seemed that the time for Kaun Banega Crorepati had come and gone. This column argued as much a few years ago, when Shah Rukh Khan took over the reins of the show. He did well enough, but it still seemed that the time for the genteel game of knowledge had passed. There was too much blood in reality television, and KBC simply did not have enough platelets for it. It had no backbiting intrigue, it lacked a cast of almost-losers and missed the low-life loquaciousness of other reality shows, and nothing ever needed to be beeped out on it, a sure sign that it was out of touch with the times.

And yet, not only is KBC back, but it is back in a very real sense not just as a TV show that gets good ratings, but as an idea that connects with something deep and real in our lives. What makes this particularly interesting is that not very much has changed in the show. Its focus has shifted to smaller towns and an 'aadmi' more 'aam', and the prize money has gone up over the years, but these are minor adjustments, not major departures. The format is pretty much the same and the return of Amitabh Bachchan restores to the show both the gravitas and the empathy that has been its hallmark.

Perhaps KBC works because it reconciles many competing ideas for us. For a show that bestows undreamt of wealth on people who win, and does so with reasonable regularity, KBC manages somehow to rise above the money it throws around. By locating money squarely in the context of small dreams, family and community, KBC shows us a face of money that is ennobling. The money of KBC is treated not as a jackpot but as a 'vardaan', a gift from divinity that comes as a reward for one's persistent effort, a prize for the penance called ordinary life. The images that surround the winners are not big cars and fancy brands, but houses made 'pukka' and IAS dreams pursued. The winners have been remarkable ambassadors for the show, focusing not what the money buys them but what it enables them to work at in the future. Money speaks in the language of responsibility, not indulgence and steps a larger collective in its pleasing warmth.

The format of the show ensures that we see people as they are, rather than the usual sight of raw innocents gradually losing their transparent naivete in a haze of hair dye and exfoliation. On other reality shows, fame and money are insistent in transforming those that they favour and what they tell us is that success must put distance between destination and source, between who we are and what we must become. On KBC, it is the innocence that is spoken to and as an audience, it is this quality we respond to. When a Sushil Kumar describes his life and attributes his success to his wife, who in turn is quick to shyly shrug off the credit, we see, for once, something that smacks of the real on a reality show.

As the reality show evolved, it found reality too boring and vapid. It was so much for fun to manufacture it by making people act in unpleasant ways, and say unsavoury things to each other. Now, no reality show can really bring us reality; any act of representation and framing creates its own version of reality in many different ways-by aestheticizing it, emotionalising moments, dramatising revelations, withholding information selectively, or by imbuing some moments with significance while ignoring others and even KBC uses these techniques. The difference is that it uses these to drive us towards the central premise of the show rather than see those as individual 'masala' elements. In a world where television is racked by anxiety about itself, and where every new season is an exercise in renewed desperation, KBC stands apart by trusting itself and its viewers and by continuing to tell a human story about dreams and their fulfilment and doing so without trying too hard.

There is no question that KBC rests on the persona of Amitabh Bachchan for he reconciles for us the ideas of fame and humility, of achievement and empathy in the way he treats the participants. He has a special ability to look into the ordinary and find something special and the humility to be awed by it. He is simultaneously The Amitabh Bachchan, the wax God who we touch and squeal when we find out that it is real and a fellow sympathiser and co-traveller on the journey called life. As a carrier of life-altering destiny, he underplays his role to perfection, acknowledging the enormity of what winning means for the participant

while revealing the wisdom that knows that it is only money. Under his steerage money is no longer cold with acquisitive urgency but warm with unfolding possibility.

KBC shows us, close-up and in slow motion, the act of a miracle colliding with a dream. In doing so, it tells us that money can change things for the better, when it finds the right home. By applying good fortune to good intention, it keeps the miracle alive, well after the moment of impact. As the winners no doubt find out, one can never have enough money, and that relative scale makes everyone a relative pauper. In the final analysis, Kaun Banega Crorepati reveals both the nobility and the eventual poverty of money, no matter if it comes in eight figures.

65. **According to the author's opinion a few years before writing this article, which of the following appeared to be in store for KBC?**

**i. The show's time was over**

**ii. The show was too refined to compete with other reality shows**

**iii. Shah Rukh Khan as the show host would take it to new heights**

**iv. The show's viciousness was leading it, to its end**

**A** i only

**B** i and ii only

**C** ii and iii

**D** i and iv

**Answer: B**

**Explanation:**

In the first paragraph the author says, 'Not many people saw it coming. It had seemed that the time for Kaun Banega Crorepati had come and gone. This column argued as much a few years ago, when Shah Rukh Khan took over the reigns of the show. He did well enough, but it still seemed that the time for the genteel game of knowledge had passed. There was too much blood in reality television, and KBC simply did not have enough platelets for it. It had no backbiting intrigue, it lacked a cast of almost-losers and missed the low-life loquaciousness of other reality shows, and nothing ever needed to be beeped out on it, a sure touch that it was out of touch with the times.'

From this we can conclude that the author believed that the time for KBC is over.

We can also conclude that the author believed that the show was too refined to compete with other reality

shows.

Although the author says that Shah Rukh Khan did well but there is no evidence to support that the author believed that Shah Rukh Khan as the show host would take it to new heights.

Also, there is no evidence to support that the author believed that the show's viciousness was leading it, to its end

66. **Unlike most reality shows, KBC has gained viewership on television by**

- A** Using glamorous participants on the show
- B** Getting participants to say unpleasant things about the truth of life
- C** Making major adjustments to its format time and again
- D** Connecting with the depth and reality of lives of people

**Answer: D**

**Explanation:**

The author says 'The format is pretty much the same and the return of Amitabh Bachchan restores to the show both the gravitas and the empathy that has been its hallmark'

From this we can conclude that Unlike most reality shows, KBC has gained viewership on television by Connecting with the depth and reality of lives of people.

Hence, option D is the correct answer.

67. **According to the author, KBC presents the prize money as**

- A** a means for indulgence
- B** a jackpot
- C** a reward for relentless work
- D** a reason for changing the real person

**Answer: C**

**Explanation:**

The author says, 'The money of KBC is treated not as a jackpot but as a 'vardaan', a gift from divinity that comes for one's persistent effort, a prize for the penance called ordinary life'

From this we can conclude that KBC presents the prize money as a reward for relentless work.

Hence, option C is the correct answer.

68. **In what context does the author use the phrase "a relative pauper"?**

- A** No one can ever have enough money
- B** Money can change who we are
- C** Money is cold and has materialistic importance
- D** Money can change things for better only if it finds the right home

**Answer:** A

**Explanation:**

The author says, 'As the winners no doubt find out, one can never have enough money, and that relative scale makes everyone a relative pauper'

From this we can conclude that the author use the phrase “a relative pauper” to say No one can ever have enough money.

Hence, option A is the correct answer.

### **Instructions [69 - 72 ]**

Read the following passages carefully and answer the questions at the end of each passage

Babur’s head was throbbing with the persistent ache that dogged him during the monsoon. The warm rain had been falling for three days now but the still, heavy air held no promise of relief. The rains would go on for weeks, even months. Lying back against silken bolsters in his bedchamber in the Agra fort, he tried to imagine the chill, thin rains of Ferghana blowing in over the jagged summit of Mount Beshtor and failed. The punkah above his head hardly disturbed the air. It was hard even to remember what it was like not to feel hot. There was little pleasure just now even in visiting his garden the sodden flowers, soggy ground and overflowing water channels only depressed him.

Babur got up and tried to concentrate on writing an entry in his diary but the words wouldn’t come and he pushed his jewel-studded inkwell impatiently aside. Maybe he would go to the women’s apartments. He would ask Maham to sing. Sometimes she accompanied herself on the round-bellied, slender-necked lute that had once belonged to Esan Dawlat. Maham lacked her grandmother’s gift but the lute still made a sweet sound in her hands.

Or he might play a game of chess with Humayun. His son had a shrewd, subtle mind – but so, he prided himself, did he and he could usually beat him. It amused him to see Humayun’s startled look as he claimed victory with the traditional cry shah mat – ‘check-mate’, ‘the king is at a loss’. Later, they would discuss Babur’s plans to launch a campaign when the rains eased against the rulers of Bengal. In their steamy jungles in the Ganges delta, they thought they could defy Moghul authority and deny Babur’s overlordship.

‘Send for my son Humayun and fetch my chessmen,’ Babur ordered a servant. Trying to shake off his lethargy he got up and went to a casement projecting over the riverbank to watch the swollen, muddy waters of the Jumna rushing by. A farmer was leading his bony bullocks along the oozing bank.

Hearing footsteps Babur turned, expecting to see his son, but it was only the white-tunicked servant. ‘Majesty, your son begs your forgiveness but he is unwell and cannot leave his chamber.’

What is the matter with him?’

‘I do not know, Majesty.’

Humayun was never ill. Perhaps he, too, was suffering from the torpor that came with the monsoon, sapping the energy and spirit of even the most vigorous.

‘I will go to him.’ Babur wrapped a yellow silk robe around himself and thrust his feet into pointed kidskin slippers. Then he hurried from his apartments to Humayun’s on the opposite side of a galleried courtyard, where water was not shooting as it should, in sparkling arcs from the lotus-shaped marble basins of the fountains but pouring over the inundated rims.

Humayun was lying on his bed, arms thrown back, eyes closed, forehead beaded with sweat, shivering. When he heard his father’s voice he opened his eyes but they were bloodshot, the pupils dilated. Babur could hear his heavy wheezing breathing. Every scratchy intake of air seemed an effort which hurt him.

‘When did this illness begin?’

‘Early this morning, Father.’

‘Why wasn’t I told?’ Babur looked angrily at his son’s attendants. ‘Send for my hakim immediately!’ Then he dipped his own silk handkerchief into some water and wiped Humayun’s brow. The sweat returned at once – in fact, it was almost running down his face and he seemed to be shivering even more violently now and

his teeth had begun to chatter.

'Majesty, the hakim is here.'

Abdul-Malik went immediately to Humayun's bedside, laid a hand on his forehead, pulled back his eyelids and felt his pulse. Then, with increasing concern, he pulled open Humayun's robe and, bending, turned his neatly turbaned head to listen to Humayun's heart.

'What is wrong with him?'

Abdul-Malik paused. 'It is hard to say, Majesty. I need to examine him further.'

Whatever you require you only have to say...'

'I will send for my assistants. If I may be frank, it would be best if you were to leave the chamber, Majesty. I will report to you when I have examined the prince thoroughly - but it looks serious, perhaps even grave. His pulse and heartbeat are weak and rapid.' Without waiting for Babur's reply, Abdul-Malik turned back to his patient. Babur hesitated and, after a glance at his son's waxen trembling face, left the room. As attendants closed the doors behind him he found that he, too, was trembling.

A chill closed round his heart. So many times he had feared for Humayun. At Panipat he could have fallen beneath the feet of one of Sultan Ibrahim's war elephants. At Khanua he might have been felled by the slash of a Rajput sword. But he had never thought that Humayun – so healthy and strong – might succumb to sickness. How could he face life without his beloved eldest son? Hindustan and all its riches would be worthless if Humayun died. He would never have come to this sweltering, festering land with its endless hot rains and whining, bloodsucking mosquitoes if he had known this would be the price.

69. **Babur was feeling depressed because...**

- A** the rulers of Bengal were defying Moghul authority
- B** he could not usually beat Humayun at chess
- C** he did not like the warm rains and the heaviness of monsoon air
- D** Maham could not play the lute as well as her grandmother.

**Answer: C**

**Explanation:**

The author in the 1st paragraph says, 'Babur's head was throbbing with the persistent ache that dogged him during the monsoon. The warm rain had been falling for three days now but the still, heavy air held no promise of relief. The rains would go on for weeks, even months'

From this we can conclude that Babur was feeling depressed because he did not like the warm rains and the heaviness of monsoon air.

Hence, option C is the correct answer.

70. **Which among the following things did Babur not consider doing to relieve himself of depression?**

- A** Go to the women's apartments
- B** Visit his garden
- C** Play a game of chess with Humayun
- D** Listen to Maham sing

**Answer:** B

**Explanation:**

The author in the 2nd and the 3rd paragraph says, 'Babur got up and tried to concentrate on writing an entry in his diary but the words wouldn't come and he pushed his jewel-studded inkwell impatiently aside. Maybe he would go to the women's apartments. He would ask Maham to sing. Sometimes she accompanied herself on the round-bellied, slender-necked lute that had once belonged to Esan Dawlat. Maham lacked her grandmother's but the lute still made a sweet sound in her hands. Or he might play a game of chess with Humayun'.

From this we can see that Babur considered going to women's apartments.

We can also see that Babur considered Listen to Maham sing and Play a game of chess with Humayun.

Thus, Babur considered doing option A, C and D.

Hence, Babur did not consider doing B as can be understood from, 'There was little pleasure just now even in visiting his garden the sodden flowers, soggy ground and overflowing water channels only depressed him'

Hence, option B is the correct answer.

71. **What was it that Babur currently feared for Humayun?**

- A** Humayun could fall beneath the feet of war elephants
- B** Humayun could be felled by the slash of a sword
- C** Humayun may not be treated properly by the Hakim
- D** Humayun might succumb to sickness

**Answer: D**

**Explanation:**

The author in the last paragraph says, 'But he had never thought that Humayun – so healthy and strong – might succumb to sickness.'

From this we can conclude that Babur currently feared for Humayun that Humayun might succumb to sickness.

Hence, option D is the correct answer.

72. **According to this passage, which of the following has not been used to describe Humayun?**

- A** Shrewd and subtle minded
- B** Healthy and strong bodied
- C** Neatly turbaned head
- D** Father's beloved

**Answer: C**

**Explanation:**

In the third paragraph, the following is stated: "...*His son had a shrewd, subtle mind...*". Based on this, Option A can be concluded.

In the last paragraph, the following is stated: "...*so healthy and strong...*" f. Thus, Option B is true.

Throughout the passage, there are many instances where Babar has showcased his love for Humayun and thus, Option D can also be concluded.

Option C is used to describe Abdul Malik and not Humayun and thus, option B cannot be concluded.

Hence, Option C is the correct answer.

## Section IV

73. **What was the picture shown on the first stamp of independent India?**

- A** The new Indian flag
- B** Ashoka Lion Capital
- C** A portrait of Mahatma Gandhi
- D** A Douglas DC-4 aircraft

**Answer:** A

74. **Which of the following venues has hosted the Summer Olympics Games the maximum number of times?**

- A** Athens
- B** Paris

- C** London
- D** Los Angeles

**Answer: C**

**Explanation:**

London has hosted the most Summer Olympic Games. London, the capital of the United Kingdom, has hosted three Summer Olympic Games, doing so in 1908, 1948, and 2012.

75. **What is a good estimate for the length of the coastline of the mainland India?**

- A** 6000 kms.
- B** 7500 kms.
- C** 9000 kms.
- D** 11,000 kms.

**Answer: A**

**Explanation:**

Gujarat is strategically located with largest share in India's coastline, followed by Andhra Pradesh and Tamil Nadu.

State Coastline

Gujarat 1915.29

Andhra Pradesh 1037

Tamil Nadu 864.73

Kerala 560

Maharashtra 510.31

Orissa 457.2

West Bengal 374

Karnataka 258.15

Goa 113.03

Total - 6089.71 . Hence, option A is the correct answer.

76. **Which treaty led to creation of the single European Currency "Euro"?**

- A** Maastricht Treaty
- B** Vienna Monetary Treaty
- C** Plaza Accord
- D** Bretton Woods Agreement

**Answer: A**

**Explanation:**

The Maastricht Treaty, officially known as the **Treaty on European Union**, marked the beginning of “a new stage in the process of creating an ever closer union among the peoples of Europe”. It laid the foundations for a single currency, the euro, and significantly expanded cooperation between European countries in a number of new areas. Hence, option A is the correct answer.

77. In ecology, what name is given to the measure of diversity that is often used to quantify the biodiversity of a habitat by taking into account the number of species present, as well as the abundance of each species?

- A Simpson Index
- B Herfindahl - Hirschman Index
- C Flintstone Index
- D Bio-volatility Index

**Answer: A**

**Explanation:**

**Simpson's Diversity Index** is a measure of **diversity** which takes into account the number of species present, as well as the relative abundance of each species. As species richness and evenness increase, so **diversity** increases. Therefore, option A is the correct answer.

78. Match the Memoir/Autobiography in Column 1: with the person on whom it is based in Column 2:

	Column 1		Column 2
a.	Open	i.	Hillary Rodham Clinton
b.	Living History	ii.	Lance Armstrong
c.	The Elephant to the Hollywood	iii.	Andre Agassi
d.	Every Second Counts	iv.	Michael Caine

- A 1 - iv, 2 - i, 3 - iii, 4 - ii
- B 1 - i, 2 - iv, 3 - ii, 4 - iii
- C 1 - iii, 2 - i, 3 - iv, 4 - ii
- D 1 - iii, 2 - ii, 3 - iv, 4 - i

**Answer: C**

**Explanation:**

The Elephant to the Hollywood is an autobiography written by Michael Caine.

Every Second Counts is a 2003 autobiography by cyclist Lance Armstrong.

Living History is a 2003 memoir by Hillary Rodham Clinton.

Open is an autobiography written by Andre Agassi. Hence, option C is the correct answer.

79. Which of the following is NOT TRUE about the Millennium Development Goals (MDGs) of the United Nations (UN)?

1. There are 8 MDGs that 191 UN Members states have agreed to achieve
2. The year set for achieving the MDGs is 2020
3. Ensuring environmental sustainability is not one of the MDGs
4. Eradication of extreme poverty and hunger is one of the prime MDGs

- A** 1 & 2
- B** 2 & 3
- C** Only 3
- D** Only 4

**Answer: B**

**Explanation:**

The United Nations Millennium Development Goals are eight goals that all 191 UN member states have agreed to try to achieve by the year 2015. The United Nations Millennium Declaration, signed in September 2000 commits world leaders to combat poverty, hunger, disease, illiteracy, environmental degradation, and discrimination against women. The MDGs are derived from this Declaration, and all have specific targets and indicators.

The Eight Millennium Development Goals are:

1. to eradicate extreme poverty and hunger;
2. to achieve universal primary education;
3. to promote gender equality and empower women;
4. to reduce child mortality;
5. to improve maternal health;
6. to combat HIV/AIDS, malaria, and other diseases;
7. to ensure environmental sustainability; and
8. to develop a global partnership for development.

We can see that statements 2 and 3 are wrong. Hence, option B is the correct answer.

80. Match the Country in Column 1 with its Capital city in Column 2 and its Currency in Column 3

	Column 1		Column 2		Column 3
1	Hungary	a	Tehran	i	Dirham
2	Iran	b	Rabat	ii	Rial
3	Morocco	c	Bucharest	iii	Leu
4	Romania	d	Budapest	iv	Forint

- A** 1 - d - iv, 2 - a - i, 3 - b - ii, 4 - c - iii
- B** 1 - d - iv, 2 - a - ii, 3 - b - i, 4 - c - iii
- C** 1 - b - i, 2 - a - iv, 3 - d - ii, 4 - c - iii

**D** 1 - b - i, 2 - a - ii, 3 - d - iii, 4 - c - iv

**Answer: B**

**Explanation:**

Hungary's capital is Budapest and Hungarian Forint is its currency.

Iran's capital is Tehran and Rial is its currency.

Morocco's capital is Rabat and Dirham is its currency.

Romania's capital is Bucharest and Leu is its currency.

Hence, option B is the correct answer.

81. **Who is the Indian to be named as one of the six winners of the prestigious Magsaysay Award for 2012?**

**A** Medha Pathkar

**B** Jeet Thayil

**C** Kulandei Francis

**D** Arvind Kejriwal

**Answer: C**

**Explanation:**

India's Kulandei Francis is one of the six winners of the prestigious Ramon Magsaysay Award for 2012, announced by the organisers in Manila. Hence, option C is the correct answer.

82. **Match the name of the automobile company in Column 1 with the brand of cars owned by them in Column 2**

	<b>Column 1</b>		<b>Column 2</b>
1	BMW	a	Bentley
2	Fiat	b	Cadillac
3	General Motors	c	Chrysler
4	Volkswagen	d	Mini

**A** 1 - iv, 2 - iii, 3 - ii, 4 - i

**B** 1 - iii, 2 - iv, 3 - i, 4 - ii

**C** 1 - i, 2 - ii, 3 -iii, 4 - iv

**D** 1 - ii, 2 - i, 3 - iv, 4 - iii

**Answer: A**

**Explanation:**

Cadillac is owned by General Motors.

Chrysler is owned by Fiat.

BMW acquired the Rover Group from British Aerospace, which **owned Mini**, among other brands.

Volkswagen owns Bentley. Hence, option A is the correct answer.

83. **Who, among the following, has not been a Vice President of India before becoming the President of India?**

- A** S. Radhakrishnan
- B** R. Venkatraman
- C** Shankar Dayal Sharma
- D** Giani Zail Singh

**Answer: D**

**Explanation:**

Except Giani Zail Singh all other personalities have served as a Vice President of India before becoming the President of India. Hence, option D is the correct answer.

84. **GAAR has been in news recently. What does GAAR stand for?**

- A** Global Accounting Alliance Regime
- B** General Anti Avoidance Rules
- C** Government Affairs Assessment Rule
- D** Generally Accepted Accounting Rules

**Answer: B**

**Explanation:**

General anti-avoidance rule (**GAAR**) is an anti-tax avoidance law under Chapter X-A of the Income Tax Act, 1961 of India. It is framed by the Department of Revenue under the Ministry of Finance.

85. **Match the description given in Column 1 with the name of film in Column 2**

	<b>Column 1</b>		<b>Column 2</b>
1	First Hindi Film	a	Mother India
2	First Hindi Color Film	b	Alam Ara
3	First Hindi Film nominated for Oscars	c	Kisan Kanya
4	First Hindi film with sound	d	Raja Harishchandra

- A** 1 - d, 2 - c, 3 - a, 4 - b
- B** 1 - b, 2 - a, 3 - d, 4 - c
- C** 1 - b, 2 - d, 3 - a, 4 - c

1 - d, 2 - a, 3 - c, 4-

**D** b

**Answer: A**

**Explanation:**

Raja Harishchandra is a 1913 Indian silent film, directed and produced by Dadasaheb Phalke. It is often considered the first full-length Indian feature film.

**Kisan Kanya** was a 1937 Hindi Cinecolor feature film which was directed by Moti B. Gidwani and produced by Ardeshir Irani of Imperial Pictures. It is largely remembered by the Indian public on account of it being India's first indigenously made colour film.

The first Bollywood movie to be nominated for an Oscar was Mother India(1957). The movie was India's first submission for the Academy Award for Best Film in a Foreign Language category and was nominated for the award but ultimately lost by just one vote.

**Alam Ara** was a 1931 Indian film directed by Ardeshir **Irani**. It was the first Indian sound film. Therefore, option A is the correct answer.

86. **Which year is known as the year of the great divide in the demographic history**

**A** 1857

**B** 1947

**C** 1921

**D** 1951

**Answer: C**

**Explanation:**

Prior to 1921, the course of population growth was undulating (several ups and downs, mainly because of mortality differentials). During 1911-1921, India experienced negative growth rate in her population.

After 1921, Mortality started declining as a result of improvement in public health measures while, fertility remained unchanged which caused a continuous and rapid increase in population growth rate in upcoming decades.

Hence, **1921** was the year when India moved from **stage 1** to **stage 2** of **demographic transition**. Therefore, year 1921 is known as the year of the great divide in the demographic history.

87. Match the position in Column 1 with the person who holds it (as on 31st August 2012) in Column 2:

	Column 1		Column 2
1	Chief Information Commissioner of India	a	V. S. Sampath
2	Central Vigilance Commissioner of India	b	S. H. Kapadia
3	Chief Election Commissioner of India	c	Satyananda Mishra
4	Chief Justice of India	d	Pradeep Kumar

- A** 1 -ii, 2 - iii, 3 - i, 4 - iv  
**B** 1 -iii, 2 - i, 3 - ii, 4 - iv  
**C** 1 - iii, 2 - iv, 3 - i, 4- ii  
**D** 1 -i, 2 - iii , 3 - iv, 4 - ii

**Answer: C**

**Explanation:**

V. S. Sampath was the Chief Election Commissioner of the Election Commission of India from 2012 to 2015.

S. H. Kapadia was the Chief Justice of India from 12 May 2010 to 28 September 2012.

Satyananda Mishra was the Chief Information Commissioner of India from 18 December 2010 to 4 September 2013.

Pradeep Kumar was the Chief vigilance commissioner of India from 14 July 2011 to 28 September 2014.

88. The 'God Particle' is the name given to

- A** The Meson Particle  
**B** The Higgs Boson Particle  
**C** The Proton Particle  
**D** None of the above

**Answer: B**

89. Which among the following cities hosted the 4th BRICS Summit in 2012?

- A** Brasilia, Brazil  
**B** Sanya, China  
**C** New Delhi, India  
**D** None of the above

**Answer: C**

**Explanation:**

The 2012 BRICS summit was the fourth annual BRICS summit, an international relations conference attended by the heads of state or heads of government of the five member states Brazil, Russia, India, China and South Africa. The summit was held at Taj Hotel in New Delhi, India on 29 March 2012 and began at 10:00 Indian Standard Time. This is the first time that India has hosted a BRICS summit. The theme of the summit was "BRICS Partnership for Global Stability, Security and Prosperity. Therefore, option C is the correct answer.

90. **When it is 11:15 as per Greenwich Mean Time, what will be the time in Delhi**

- A** 04:45 hours
- B** 05:45 hours
- C** 17:45 hours
- D** 16:45 hours

**Answer: D**

**Explanation:**

IST = GMT + 5:30. Hence, when GMT = 11:15 Then IST = 5:30 + 11:15 = 16 : 45.

91. **Mullaperiyar Dam is a matter of controversy between which of the following states?**

- A** Karnataka - Tamil Nadu
- B** Kerala - Tamil Nadu
- C** Kerala - Karnataka
- D** Karnataka - Andhra Pradesh

**Answer: B**

**Explanation:**

The Mullaperiyar Dam or Mullaiperiyar Dam is a masonry gravity dam on the Periyar River in the Indian state of Kerala. It is located 881 m (2,890 ft) above mean sea level, on the Cardamom Hills of the Western Ghats in Thekkady, Idukki District of Kerala, South India. It was constructed between 1887 and 1895 by John Pennycuick and also reached in an agreement to divert water eastwards to the Madras Presidency area (present-day Tamil Nadu). It has a height of 53.6 m (176 ft) from the foundation, and a length of 365.7 m (1,200 ft). The Periyar National Park in Thekkady is located around the dam's reservoir. The dam is located in Kerala on the river Periyar, but is operated and maintained by Tamil Nadu state. Although the Periyar River has a total catchment area of 5398  $km^2$  with 114  $km^2$  in Tamil Nadu, the catchment area of the Mullaperiyar Dam itself lies entirely in Kerala.

92. Match the celebration day in Column 1 with the date in Column 2

	Column 1		Column 2
1	World AIDS day	a	April 22
2	UN day	b	October 24
3	Earth day	c	March 8
4	International Women's Day	d	December 1

**A** 1 - ii, 2 - iv, 3 - iii, 4 - i

**B** 1 - iii, 2 - ii, 3 - iv, 4 - i

**C** 1 - i, 2 - iii, 3 - iv, 4 - ii

**D** 1 - iv, 2 - ii, 3 - i, 4 - iii

**Answer: D**

**Explanation:**

World AIDS day is observed on 1st December.

UN day is observed on 24th October.

International Women's day is celebrated on 8th March.

Earth day is celebrated on 22nd April.

93. Which country has won the Gold Medal for Men's Football in 2012 Olympic Games?

**A** Brazil

**B** Spain

**C** Germany

**D** Mexico

**Answer: D**

**Explanation:**

Mexico won the Gold Medal whereas Brazil and South Korea won the Silver and the Bronze medal in Men's Football in 2012 Olympic Games.

94. What is the name given to the civil reformist movement for eradication of ragging in India?

**A** Aman

**B** Mitra

**C** Sahyog

**D** Aadhar

**Answer: A**

**Explanation:**

Aman movement is the civil reformist movement for eradication of ragging in India. It is named after Aman Satya Kachroo, a 19 year old medical student, who died in 2009 because of ragging. The Movement has since developed into a research facility for improved management of Social Sector programs of governments of India.

95. Which of the following teams have been in at least one of the ten final matches of ICC Cricket World Cup played from 1975 through 2011, but have never been a winner

- A England
- B South Africa
- C New Zealand
- D Zimbabwe

**Answer: A**

**Explanation:**

South Africa, New Zealand and Zimbabwe haven't played final matches of ICC Cricket World Cup played from 1975 through 2011. England have lost 3 world cup finals.

96. In a painting what is the vanishing point?

- A The point beyond which things are too small to be seen
- B The point where sky meets the ground
- C The point on the horizon where a parallel lines appear to meet
- D The point where an object disappears behind another

**Answer: C**

97. Match the Leader's name in Column 1 to the Party headed by them in Column 2:

	Column 1		Column 2
1	Hosni Mubarak	a	National League for Democracy
2	Aung San Sui Kyi	b	Socialist Party
3	Francois Hollande	c	National Democratic Party

- A 1 - iii, 2 - ii, 3 - i
- B 1 - ii, 2 - iii, 3 - i
- C 1 - iii, 2 - i, 3 - ii
- D 1 - ii, 2 - i, 3 - iii

**Answer: C**

**Explanation:**

Muhammad Hosni El Sayed Mubarak is a former Egyptian military and political leader who served as the fourth President of Egypt from 1981 to 2011. Before he entered politics, Mubarak was a career officer in the Egyptian Air Force. The National Democratic Party of Egypt continued to state that Hosni Mubarak was to be the party's only candidate in the 2011 Presidential Election. Mubarak said on 1 February 2011 that he had no intention of standing in the 2011 presidential election.

Aung San Suu Kyi is a Burmese politician, diplomat, author, and Nobel Peace Prize laureate. She is the leader of the National League for Democracy and the first and incumbent State Counsellor, a position akin to a prime minister.

François Gérard Georges Nicolas Hollande (born 12 August 1954) is a French politician who served as President of France and ex officio Co-Prince of Andorra from 2012 to 2017. He was previously the First Secretary of the Socialist Party from 1997 to 2008.

Therefore, option C is the correct answer.

98. **According to Greek Mythology, what is the name of the beautiful youth who was loved by Echo; and in punishment for not returning her love, was made to fall in love with his image reflected in a pool; and finally unable to possess the image, is believed to have pined away and turned into a flower?**

- A** Midas
- B** Narcissus
- C** Hercules
- D** Adonis

**Answer: B**

99. **Of which of the following trade groupings is Myanmar a member**

- A** SAARC
- B** ASEAN
- C** NAFTA
- D** MERCOSUR

**Answer: B**

**Explanation:**

The South Asian Association for Regional Cooperation (SAARC) is the regional intergovernmental organization and geopolitical union of nations in South Asia. Its member states include Afghanistan, Bangladesh, Bhutan, India, Nepal, the Maldives, Pakistan and Sri Lanka.

ASEAN was founded on 8 August 1967 with five members: Indonesia, Malaysia, the Philippines, Singapore, and Thailand. It is headquartered in Jakarta. In 1984, Brunei became ASEAN's sixth member and on 28 July 1995, Vietnam joined as the seventh member. Laos and Myanmar (Burma) joined two years later on 23 July

1997. Cambodia was to have joined at the same time as Laos and Burma, but its entry was delayed due to the country's internal political struggle. It later joined on 30 April 1999, following the stabilization of its government.

The North American Free Trade Agreement is an agreement signed by Canada, Mexico, and the United States, creating a trilateral trade bloc in North America.

Mercosur is an economic and political bloc comprising Argentina, Brazil, Paraguay, Uruguay, and Venezuela. Created during a period when longtime rivals Argentina and Brazil were seeking to improve relations, the bloc saw some early successes, including a tenfold increase in trade within the group in the 1990s.

00. **Arrange the following Indian rivers from North to South**

1. Narmada
2. Kaveri
3. Jhelum
4. Godavari

**A** 3 - 1 - 2 - 4

**B** 1 - 4 - 3 - 2

**C** 1 - 3 - 4 - 2

**D** 3 - 1 - 4 - 2

**Answer: D**

**Explanation:**

The Jhelum River, is a river of west Kashmir and eastern Pakistan. It is the westernmost of the five rivers of Punjab, and passes through Srinager District. It is a tributary of the Indus River and has a total length of about 725 kilometres (450 mi).

The Narmada, also called the Rewa and previously also known as Nerbudda, is a river in central India after the Godavari, and the Krishna. It is also known as "Life Line of Gujarat and Madhya Pradesh" for its huge contribution to the state of Gujarat and Madhya Pradesh in many ways.

The Godavari is India's second longest river after the Ganga. Its source is in Triambakeshwar, Maharashtra. It flows east for 1,465 kilometres (910 mi) draining the states of Maharashtra (48.6%), Telangana (18.8%), Andhra Pradesh (4.5%), Chhattisgarh (10.9%), Madhya Pradesh (10.0%), Odisha (5.7%), Karnataka (1.4%) and Puducherry (Yanam) and emptying into Bay of Bengal through its extensive network of tributaries.

Kaveri, also referred as Ponni, is an Indian river flowing through the states of Karnataka and Tamil Nadu. It is the third largest after Godavari and Krishna in south india and the largest in Tamil Nadu which on its course, bisects the state into North and South.

Hence, option D is the correct answer.

## Section 1 part 1

01. **In the word HEIRARCHICAL, If the first and second, third and fourth, fifth and sixth letters are interchanged up to the last letter, which are the two position from the left on which R would appear and on which positions would C appear twice?**

- A** R - 3 and 5; C - 8 and 9
- B** R - 9 and 10; C - 4 and 5
- C** R - 4 and 5; C - 7 and 8
- D** 4 and 5; C - 7 and 8

**Answer: A**

**Explanation:**

After the exchange HEIRARCHICAL becomes EHRIRAHCCILA.

Thus, R - 3 and 5; are the two positions from the left on which R would appear and C - 8 and 9 are the positions C would appear twice.

Hence, option A is the correct answer.

02. In the following series, what numbers should replace the question marks?

-1, 0, 1, 0, 2, 4, 1, 6, 9, 2, 12, 16, ???

- A** 11, 18, 27
- B** -1, 0, 3
- C** 3, 20, 25
- D** Cannot be ascertained

**Answer: C**

**Explanation:**

The given series is a combination of 3 series:-

1st containing all  $3n+1$  terms i.e. 1st, 4th, 7th and so on terms:-

-1, 0, 1, 2 and thus, the next number will be 3.

2nd containing all  $3n+2$  terms i.e. 2nd, 5th, 8th and so on terms:-

0, 2, 6, 12 as we can see  $2n$  is being added to each term to get the next term and thus the next term will be 20.

3rd containing all  $3n$  terms i.e. 3rd, 6th, 9th and so on terms:-

1, 4, 9, 16 as we can see these are squares of the natural numbers and thus, the next term will be 25.

Hence, ??? will be 3, 20, 25

Hence, option C is the correct answer.

03. Here are some words translated from an artificial language.

dionot means oak tree

blyonot means oak leaf

blycrin means maple leaf

Which word could mean "maple syrup"

- A** blymuth
- B** hupponot
- C** patricrin
- D** crinweel

**Answer:** C

**Explanation:**

dionot means oak tree

blyonot means oak leaf

blycrin means maple leaf

Thus, not-oak, bly-leaf, dio-tree, crin-maple.

Thus, either option C or D is the correct answer.

But when we notice the position we can observe that 1st word come last and last word come first.

Thus, 'patricrin' could mean 'maple syrup'

Hence, option C is the correct answer.

04. **Gita is older than her cousin Mita. Mita's brother Bhanu is older than Gita. When Mita and Bhanu are visiting Gita, all three like to play a game of Monopoly. Mita wins more often than Gita does. Which of the following can be concluded from the above?**

- A** When he plays Monopoly with Mita and Gita. Bhanu often loses.
- B** Of the three, Gita is the oldest
- C** Gita hates to lose at Monopoly
- D** Of the three, Mita is the youngest.

**Answer:** D

**Explanation:**

Gita is older than her cousin Mita. Mita's brother Bhanu is older than Gita

From this we can see that their ages in the descending order is:-

Bhanu>Gita>Mita.

Thus, Of the three, Mita is the youngest.

Hence, option D is the correct answer.

05. **Priya is taller than Tiya and shorter than Siya.  
Riya is shorter than Siya and taller than Priya.  
Riya is taller than Diya, who is shorter than Tiya.  
Arrange them in order of descending heights.**

- A** Priya - Siya - Riya - Tiya - Diya
- B** Riya - Siya - Priya - Diya - Tiya

**C** Siya - Riya - Priya - Tiya - Diya

**D** Siya - Priya - Riya - Diya - Tiya

**Answer: C**

**Explanation:**

Priya is taller than Tiya and shorter than Siya.

Thus, Siya>Priya>Tiya.

Riya is shorter than Siya and taller than Priya.

Thus, Siya>Riya>Priya>Tiya.

Riya is taller than Diya, who is shorter than Tiya.

Thus, Siya>Riya>Priya>Tiya>Diya.

Hence, option C is the correct answer.

06. **Statement 1: All chickens are birds.**

**Statement 2: Some chickens are hens.**

**Statement 3: Female birds lay eggs.**

**If the above statement are facts, then which of the following must also be a fact?**

**I. All birds lay eggs.**

**II. Hens are birds.**

**III. Some chickens are not hens.**

**A** II only

**B** II and III only

**C** I, II and III

**D** None of the statement is a known fact

**Answer: D**

**Explanation:**

No relation can be established between birds and eggs and thus, 1 is not a fact.

All chickens are birds and Some chickens are hens. There might be a case where some hens are not birds.

Thus, 2 is not a fact.

Some chickens are hens. This may mean all the chickens are hens. Thus, 3 is also not a fact.

Hence, option D is the correct answer.

07. **Statement 1: Pictures can tell a story.**

**Statement 2: All storybooks have pictures.**

**Statement 3: Some storybooks have words.**

**If the above statement are facts, then which of the following must also be a fact?**

**I. Pictures can tell a story better than words can.**

**II. The stories in storybook are very simple**

**III. Some storybooks have both words and pictures.**

**A** I only

- B** II only
- C** III only
- D** None of the statement is a known fact

**Answer: C**

**Explanation:**

All storybooks have picture and Some storybooks have words. Thus, Some storybooks have both words and pictures.

Hence, III is a fact.

From the given statements none of 'Pictures can tell a story better than words can and The stories in storybook are very simple' can be concluded.

Story books is a subset of pictures and some story books have words. Story books is a subset of pictures and some story books have words. Story books is a subset of pictures and some story books have words. Hence, option C is the correct answer.

08. If IQS : LNV, then JRM : ?

- A** OKS
- B** MOP
- C** NIP
- D** MOQ

**Answer: B**

**Explanation:**

IQS : LNV,

As we can see I is replaced by the letter 3rd to the right of I in the alphabetical series.

Q is replaced by the letter 3rd to left of Q in the alphabetical series.

S is replaced by the letter 3rd to the right of S in the alphabetical series.

Thus, in JRM, J will be replaced by M, R will be replaced by O and M will be replaced by P.

Hence, option B is the correct answer.

**Instructions [109 - 110 ]**

Some information is provided in the paragraph below. Answer the questions based on this information

A weekly television show routinely stars six actors, J, K, L, M, N and O. Since the show has been on the air for a long time, some of the actors are good friends and some do not get along at all. In an effort to keep peace, the director sees to it that friends work together and enemies do not. Also, as the actors have become more popular, some of them need time off to do other projects. To keep the schedule working, the director has a few things she must be aware of:

J will only work on episodes on which M is working

N will not work with K under any circumstances.

M can only work every other week, in order to be free to film a movie.

At least three of the actors must appear in every weekly episode.

09. **In a show about L getting a job at the same company J already works for and K used to work for, all three actors will appear. Which of the following is true about the other actors who may appear?**

- A** M, N and O must all appear.
- B** M may appear and N must appear.
- C** M must appear and O may appear
- D** O may appear and N may appear

**Answer: C**

**Explanation:**

In a show about L getting a job at the same company J already works for and K used to work for, all three actors will appear.

Thus, L, J and K are definitely appearing on the show.

We are given that:-

J will only work on episodes on which M is working. Thus, M is also working.

O may work as there are no conditions restricting O.

Hence, option C is the correct answer.

10. **Next week, the show involves N's new car and O's new refrigerator. Which of the following is true about the actors who may appear?**

- A** M, J, L and K all may appear.
- B** J, L, and K must appear
- C** L and K must appear.
- D** Only L may appear.

**Answer: D**

**Explanation:**

Since, M worked previous week thus, he won't work this week.

We are given J will only work on episodes on which M is working.

Thus, J cannot work.

N and O are already working and N will not work with K under any circumstances.

We are also given that:- At least three of the actors must appear in every weekly episode.

Thus, L will have to work.

Hence, option D is the correct answer.

**Instructions [111 - 112 ]**

Some information is provided in the paragraph below. Answer the questions based on this information.

Era is in charge of seating the speakers at a table. In addition to the moderator, there will be a pilot, a writer, an attorney, and an explorer. The speakers' names are Gaj, Hema, Jaya, Kumar, and Lalit

The moderator must sit in the middle, in seat #3

The attorney cannot sit next to the explorer

Lalit is the pilot

The writer and the attorney sit on either side of the moderator

Hema, who is not the moderator, sits between Kumar and Jaya.

The moderator does not sit next to Jaya or Lalit

Gaj, who is attorney, sits in seat #4.

11. **Who is the moderator?**

**A** Lalit

**B** Gaj

**C** Hema

**D** Kumar

**Answer:** D

**Explanation:** Thus, Kumar is the moderator.

Hence, option D is the correct answer.

12. **Where does Jaya Sit?**

**A** seat #1

**B** seat #2

**C** seat #3

**D** seat #4

**Answer:** A

**Explanation:** Thus, Jaya sits at seat #1.

Hence, option A is the correct answer.

**Instructions [113 - 114 ]**

Some information is provided in the paragraph below. Answer the questions based on this information.

A number arrangement machine, when given a particular input, rearranges it using a particular rule. The following is the illustration and steps of the arrangement

<b>Input</b>	105	241	67	347	150	742	292	589
<b>Step I</b>	67	105	241	347	150	742	292	589
<b>Step II</b>	67	742	105	241	347	150	292	589
<b>Step III</b>	37	742	105	589	241	347	150	292
<b>Step IV</b>	67	742	105	589	150	241	347	292
<b>Step V</b>	67	742	105	589	150	347	241	292

Arrangement at Step V is the last for the given input

13. **What should be the fourth step of the following input?**  
**64 326 187 87 118 432 219 348**

- A** 64 432 87 326 118 187 219 348
- B** 64 432 87 348 326 187 118 219
- C** 64 432 87 348 118 326 187 219
- D** None of the above

**Answer: C**

**Explanation:**

As we can see in the 1st step the smallest number come to the 1st position from left.

In the 2nd step the largest number comes to the 2nd position from left.

In the 3rd step the 2nd smallest number come to the 3rd position from left and so on.

Thus, 64 326 187 87 118 432 219 348

Step 1:- 64 432 326 187 87 118 219 348

Step 2:- 64 432 87 326 187 118 219 348

Step 3:- 64 432 87 348 326 187 118 219

Step 4:- 64 432 87 348 118 326 187 219

Hence, option C is the correct answer.

14. **How many steps will be required to get the final output from the following input?**  
**319 318 746 123 15 320 78 426**

- A** Four
- B** Five
- C** Six
- D** Seven

**Answer: D**

**Explanation:**

As we can see in the 1st step the smallest number come to the 1st position from left.

In the 2nd step the largest number comes to the 2nd position from left.

In the 3rd step the 2nd smallest number come to the 3rd position from left and so on.

Thus, 319 318 746 123 15 320 78 426

Step 1:- 15 319 318 746 123 320 78 426

Step 2:- 15 746 319 318 123 320 78 426

Step 3:- 15 746 78 319 318 123 320 426

Step 4:- 15 746 78 426 319 318 123 320

Step 5:- 15 746 78 426 123 319 318 320

Step 6:- 15 746 78 426 123 320 319 318

Step 7:- 15 746 78 426 123 320 318 319

Thus, 7 steps will be required to get the output.

Hence, option C is the correct answer.

15.  $P * Q$  implies that Q is 2 kms to the left of P

$P @ Q$  implies that Q is 2 kms below P

$P \$ Q$  implies that Q is standing 2 kms above P

$P \neq Q$  implies that Q is standing 2 kms to the right of P

If  $F \neq S \$ B * V$ , in which direction is F with respect to V?

**A** North

**B** South

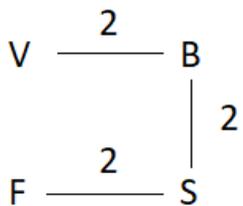
**C** East

**D** West

**Answer:** B

**Explanation:**

The given condition is as shown below:-



As we can see F is to the South of V.

Hence, option B is the correct answer.

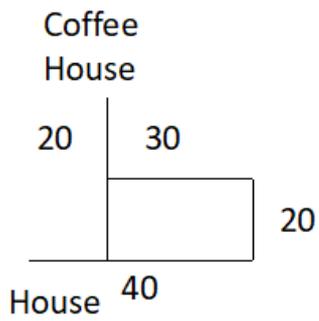
16. Immediately after leaving his house, Ratvik turned right and walked for 40m. Then he turned left and walked for 20mts. Then he again took a left turn and walked for 30mts. There he met a friend and turned right to go to the coffee shop 20 mts away. After having coffee, he walked back straight for 40mts in the direction he had come from. How far is he from his house?

- A** 20m
- B** 0m
- C** 10m
- D** 40m

**Answer: C**

**Explanation:**

The given condition is as shown below:-



Thus, Ratvik is 10m away from his home.  
Hence, Option C is the correct answer.

17. **Find the missing alphabet.**

H	C	?
B	F	E
P	R	T

- A** Y
- B** O
- C** D
- D** G

**Answer: C**

**Explanation:**

$H = 8$	$C = 3$	$? = 20/5 = 4 = D$
$B = 2$	$F = 6$	$E = 5$
$P = 8*2 = 16$	$R = 3*6 = 18$	$T = 20$

Thus,  $? = D$ .

Hence, option C is the correct answer.

18. In a four-day period - Monday through Thursday - each of the following temporary office workers worked only one day, each a different day. Jai was scheduled to work on Monday, but he traded with Raj, who was originally scheduled to work on Wednesday. Farid traded with Kajal, who was originally scheduled to work on Thursday. Finally, Jai traded with Kajal. After all the switching was done, who worked on Tuesday?

- A Jai
- B Farid
- C Raj
- D Kajal

**Answer:** A

**Explanation:**

Name	Original schedule	After 1 <sup>st</sup> exchange	After 2 <sup>nd</sup> exchange
Jai	Monday	Wednesday	Tuesday
Raj	Wednesday	Monday	Monday
Farid	Tuesday	Thursday	Thursday
Kajal	Thursday	Tuesday	Wednesday

Thus, after all the exchanges Jai worked on Tuesday.

Hence, option A is the correct answer.

19. Which four bits can be joined together to form two words that have opposite meanings?

ERT, UCE, DES, END, EXP, EAR, AND, SIP, RED, GOS

1 2 3 4 5 6 7 8 9 10

- A 2, 5, 7, 9
- B 1, 3, 8, 10
- C 1, 5, 8, 10
- D 2, 4, 7, 8

**Answer:** A

**Explanation:**

The words form by joining 2, 5, 7, 9 are Expand and Reduce which are opposite in meaning.

Hence, option A is the correct answer.

20. If a clock is kept on the table in such a way that at 3:10 pm the hour hand points south, after how much time will the minute hand point east?

- A 20 minutes

**B** 35 minutes

**C** 50 minutes

**D** 90 minutes

**Answer: C**

**Explanation:**

If at 3:10 the hour hand is pointing south then 3 points South, 6 points West, 9 points North and 12 points East.

Thus, after 50 minutes the minute hand will point 12 and thus East.

Hence, option C is the correct answer.