

ANSWERS:

1	A
2	В
3	В
4	В
5	D
6	В
7	D
8	В
9	С
10	С
11	A
12	D A
13	A
14	A
15	В
16	С
17	С
18	В
19	В
20	A
21	С
22	С
23	D
24	A
25	D
26	В
27	A
28	A
29	A
30	В

31	С
32	С
33	В
34	A
35	С
36	A
37	A
38	D
39	D
40	D
41	В
42	A
43	С
44	С
45	A
46	С
47	С
48	С
49	D
50	D
51	D
52	D
53	D
54	С
55	В
56	В
57	С
58	A
59	С
60	D

61	D
62	A
63	D
64	A
65	С
66	D
67	С
68	В
69	С
70	В
71	С
72	D
73	С
74	В
75	D
76	С
77	В
78	A
79	A
80	A
81	В
82	D
83	A
84	С
85	D
86	В
87	С
88	A
89	A
90	В

01	В
91	
92	A
93	D
94	С
95	D
96	С
97	В
98	С
99	C A
100	
101	D
102	В
103	С
104	D
105	A
106	A
107	В
108	В
109	A
110	D
111	D
112	В
113	A
114	A
115	D
116	D
117	D
118	С
119	С
120	С

121	С
122	D
123	С
124	В
125	С
126	D
127	В
128	A
129	D
130	A
131	С
132	С
133	D
134	С
135	A
136	В
137	A
138	В
139	A
140	В
141	D
142	В
143	A
144	A
145	A
146	В
147	В
148	A
149	С
150	A
	•



EXPLANATIONS:

1 Solution

B is not neighbour of G, which means final position is as under:

A C 1

Now let us check the options:

- (a) C is to the immediate left of A.....ANSWER
- (b) D is immediate neighbour of B and F.....NO
- (c) G is to the immediate right of D.....NO
- (d) A and E are at the extreme ends.....NO

2 Solution:

A - Hindi, English

B – Hindi, English, Geography, History, French

- C English, Geography
- D Mathematics, Hindi
- E History, French

3 Solution

From 1 to 150, there are

9 single digit numbers (1 to 9) + 90 two digit numbers (10 to 99) + 51 three digit numbers (100 to 150)

Thus total digits to be printed = (9×1) + (90×2) + (51×3) = 342.

4 Solution

The clock will strike 3 times at 3 o' clock. These five strikes are interspersed with four intervals as under:

Strike – Strike – Strike – Strike

It is these intervals that take time. When clock strikes 5 times, there are 4 intervals. Total time taken by them is 12 seconds. Thus each interval is of duration 3 seconds.

When the clock will strike 8 times at 9 o' clock there shall be 8 such intervals and thus time taken shall be $8 \times 3 = 24$ seconds.

5 Solution

The statement simply says that morning walk is good for health. It is not presented as either the necessary or the suffcient condition for good health.

Hence, conclusion 1 is incorrect as all healthy people need not go for morning walk

Similarly, conclusion 2 is also incorrect as morning walk is not an esssential condition for good health

6 Solution

Let us solve this question using elimination. 256 means red colour chalk (thus white is none of 2 or 5 or 6). 589 means 'green colour flower' (thus white is none of 5, 8 or 9). Thus white is none of 2, 5, 6, 8 or 9 and hence we get only one option (b) which can represent white.

7 Solution

Here nothing has been said about the relative magnitudes of A and B or whether they are both positive, both



negative or one positive and one negative. Therefore, let us assume some value for A and B and see whether we can make any progress:

Let A = 100 and B = 50. In this case P shall come out to be 72.5 and Q shall be 75. That is P shall be smaller to Q. Now Let A = 100 and B = 99. In this case P shall be 104.35 and Q shall become 99.5. That is P shall be greater to Q.

Thus with different values of A and B, we get different results about magnitudes of P and Q. Thus the answer shall be

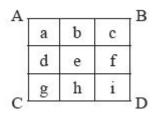
(d) None of the above can be concluded with certainty.

8 Solution

	Α	В	С	D	Е	F
	10	10	10	10	10	10
	8	10	15	10	10	7
Finally	8	7	12	15	11	7

D + E = 15 + 11 = 26By option, B + C + F = 7 + 12 + 7 = 26

9 Solution



4 vertical and 4 horizontal lines Squares are: a, b, c, d, e, f, g, h, i, (abde), (bcef), (degh), (efhi), ABCD Rectangles are: (ab), (bc), (de), (ef), (gh), (hi), (ad), (dg), (be), (eh), (cf), (fi), (abc), (def), (ghi), (adg), (beh), (cfi), (abcdef), (defghi), (adgbeh), (behcfi) Required number = 14 + 22 = 36

10 Solution

Two hours later the freight train from Delhi to Mumbai must have covered a distance of $40 \times 2 = 80$ km. Now in this question, we know that the express train is running faster than the freight train so it will eventually catch up with the freight train. If we assume that after 2 hours the freight train has stopped then basically we have to find out in how much time the express train (whose relative speed will be 60-40 = 20 km/hr) cover the distance of 80 km that separates the two trains. Now with 20 km/hr the express train would cover 80 km in 4 hours. Thus in four hours the distance covered by the express train shall be $4 \times 60 = 240 \text{ km}$.

21 NOTE:

https://www.thehindu.com/scitech/energy-and-environment/newspecies-of-shrew-discovered-inandamans-narcondamisland/article34478344.ece

22 NOTE:

https://blog.ipleaders.in/biomedicalwaste-management-rules-2016/

23 NOTE:

https://www.thehindu.com/scitech/science/100-million-year-oldbones-of-sauropods-discovered-inmeghalaya/article34479477.ece



24 NOTE:

https://indianexpress.com/article/in dia/india-hdi-ranking-2020-unhuman-development-7108205/

25 NOTE:

India ranked 189 131 among countries on the Human Development Index (HDI) for 2019, slipping two places from the previous year, according the Human to Development Report 2020 released by the United Nations Development Program (UNDP).

The 2020 Report has introduced planetary pressures-adjusted Human Development Index, which adjusts the standard Human Development Index (HDI) by a country's per capita carbon dioxide emissions and material footprint.

The other indices that form the part of the Report are:

Inequality-adjusted Human
Development Index (IHDI),
Gender Development Index (GDI),
Gender Inequality Index (GII) and
Multidimensional Poverty Index (MPI).
HDI emphasizes that people and their
capabilities should be the ultimate
criteria for assessing the development
of a country, not economic growth
alone.

Based on three Basic Dimensions of Human Development:

A long and healthy life,
Access to knowledge, and
A decent standard of living.
HDR was developed and led for years

by Pakistani economist Mahbub ul-Haq, who was that country's finance minister for most of the '80s. He, along with Amartya Sen, pioneered the idea of development as being more than just greater income: it also meant access to more and more options, to the capability to fulfil more and more of your aspirations. The Human Development Index or HDI, the report's main product, reflects this idea: it includes income, but also quantifications of access to health and education — life expectancy and mean years of schooling, for example. This HDR looks at the big movers, the countries that have improved the allround lives of their citizens most.

26 NOTE:

https://indianexpress.com/article/ex plained/how-sputnik-v-worksagainst-coronavirus-and-howeffectively-7270877/

27 NOTE:

https://www.financialexpress.com/op inion/why-g-sap-1-0-is-a-bold-move-by-rbi/2231796/

28 NOTE:

https://www.thehindubusinessline.co m/companies/vedanta-signs-mou-forreuse-of-bauxiteresidue/article34301801.ece

29 NOTE:

https://www.thehindu.com/news/nat ional/kerala/wayanad-sanctuary-ahaven-for-asiatic-wild-



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20	NOTE:			
30	NOTE:			
	https://indianexpress.com/article/in			
	dia/covid-19-has-pushed-half-of-			
	indias-poor-away-from-nutritious-			
	food-report-7272500/			
36	NOTE:			
	https://wps.pearsoned.com/wps/me			
	dia/objects/3844/3936850/protected			
	/ch18/micsg18.pdf			
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37	NOTE:			
	https://www.financialexpress.com/w			
	hat-is/non-tax-revenue-			
	meaning/1762795/			
20	NOTE			
38	NOTE:			
	https://www.thehindubusinessline.co			
	m/companies/vedanta-signs-mou-for-			
	reuse-of-bauxite-			
	residue/article34301801.ece			
39	NOTE:			
	https://indianexpress.com/article/ex			
	plained/explained-how-the-1-5-times-			
	formula-for-crops-msp-is-calculated-			
	7075865/			
40	NOTE:			
	https://www.livemint.com/news/indi			
	a/rbi-looks-to-tame-inflation-with-a-			
	stronger-rupee-			
	11599065207611.html			
41	NOTE:			
	Wood's Despatch of 1854 Charles			
	-			

Wood was a British Liberal politician and Member of Parliament. He served as Chancellor of the Exchequer from 1846 to 1852. Later he became the President of the Board of Control of the East India Company. In 1854 he sent the "Wood's despatch" to the Governor General Lord Dalhousie. As per this despatch: An education department was to be set in every province. Universities on the model of the London University be established in big cities such as Bombay, Calcutta and Madras. At least one government school be opened in every district. Affiliated private schools should be given grant in aid. The Indian natives should be given training in their mother tongue also. Wood's Despatch called Magnacarta of English Education in India. In accordance with Wood's despatch, Education Departments were established in every province and universities were opened at Calcutta, Bombay and Madras in 1857 on the model of the London University. Later universities were opened in Punjab in 1882 and at Allahabad 1887.

42 NOTE:

https://pib.gov.in/PressReleasePage.aspx?PRID=1604587

https://oceanservice.noaa.gov/hazard s/hab/

43 **NOTE**:

Indian Social Conference Founded by



M.G. Ranade and Raghunath Rao, the conference met annually from its first session in Madras in 1887 at the same time and venue as the Indian Congress. National It focused attention on the social issues of importance; it could be called the social reform cell of the Indian National Congress, in fact. The conference advocated inter-caste marriages, opposed polygamy and kulinism. It launched the "Pledge Movement" to inspire people to take a pledge against child marriage.

44 NOTE:

The name of Lord William Bentinck is still cherished in India for suppression of the Thugs. Thugs were hereditary assassins whose profession was to deceive people and strangle them to death with their Pugree or handkerchief. They used to travel in Gangs, disguised as merchants or pilgrims. They were bound together by an oath on the rites of their deity goddess Kali. The word "Thug" is derived from "Sthag" of Sanskrit, which means "sly". Rather than ordinary thieves, they were the bands of the people who were first recorded by Barni, when he mentions that Firoz Shah Tughlaq captured the Thugs. But none of them was killed and Sultan put them in boats and sent them to Lakhnauti where they were set free, so that they don't trouble the "Delhites". In suppression of Thugs, along with William Bentinck, one more name is cherished. This able officer was William Henry Sleeman. Initially he was a soldier and later became the administrator. In 1835, the Thuggee and Dacoity Dept' was William created by Bentinck and William Henry Sleeman was made its superintendent. He was later promoted as its Commissioner in 1839. The rigorous operations under Sleeman led to capture of 1400 Thugs who were hanged by the government or transported for life. A special prison was established at Jabalpur Thugs. The reason of this success was awareness creation by the the Government. The department started disseminating information about the Thugee and at every Police Station or Thana, the information about the new techniques by the Thugs would be sent. The travelers were warned. Since, Thugs could be recognized only by evidence, the department started "King's Evidence Programme". In this programme the Thugs, who turned evidences of the and provided into about the Gang members & peers would be provided protection and incentives. This was used by the government to break the code of silence, which kept the members of the gang silent.

45 NOTE:

https://www.ndtv.com/delhinews/arvind-kejriwal-inauguratestruck-mounted-anti-smog-gun-totackle-delhi-air-pollution-2336515 https://indianexpress.com/article/w



	hat-is/what-is-anti-smog-gun/		https://www.thehindu.com/news/nat
			ional/other-states/jammu-muslim-
46	NOTE:		front-backs-gupkar-
	https://indianexpress.com/article/ex		declaration/article32881929.ece
	plained/explained-why-this-is-the-		
	worst-wildfire-season-in-the-western-	55	NOTE:
	us-6904983/		https://telanganatoday.com/the-
			graveyard-of-spacecrafts
47	NOTE:		
	The value of pi was first calculated by	56	NOTE:
	Baudhayan.		https://www.indiatoday.in/india/stor
	https://www.livemint.com/Sundayap		y/lipulekh-kalapani-india-nepal-
	p/8wRiLexg1N2IOXjeK2BKcL/How-		mansarovarwhat-1679173-2020-05-
	Aryabhata-got-the-earths-		18
	circumference-right-millenia-a.html		Banihal pass is a popular pass in
			Jammu and Kashmir. It is situated in
48	NOTE:		the Pir- Panjal Range. It connects
	https://indianexpress.com/article/ex		Banihal with Qazigund.
	plained/explained-what-fundamental-		Lipu Lekh is located in Uttarakhand.
	duties-mean-6145712/		It connects Uttarakhand with Tibet.
			This pass is an important border post
49	NOTE:		for trade with China.
	https://www.livemint.com/news/indi		Shipki La is located through Sutlej
	a/kolkata-east-west-metro-a-look-at-		Gorge. It connects Himachal Pradesh
	india-s-first-underwater-metro-		with Tibet. It is India's third border
	station-11603185104286.html		post for trade with China after Lipu
52	NOTE:		Lekh and Nathula Pass.
•	https://www.financialexpress.com/op		
	inion/paddy-straw-decomposer-is-	57	NOTE:
	not-a-substitute-for-no-burning-		A situation in which available work
	stubble-management-		tasks are split among resources
	practices/2099623/		(typically labour) such that they seem
	, ,		fully employed but in reality much of
53	NOTE:		their time is spent in unproductive
	https://indianexpress.com/article/in		activities is called disguised
	dia/global-health-index-2020-india-		unemployment. Here the marginal
	6757899/		productivity of labour comes to zero.
	0.0.00		When aggregate demand for goods
54	NOTE:		and services in the economy falls far
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below its capacity, a large chunk of labour force gets employed. This is known as cyclical unemployment. While structural unemployment means the change in the demand pattern for goods necessitates change in the demand pattern for labour. But labour force cannot immediately metamorphose, matching the change in demand pattern. Due to these conditions a state of unemployment occurs that is known as structural unemployment.

58 **NOTE**:

Being a sovereign state, India can acquire foreign territories according to the modes recognized by international law, i.e., cession (following treaty, purchase, gift, lease or plebiscite), occupation (hitherto unoccupied by a recognized ruler), conquest subjugation. For example, India acquired several foreign territories such as Dadra and Nagar Haveli; Goa, Daman and Diu; Puducherry; and Sikkim since the commencement of the Constitution.

59 NOTE:

https://www.businessstandard.com/article/ptistories/centre-declares-nationalchambal-sanctuary-in-mp-as-ecosensitive-zone-120030200815_1.html

60 NOTE:

https://www.downtoearth.org.in/new s/climate-change/protectingpeatlands-can-help-attain-climategoals-

69883#:~:text=In%20India%2C%20pe atlands%20occupy%20roughly,the%2 0organic%20layer%20relatively%20ra pidly.

62 NOTE:

The Kigali Agreement is an amendment to the Montreal Protocol which is an environmental treaty signed by countries to phase out Ozone Depleting Substances (ODSs) from the earth's atmosphere entered into force on 1st January 2019.

The signing countries are expected to decrease the manufacture and usage of hydrofluorocarbons (HFCs) by about 80-85% from their baselines until 2045.

Even though HFCs do not cause ozone layer depletion, they are super greenhouse gases. They cause global warming.

64 NOTE:

Shukrayaan Mission: The ISRO is also planning a mission to Venus, tentatively called Shukrayaan.

65 NOTE:

Recently, farmers from Golaghat district in Assam have cultivated new flood resistant paddy varieties to shift from the traditional ones. The varieties called Ranjit Sub1, Swarna Sub1 and Bahadur Sub1 have been used by about 60% farmers of the West Brahmaputra area.



66 NOTE:

Α human atlas initiative named Manav has been launched by the Department of Biotechnology (DBT) and Persistent Systems, a biotechnology company. The aim is to create a unified database of molecular network of all the tissues in the human body and to derive a holistic picture of working of the human body. https://indianexpress.com/article/ex plained/manav-human-atlasinitiative-depart-of-biotechnology-5723857/

67 NOTE:

Surya Sen decided to organize an armed rebellion to occupy two main armories in Chittagong to seize and supply arms to the revolutionaries to destroy telephone and telegraph lines and to dislocate the railway link of Chittagong with the rest of Bengal. The raid was conducted under the banner of Indian Republican Army Chittagong Branch. The raid was quite successful and Sen hoisted the took national flag, salute proclaimed a provisional revolutionary government.

68 NOTE:

Average age of 40 students = 16.95 years Total age of 40 students = 40×16.95 = 678 years

Average age of 41 students = 17

Total age of 41 students = 41×17 = 697 years.

Age of new student = 697 - 678 = 19 years.

69 NOTE:

National Aeronautics and Space Administration (NASA) has found out that asteroid 16 Psyche, which orbits between Mars and Jupiter, could be made entirely of metal and is worth an estimated 10,000 quadrillion US dollars.

https://indianexpress.com/article/ex plained/what-is-16-psyche-theasteroid-believed-to-be-worth-10000quadrillion-6911646/

70 NOTE:

VAJRA (Visiting Advanced Joint Research) Faculty Scheme is a dedicated program exclusively for overseas scientists and academicians with emphasis on Nonresident Indians (NRI) and Persons of Indian Origin (PIO)/Overseas Citizen to India (OCI) work adjunct/visiting faculty for a specific period of time in Indian Public funded academic and research institutions. https://pib.gov.in/PressReleaseIframe Page.aspx?PRID=1657418

71 NOTE:

'Saviour Sibling' refers to babies that are created to serve an older sibling as a donor of organs, bone marrow or cells. Stem cells from the umbilical cord blood or blood of the saviour



sibling are used for treatment of serious blood disorders like thalassemia, sickle cell anaemia.

Recently, The Saviour Sibling named Kavya saved her 6-year-old brother (suffering from Thalassemia).

72 NOTE:

Plants sustain themselves process called photosynthesis. But do not they need soil photosynthesize. They need the soil to them with water supply Hydroponic innovations nutrients. have proven direct exposure nutrient-filled water can be a more effective and versatile method of growth than traditional irrigation.

79 NOTE:

Ceylon Frogmouth is a nocturnal Small Bird from Sri Lanka, Coppersmith Barbet is an Asian barbet, Gray-Chinned Minivet is a bird from the Campephagidae family and White throated redstart belongs to Muscicapidae.

81 NOTE:

More than 50% of India's districts are classified as "overexploited" or "critical" by the Central Ground Water Authority (CGWA). Statement 1 is incorrect.

The Central Ground Water Authority is under Section 3 of the Environment Protection Act, 1986. Statement 2 is correct.

India has the world's largest groundwater well-equipped irrigation system. Statement 3 is correct.

82 NOTE:

A situation in which available work tasks are split among resources (typically labour) such that they seem fully employed but in reality much of their time is spent in unproductive activities is called disguised unemployment. Here the marginal productivity of labour comes to zero. When aggregate demand for goods and services in the economy falls far below its capacity, a large chunk of labour force gets employed. This is known as cyclical unemployment. While structural unemployment means the change in the demand pattern for goods necessitates change in the demand pattern for labour. But labour force cannot immediately metamorphose, matching the change in demand pattern. Due to these conditions a state of unemployment occurs that is known as structural unemployment.

86 NOTE:

Taiga is a biome characterized by coniferous forests. Covering most of inland Alaska, Canada, Sweden, Finland, inland Norway, northern Kazakhstan and Russia (especially Siberia), as well as parts of the extreme northern continental United States, the taiga is the world's largest terrestrial biome. In Canada, boreal forest is the term used to refer to the southern part of this biome, while



"taiga" is used to describe the more barren northern areas south of the Arctic tree-line, Since North America and Eurasia were recently connected by the Bering land bridge, a number of animal and plant species (more animals than plants) were able to colonise both continents and are distributed throughout the taiga biome. Others differ regionally, typically with each genus having several distinct species, each occupying different regions of the taiga. Taigas also have some smallleaved deciduous trees like birch, alder, willow and aspen; mostly in areas escaping the most extreme winter cold. However, the deciduous Larch is coping with the coldest winters on the northern hemisphere in eastern Siberia. The southernmost part of the taiga also have trees like oak, maple and elm scattered among the conifers.

87 NOTE:

https://www.thehindu.com/scitech/science/nasas-voyager-1detects-the-eerie-hum-of-interstellarspace/article34539865.ece

88 **NOTE**:

https://www.thehindu.com/scitech/health/explained-why-havedoctors-cautioned-against-misuse-ofct-scans-and-steroids-to-diagnoseand-treat-covid-19/article34516623.ece

89 NOTE:

https://www.thehindu.com/news/nat ional/no-difference-in-mortality-in-covid-19-first-and-second-wave-icmr/article34358148.ece
https://www.thehindu.com/sci-tech/health/the-hindu-explains-what-are-some-of-the-key-terms-being-used-to-describe-the-novel-coronavirus-outbreak/article31768617.ece

90 NOTE:

https://www.thehindu.com/scitech/science/how-long-is-the-solarsystems-longest-day-venus-has-theanswer/article34478742.ece

92 NOTE:

https://indianexpress.com/article/ex plained/explained-ats-seizes-7kguranium-worth-rs-21-crore-from-ascrap-dealer-heres-what-happened-7305856/

93 **NOTE**:

https://www.downtoearth.org.in/new s/agriculture/reduce-human-caused-methane-emissions-by-45-to-avoid-worst-of-climate-change-un-76837#:~:text=Human%2Dcaused%2 0methane%20emissions%20must,by %202045%2C%20the%20report%20a dded.&text=Governments%20worldwi de%20were%20aspiring%20to%20red uce%20methane

94 NOTE:

https://indianexpress.com/article/ex plained/explained-ip-waiver-for-covid-



	vaccines-7304992/					
95	NOTE:					
	https://www.livemint.com/news/indi					
	a/steps-taken-by-rbi-will-help-middle-					
	class-businesses-during-lockdown-					
	pm-modi-11585315605489.html					
96	NOTE:					
	It was based on the Harrod-Domar					
	model, which suggested that growth					
	was dependent on two things. First,					
	high level of savings since higher					
	savings enabled greater investment					
	and second, a low capital-output ratio					
	that ensured efficient investment and					
	a higher growth rate.					
100	NOTE:					
	https://www.thehindu.com/news/int					
	ernational/israels-six-day-war-					
	explained/article18960298.ece					
101	NOTE:					
	https://www.thehindu.com/news/nat					
	ional/gi-tag-to-manipur-black-rice-					
	gorakhpur-					
	terracotta/article31475958.ece					
102	NOTE:					
	https://www.thehindu.com/news/nat					
	ional/what-are-gi-tags-and-how-are-					
	they-awarded/article31667981.ece					
103	NOTE:					
	https://www.thehindu.com/news/citi					
	es/Hyderabad/remdesivir-not-for-all-					
40.	patients/article34353099.ece					
104	NOTE:					

Parallel or Grey Imports: These are products marketed by the patent owner in one country and imported into another country without the approval of the patent owner. For example, suppose company A has a drug patented in the Country 'X' and Country 'Y'. In Country 'Y', the drug may be sold at lower prices. In this case, the Country 'X' may decide to import the drug from Country 'Y'. It is referred to parallel or grey import.

Bolar Exception: Usually, the marketing approval for new drugs takes substantial amount of time. Hence, upon the expiry of patented drugs, the entry of cheaper Generic medicines into market may get delayed.

Hence, Bolar Exception allows potential competitors to use a patented invention during the patent term without the consent of the patent owner for the purpose of obtaining marketing approval for a prospective generic product.

105 NOTE:

The Trade Related Aspects of Intellectual Property Rights (TRIPS Agreement) does not specifically list the reasons that might be used to justify compulsory licensing. However, the Doha Declaration on TRIPS and Public Health confirms that countries are free to determine the grounds for granting compulsory licences, and to determine what constitutes a national emergency.



	https://www.financialexpress.com/op		ies/mumbai/maratha-quota-special-
	inion/fight-covid-with-compulsory-		leave-petition-filed-in-sc-against-hc-
	licensing/2248068/		order-5817938/
106	NOTE:		Special Leave Petition – What, How &
	https://indianexpress.com/article/ex		When
	plained/explained-what-new-	1:	12 NOTE:
	research-says-about-climate-change-		https://www.livelaw.in/columns/sup
	causing-a-shift-in-earths-axis-		reme-court-rohingya-refugees-
	7299258/		international-covenant-on-civil-and-
			political-rights1966-173718
108	NOTE:		
	https://www.sciencedirect.com/scien	1	13 NOTE:
	ce/article/pii/S0167198710001960#:		https://www.thehindu.com/society/t
	~:text=Direct%20seeded%20rice%20(he-mizos-and-myanmarese-share-
	DSR)%20has,prepared%20seedbed%2		deep-cultural-bonds-that-go-beyond-
	0(dry%20seeding).		the-citizen-refugee-
	https://www.thehindu.com/news/nat		divide/article34391179.ece
	ional/other-states/punjab-farmers-		
	find-a-better-way-to-grow-	1:	14 NOTE:
	paddy/article32060408.ece		https://www.mondaq.com/india/pate
	https://indianexpress.com/article/ex		nt/603302/utility-patents-its-
	plained/labour-short-can-direct-		position-in-india
	seeding-be-alternative-to-paddy-		
	transplanting-6408653/	1:	15 NOTE:
			https://indianexpress.com/article/op
109	NOTE:		inion/columns/wealth-from-stubble-
	https://www.thehindu.com/news/int		burning-farmers-farmers-air-
	ernational/6-european-nations-join-		pollution-delhi-punjab-haryana-
	iran-barter-		6884982/
	system/article30131764.ece		
			https://indianexpress.com/article/in
110	NOTE:		dia/punjab-stubble-farm-fires-ex-
	https://www.thehindu.com/opinion/		situ-management-7076263/
	op-ed/dams-and-		
	damages/article33795426.ece	1	16 NOTE:
			https://www.deccanherald.com/natio
111	NOTE:		nal/north-and-central/indian-
	https://indianexpress.com/article/cit		constitution-first-amendment-and-



the-l	last-7	795	74.	html

117 NOTE:

https://www.businessstandard.com/article/finance/moneta ry-policy-review-rbi-adopts-a-newliquidity-management-framework-120020601929 1.html

118 | NOTE:

https://www.thehindu.com/scitech/science/a-globalselfie/article30808013.ece

119 NOTE:

https://pib.gov.in/PressReleaseIframe Page.aspx?PRID=1680145

120 NOTE:



https://www.thehindu.com/news/int ernational/kyrgyzstan-tajikistan-seekto-ease-cross-bordertensions/article34452732.ece

121 NOTE:

The average rainfall in six days = 0.5 inch.

Hence, total rainfall in six days = $0.5 \times 6 = 3$ inch

The average rainfall in a city for the first four days = 0.4 inch

So, total rainfall in these four days = $0.4 \times 4 = 1.6$ inch

Hence, rainfall in the last two days = 3 - 1.6 = 1.4 inch

Now, it's given that the rainfall on the last two days was in the ratio of 4:3.

Hence, rainfall on the fifth day = $1.4 \times [4/(4+3)] = 1.4 \times (4/7) = 0.8$ inch

122 NOTE:

The difference when reversed is 27.

So the digits will have a difference of 27/9 or 3.

So 14,25,36,47,58,69 are the possible pairs of digits.

The numbers are 41,52,63,74,85,96. Or total 6 pairs.

123 NOTE:

	Bank Employee	Tennis Player	Post Graduate Sociology	P.G in Commerce
Vimala	✓			
Kamala	✓		✓	
Amala	Unemployed		✓	
Komala	Unemployed	✓	✓	
Nirmala	✓	✓	✓	
Shyamala				✓

124 NOTE:

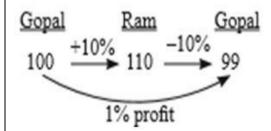


$\underline{\mathbf{X}}$	Y	<u>Z</u>
A	В	C
\downarrow	\downarrow	\downarrow
6	7	6.5
- 1	- 3	- 2
5 cm	4 cm	4.5 cm
100	-	C

A =
$$39 \times 5 + 1 \times 6 = 201$$

B = $39 \times 4 + 1 \times 7 = 163$
C = $39 \times 4.5 + 1 \times 6.5 = 182$

125 NOTE:



Suppose Gopal got the cell phone for Rs. 100/-. He sold it to Ram at 10% profit i.e. he sold it to Ram for Rs. 110/-. Now Ram wants to sell it back to Gopal at 10% loss i.e. only for 90% of the amount for which is got it. Thus he will sell it to Gopal for Rs. $0.9 \times 110 = Rs. 99/-$

Thus Gopal makes a profit of Rs. 1 over an initial investment of Rs. 100/-

126 NOTE:

https://www.thehindu.com/news/citi es/Tiruchirapalli/better-awarenessof-plasma-donation-need-of-thehour/article32414743.ece https://www.ahealthyme.com/Library /DiseasesConditions/Pediatric/Blood /160,37

127 | NOTE:

https://www.financialexpress.com/lifestyle/science/devic-earth-fighting-air-pollution-with-modern-technology/2256682/

128 NOTE:

https://www.indiawaterportal.org/art icles/indian-islands-declared-hope-spots#:~:text=The%20Andaman%20a nd%20Nicobar%20and,wildlife%20and%20significant%20underwater%20h abitats.

129 NOTE:

https://www.traffic.org/news/tiktok-coalition-announcement/

130 NOTE:

https://www.thehindubusinessline.co m/news/pxil-launches-green-termahead-market/article34168706.ece

131 NOTE:

http://www.ncbc.nic.in/User_Panel/ UserView.aspx?TypeID=1025

132 NOTE:

https://indianexpress.com/article/ex plained/from-dolphins-and-whalesnew-insights-on-covid-19-7092225/ https://indianexpress.com/article/ex plained/why-beaching-of-whales-stillbaffles-science/

https://www.downtoearth.org.in/new s/japan-leads-opposition-toestablishing-marine-sanctuary-forwhales-

46393#:~:text=Two%20sanctuaries%2 0are%20currently%20designated,the



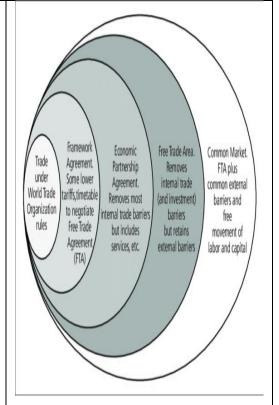
	%20Southern%20Ocean%20around%		we consider all committees which
	20Antarctica.		include 3, 4, and 5 men, with 2, 1,
133	NOTE:		and 0 women, respectively. That is, we
	https://www.oneindia.com/india/full		want to add the number of ways to:
	-text-of-rbi-governor-shaktikanta-das-		a. Choose 3 from 7 men and 2 from 6
	may-22-briefing-3092733.html		women = (7C3)*(6C2) = 35*15 = 525
			b. Choose 4 from 7 men and 1 from 6
			women = (7C4)*(6C1) = 35*6 = 210
134	NOTE:		c. Choose 5 from 7 men and 0 from 6
	https://indianexpress.com/article/ex		women = (7C5)*(6C0) = 21*1 = 21
	plained/explained-what-is-a-notified-		a+b+c= 756
	disaster-and-how-is-the-sdrf-used-		
	6315643/	139	NOTE:
	·		No. of ways in which 5 paper can
135	NOTE:		arranged is 5! Ways.
	https://geacindia.gov.in/india-		When the best and the worst papers
	bch.aspx		come together, regarding the two as
	_		one paper, we have only 4 papers.
136	NOTE:		These 4 papers can be arranged in 4!
	x= mixture A ,, then 300-x is Mixture		Ways.
	В		And two papers can be arranged
	0.1 x + (300-x)0.15=38		themselves in 2! Ways.
	x=140		No. of arrangement when best and
			worst paper do not come together,
137	NOTE:		= 5! - 4! 2! = 4! (5-2) = 24 x 3 = 72.
	Vowels in the word "CORPORATION"		(n-2)(n-1)! = (5-2)(5-1) = 72
	are O,O,A,I,O		
	Lets make it as CRPRTN(OOAIO)	140	NOTE:
	This has 7 letters, where R is twice so		Numbers of Options applicable for 5
	value = 7! /2!		letter digit –
	= 2520		> 10* 9* 8* 7* 610* 9* 8* 7* 6
	Vowel O is 3 times, so vowels can be		(as option pool for first digit is 10, for
	arranged = 5! /3!		second 9 because one is removed and
	= 20		so on)
	Total number of words = 2520 * 20 =		Numbers of Options applicable for 5
	50400		letter digit -> 10* 9* 8* 710* 9* 8* 7
			Required Ratio -
138	NOTE:		> (10* 9* 8* 7* 6)/(10* 9* 8* 7)(10* 9*
	Since at least 3 men must be chosen,		8* 7* 6)/(10* 9* 8* 7) = 6:1



143 NOTE:

https://indianexpress.com/article/ex plained/explained-deepfake-videodetection-implications-7247635/ https://indianexpress.com/article/ex plained/explained-deepfake-videodetection-implications-7247635/

145



https://www.indiabriefing.com/news/indias-free-tradeagreements-4810.html/