

IIFT 2015 Question Paper

Section I

1. Which multilateral development bank has been set up by BRICS as an alternative to the World Bank and the International Monetary Fund?

- A The New Development Bank
- B The Asian Development Bank
- C The Bank for Emerging Nations
- D The Economics Cooperation Bank

Answer: A

Explanation:

A new bank dedicated to the emerging BRICS countries opened for business in China's commercial hub of Shanghai on Tuesday, the official Xinhua news agency reported. The so-called emerging BRICS countries are made up of Brazil, Russia, India, China and South Africa, and their "New Development Bank" has been seen as a challenge to the Washington-based International Monetary Fund and World Bank.

2. Given below are some popular stock indices of the world. Match the stock index with the country and stock market it represents.

	Stock Index		Stock Market
I.	DAX	a.	Japan
II.	Nikkei	b.	Brazil
III.	KOSPI	c.	Germany
IV.	Bovespa	d.	South Korea

- A I-d; II-b; III-a; IV-c
- B I-b; II-d; III-c; IV-a
- C I-a; II-c; III-b; IV-d
- D I-c; II-a; III-d; IV-b

Answer: D

Explanation:

The DAX is a blue chip stock market index consisting of the 30 major German companies trading on the Frankfurt Stock Exchange. Prices are taken from the Xetra trading venue.

The Nikkei 225, more commonly called the Nikkei, the Nikkei index, or the Nikkei Stock Average, is a stock market index for the Tokyo Stock Exchange. It has been calculated daily by the Nihon Keizai Shinbun newspaper since 1950.

The Korea Composite Stock Price Index or KOSPI is the index of all common stocks traded on the Stock

Market Division—previously, Korea Stock Exchange—of the Korea Exchange. It is the representative stock market index of South Korea, like the S&P 500 in the United States.

The Bovespa Index (Portuguese: Índice Bovespa) best known as Ibovespa is the benchmark index of about 60 stocks that are traded on the B3 (Bovespa: BOlsa de Valores do Estado de São PAulo).

Hence, option D is the correct answer.

3. **The remains of which ancient civilization can be seen at the site of Machu Pichu in Peru?**

- A** Incas
- B** Aztecs
- C** Mayans
- D** Indians

Answer: A

Explanation:

Although known locally, it was not known to the Spanish during the colonial period and remained unknown to the outside world until American historian Hiram Bingham brought it to international attention in 1911. Machu Picchu was built in the classical Inca style, with polished dry-stone walls.

4. **Who is acknowledged as the creator of Chandigarh's Rock Garden?**

- A** E. Sridharan
- B** Nek Chand Saini
- C** Charles Correa
- D** Geoffrey Bawa

Answer: B

Explanation:

The Rock Garden of Chandigarh is a sculpture garden in Chandigarh, India. It is also known as Nek Chand's Rock Garden after its founder Nek Chand, a government official who started the garden secretly in his spare time in 1957.

5. **Which is the first Eurozone nation to exit its bailout package?**

- A** Portugal
- B** Italy
- C** Ireland
- D** Spain

Answer: C

Explanation:

In December 2013, after three years on financial life support, **Ireland** finally left the EU/IMF bailout programme, although it retained a debt of €22.5 billion to the IMF; in August 2014, early repayment of €15 billion was being considered, which would save the country €375 million in surcharges.

6. Match the name of the city with the river on whose banks it is located

	City		River
I.	Budapest	a.	Tigris
II.	Baghdad	b.	Tiber
III.	Rome	c.	Han
IV.	Seoul	d.	Danube

- A** I-d; II-a; III-b; IV-c
- B** I-b; II-c; III-d; IV-a
- C** I-c; II-d; III-a; IV-b
- D** I-a; II-b; III-c; IV-d

Answer: A

Explanation:

Budapest is the capital city of Hungary, made up of Buda and Pest, with the Danube River flowing past them, along a stretch of 28 kilometers.

The city of Baghdad is situated on the bank of river Tigris.

Rome is situated at the banks of 'Tiber River'.

A Center of Asia, Seoul Metropolitan. The history of the city of Seoul dates back approximately 2,000 years, to when Wiryeseong, the capital of Baekje, was located on the banks of the Hangang River in the southeastern part of what is now Seoul.

Hence, option A is the correct answer.

7. What is the motto of the 2016 Summer Olympics to be held in Rio de Janeiro?

- A** Live Your Passion
- B** One World, One Dream
- C** Friends Forever
- D** Harmony and Progress

Answer: A

Explanation:

Live Your Passion is the motto of the 2016 Summer Olympics to be held in Rio de Janeiro.

8. Which film won the 2015 Oscar Award for the “Best Animated Feature Film”?

- A Song of the Sea
- B How to train your Dragon 2
- C Big Hero 6
- D The Boxtrolls

Answer: C

Explanation:

'Big Hero 6' was directed by Don Hall and Chris Williams, and produced by Kristina Reed and Roy Conli won the 2015 Oscar Award for the “Best Animated Feature Film”.

9. Who among the following has won the maximum all time Grand Slam Women’s Singles title?

- A Serena Williams
- B Margaret Court
- C Steffi Court
- D Martina Navratilova

Answer: B

Explanation:

Margaret Court, also known as Margaret Smith Court, is a retired Australian tennis player and former world No. 1. In tennis, she amassed more major titles than any other player in history.

In 1970, Court became the first woman during the Open era (and the second woman in history) to win the singles Grand Slam (all four major tournaments in the same calendar year). She won 24 of those titles (11 in the Open era), a record that still stands.

10. Match the name of the Multinational Firm with whom the following Indians are/ have been associated as CEO

	Indian CEO		Multinational Firm
I.	Anshu Jain	a.	MasterCard
II.	Shantanu Narayen	b.	Reckitt & Colman
III.	Ajaypal Singh Banga	c.	Deutsche Bank
IV.	Rakesh Kapoor	d.	Adobe

- A I-c; II-d; III-a; IV-b
- B I-b; II-a; III-c; IV-d
- C I-d; II-c; III-b; IV-a

D I-a; II-b; III-d; IV-c

Answer: A

Explanation:

Anshu Jain is a British Indian business executive who currently serves as president of Cantor Fitzgerald. Jain formerly served as the Co-CEO of Deutsche Bank from 2012 until July 2015. Jain was a member of Deutsche Bank's Management Board.

Shantanu Narayen is an Indian American business executive, and the CEO of Adobe Systems, and president of the board of the Adobe Foundation. Prior to this, he had been the president and chief operating officer since 2005.

Ajaypal "Ajay" Singh Banga is an Indian Sikh American business executive. He is the current president and chief executive officer of MasterCard.

Rakesh Kapoor is an Indian businessman. He is chief executive of Reckitt Benckiser plc, a UK FTSE-listed multinational consumer goods company, a major producer of health, hygiene and home products.

Hence, we can say that option A is the correct answer.

11. A person with 'AB' blood group is also called a universal recipient because of the

- A** Lack of antigens in the blood
- B** Lack of antibodies in the blood
- C** Lack of both antigens and antibodies in the blood
- D** Presence of both antigens and antibodies in the blood

Answer: B

12. Who is the Vice Chairman of the NITI Aayog?

- A** Dr. Rajiv Kumar
- B** Arun Maira
- C** Raghuram Rajan
- D** Arvind Subramaniam

Answer: A

Explanation:

Rajiv Kumar (born 6 July 1951) is an Indian economist and is currently the vice-chairman of the NITI Aayog.

13. The first Export Processing Zone of Asia was set up in

- A** Singapore
- B** Kandla

C Shanghai

D Dubai

Answer: B

Explanation:

India is one of the first countries in Asia to recognize the effectiveness of the Export Processing Zone (EPZ) model in promoting export. India was inspired by China for setting up of SEZ. Asia's First EPZ was set up in Kandla in 1965.

14. **Who launched a 'crowd funding' campaign to raise funds for bailing out Greece?**

A Thomas Feeney

B Thomas Friedman

C Thomson Reuters

D Thomas Edison

Answer: A

Explanation:

Campaign organiser **Thomas Feeney** wasted no time in launching the campaign again. A crowdfunding campaign trying to raise €1.6 billion to bail out Greece has ended with contributions just shy of the €2 million mark - or 0 per cent of the total needed to make a difference to Greece.

15. **Match the name of the book with its autor.**

	Book		Author
I.	To Kill Mockingbird	a.	E.M. Forster
II.	A Passage to India	b.	Joseph E. Stiglitz
III.	Globalization and its Discontents	c.	Thomas L. Friedman
IV.	The World is Flat	d.	Harper Lee

A I-a; II-b; III-d; IV-c

B I-d; II-a; III-b; IV-c

C I-d; II-c; III-a; IV-b

D I-a; II-d; III-c; IV-b

Answer: B

Explanation:

To Kill a Mockingbird - Harper Lee

A Passage to India (1924) is a novel by English author E. M. Forster.

Globalization and Its Discontents is a book published in 2002 by the 2001 Nobel laureate Joseph E. Stiglitz.

The World Is Flat: A Brief History of the Twenty-first Century is an international best-selling book by Thomas L. Friedman.

16. **The U.S. recently announced that its redesigned ten-dollar bill, to be issued in 2020, will include the**

- A** Face of a Lion
- B** Face of an Elephant
- C** Face of a Woman
- D** Face of a Dragon

Answer: C

Explanation:

The U.S. plans to put a woman on the \$10 bill, announcing Wednesday that the next \$10 bill will feature the likeness of a woman who has played a major role in American history and has been a champion for democracy.

The new note, anticipated to be released in 2020, would be unveiled just in time for the 100th anniversary of the passage of the 19th Amendment, which secured women's suffrage. "America's currency makes a statement about who we are and what we stand for as a nation," Treasury Secretary Jack Lew said on a call Wednesday.

17. **The new Centre-State tax sharing model promised a 10% increase in the State's share. This 10% increase will result from increasing the share from**

- A** 32% to 42%
- B** 22% to 32%
- C** 42% to 52%
- D** None of the above

Answer: A

Explanation:

The Narendra Modi government accepted recommendations of the 14th Finance Commission for increasing share of states in central taxes to 42%.

The commission recommended increase in the share of states in the centre's tax revenue from the current 32% to 42%-the single largest increase ever recommended. The recommendation, which the government will likely accept, will give more power to states in determining how they spend this money (it also correspondingly reduces the fiscal resources available to the centre).

Hence, option A is the correct answer.

18. **Which of the following countries is not a member of European Union?**

- A** Sweden
- B** Finland
- C** Norway
- D** Denmark

Answer: C

Explanation:

The European Union (EU) is a political and economic union of certain European states. At present, it has 28 member states: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Ireland, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Spain, Slovakia, Slovenia, Sweden and the United Kingdom (UK).

Clearly, Norway is not a member of EU.

19. **As per the monetary policy agreement between RBI and the Finance Ministry, the RBI is required to maintain inflation in the range of:**

- A** 2% to 6%
- B** 4% to 10%
- C** 3% to 9%
- D** 5% to 8%

Answer: A

Explanation:

As per the monetary policy agreement between RBI and the Finance Ministry, the RBI is required to maintain inflation in the range in 4 ± 2 % interval. i.e. 2% to 6%

20. **Who discovered 'Pluto' in the year 1930?**

- A** Clyde Tombaugh
- B** Albert Einstein
- C** Carl Sagan
- D** Jacques Cousteau

Answer: A

Explanation:

Clyde William Tombaugh was an American astronomer. He discovered Pluto in 1930, the first object to be discovered in what would later be identified as the Kuiper belt.

21. According to the World Investment Report 2015 published by UNCTAD, which of the following countries was the largest recipient of FDI inflows in 2014?

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

Answer: A

Explanation:

China received a total sum of 129 billions USD as FDI inflows in 2014 which was the highest for any nation in the world.

22. Euro dollars are

- A A currency issued by European Union
- B Special currency issued by the Federal Government of USA for Europe
- C US dollars held in Europe
- D European currencies exchanged for the US dollar in US

Answer: C

Explanation:

Eurodollars are time deposits denominated in U.S. dollars at banks outside the United States, and thus are not under the jurisdiction of the Federal Reserve. Consequently, such deposits are subject to much less regulation than similar deposits within the U.S. The term was originally coined for U.S. dollars in European banks, but it expanded over the years to its present definition. A U.S. dollar-denominated deposit in Tokyo or Beijing would be likewise deemed a Eurodollar deposit. There is no connection with the euro currency or the eurozone.

23. Match the Prime Ministers and Presidents of India who have been contemporaries in Office

	Prime Minister		President
I.	Indira Gandhi	a.	Shankar Dayal Sharma
II.	Rajiv Gandhi	b.	V.V.Giri
III.	I.K.Gujral	c.	A.P.J. Abdul Kalam
IV.	Manmohan Singh	d.	Giani Zail Singh

- A I-a; II-b; III-c; IV-d
- B I-b; II-a; III-d; IV-c
- C I-a; II-c; III-b; IV-d

D I-b; II-d; III-a; IV-c

Answer: D

Explanation:

Prime Minister

President

Indira Gandhi -----Sarvepalli Radhakrishnan, Zakir Husain, V. V. Giri, Fakhruddin Ali Ahmed

Rajiv Gandhi -----Zail Singh, R. Venkataraman

I K Gujral -----Shankar Dayal Sharma, K. R. Narayanan

Manmohan Singh -----A. P. J. Abdul Kalam, Pratibha Patil, Pranab Mukherjee

We can see that option D contains all correct matches.

24. Mark the wrong combination

A James Watt : Steam Engine

B A.G. Bell : Telephone

C J.L. Baird : Television

D J. Perkins : Penicillin

Answer: D

Explanation:

Sir Alexander Fleming, a Scottish researcher, is credited with the discovery of penicillin in 1928. At the time, Fleming was experimenting with the influenza virus in the Laboratory of the Inoculation Department at St. Mary's Hospital in London.

Often described as a careless lab technician, Fleming returned from a two-week vacation to find that a mold had developed on an accidentally contaminated staphylococcus culture plate. Upon examination of the mold, he noticed that the culture prevented the growth of staphylococci.

Hence, option D is the incorrect answer. Rest of the options contain correct pair.

25. Mother Teresa was born in

A Switzerland

B India

C Germany

D Macedonia

Answer: D

Explanation:

Mother Teresa, known in the Roman Catholic Church as Saint Teresa of Calcutta was an Albanian-Indian Roman Catholic nun and missionary. She was born in Skopje (now the capital of Macedonia), then part of the Kosovo Vilayet of the Ottoman Empire. After living in Macedonia for eighteen years she moved to Ireland and then to India, where she lived for most of her life.

26. In 1985-86, an official policy introduced by Gorbachev in Soviet Union that stressed on honest discussion about the country's social issues and concerns was called

- A Glasnost
- B Gosplans
- C Irredentism
- D Oligarchs

Answer: A

Explanation:

In May 1985, two months after coming to power, Mikhail Gorbachev delivered a speech in St. Petersburg (then known as Leningrad), in which he publicly criticized the inefficient economic system of the Soviet Union, making him the first Communist leader to do so.

This was followed by a February 1986 speech to the Communist Party Congress, in which he expanded upon the need for political and economic restructuring, or perestroika, and called for a new era of transparency and openness, or glasnost. Therefore, option A is the correct answer.

27. The British Cosmologist Stephen Hawing and the Russian entrepreneur Yuri Milner have launched a project to search for the extra terrestrial life. This project is called:

- A The Breakthrough Listen Project
- B The Cosmic Breakthrough Project
- C The Extra Terrestrial Project
- D The Edge of the Universe Project

Answer: A

Explanation:

The Breakthrough Listen Project: BLP is US\$100-million global astronomical initiative launched in 2015 by Internet investor Yuri Milner and cosmologist Stephen Hawking. It has teams from around the world to find signs of intelligent life in universe. The 10-year programme aims to survey 1,000,000 closest stars to Earth by scanning entire galactic plane of Milky Way. It will listen for messages from the 100 closest galaxies at 10 billion different frequencies originated beyond our galaxy.

28. Match the name of the organization with the name of the city in which it is headquartered.

	Organization		Headquarters
I.	International Monetary Fund	a.	Lausanne
II.	International Olympic Committee	b.	Geneva
III.	International Labour Organization	c.	Washington
IV.	International Chamber of Commerne	d.	Paris

- A** I-d; II-c; III-a; IV-b
- B** I-a; II-b; III-d; IV-c
- C** I-c; II-a; III-b; IV-d
- D** I-b; II-d; III-c; IV-a

Answer: C

Explanation:

International Monetary Fund (IMF) - Washington DC, US
 International Olympic Committee - Lausanne, Switzerland
 International Labour Organisation (ILO) - Geneva, Switzerland
 International Chamber of Commerce - Paris, France
 Hence, option C is the correct answer.

Section II

29. The internal evaluation for Economics course in an Engineering programme is based on the score of four quizzes. Rahul has secured 70, 90 and 80 in the first three quizzes. The fourth quiz has ten True-False type questions, each carrying 10 marks. What is the probability that Rahul's average internal marks for the Economics course is more than 80, given that he decides to guess randomly on the final quiz?

- A** 12/1024
- B** 11/1024
- C** 11/256
- D** 12/256

Answer: B

Explanation:

Rahul has to score either 90 or 100 marks in the fourth quiz in order to have average more than 80. So, there will be two cases:

Case 1: If Rahul scores 90 marks

Then 9 out of 10 will be correct and those 9 correct answers can be in any order. So, total ways of arranging them is $\frac{10!}{9!}$

And the probability of choosing either a right answer or wrong answer is $\frac{1}{2}$

Hence, the probability of getting 9 answers correct is: $\frac{10!}{9!} \times \left(\frac{1}{2}\right)^{10}$

Case 2: If Rahul scores 100 marks

Then 10 out of 10 will be correct. So, total ways of arranging them is $\frac{10!}{10!} = 1$

And the probability of choosing either a right answer or wrong answer is $\frac{1}{2}$

Hence, the probability of getting all 10 answers correct is: $\left(\frac{1}{2}\right)^{10}$

So, the final probability is $\frac{10!}{9!} \times \frac{1}{2^{10}} + \frac{1}{2^{10}} = \frac{11}{1024}$

30. In 2004, Rohini was thrice as old as her brother Arvind. In 2014, Rohini was only six years older than her brother. In which year was Rohini born?

A 1984

B 1986

C 1995

D 2000

Answer: C

Explanation:

In 2004, let age of Arvind be x , then age of Rohini will be $3x$.

It is also given that in 2014, she is older by 6 years than her brother.

It means that their ages differ by 6 years.

So, $3x - x = 6$

$2x = 6$

$x = 3$.

In 2004, Arvind age is 3 years and Rohini age is 9 years.

Hence, Rohini was born in 1995.

31. If p , q and r are three unequal numbers such that p , q and r are in A.P., and p , $r - q$ and $q - p$ are in G.P., then $p : q : r$ is equal to:

A 1 : 2 : 3

B 2 : 3 : 4

C 3 : 2 : 1

D 1 : 3 : 4

Answer: A

Explanation:

Given that p , q and r are in A.P.,

$2q = p + r$

$$p = 2q - r \quad \text{Eq -1}$$

Given that p, r-q and q-p are in G.P.,

Let us assume the common ratio of k in G.P.

$$r-q = k(p) \quad \text{Eq -2}$$

$$q-p = k(r-q) \quad \text{Eq -3}$$

$$q-p = k^2(p) \quad \text{Eq -4}$$

Substitute Eq-1 in Eq-3,

$$q-(2q-r) = k(r-q)$$

$$r-q = k(r-q)$$

So, k=1

From Eq -4, we get q=2p

Now substitute q=2p in Eq-1 we get r=3p

Hence, ratio of p:q:r = p:2p:3p = 1:2:3

32. If $\log_{25}5 = a$ and $\log_{25}15 = b$, then the value of $\log_{25}27$ is:

A $3(b+a)$

B $3(1-b-a)$

C $3(a+b-1)$

D $3(1-b+a)$

Answer: C

Explanation:

$$\log_{25}5 = a$$

$$\Rightarrow a = 1/2$$

$$\log_{25}15 = \log_{25}3 + \log_{25}5 = b$$

$$\frac{1}{2} \log_5 3 + \frac{1}{2} = b$$

$$\log_5 3 = 2(b - \frac{1}{2}) \dots \dots \dots (i)$$

$$\log_{25}27 = \frac{3}{2} \log_5 3 \dots \dots \dots (ii)$$

Replacing $\log_5 3 = 2(b - \frac{1}{2})$ in (ii) we get

$$\log_{25}27 = 3(b - \frac{1}{2})$$

We can write $-\frac{1}{2}$ as $(-1 + \frac{1}{2})$ or $(-1 + a)$

$$\text{So, } \log_{25}27 = 3(b + a - 1)$$

Hence, option C is the correct answer.

33. During the essay writing stage of MBA admission process in a reputed B-School, each group consists of 10 students. In one such group, two students are batchmates from the same IIT department. Assuming that the students are sitting in a row, the number of ways in which the students can sit so that the two batchmates are not sitting next to each other, is:

- A 3540340
- B 2874590
- C 2903040
- D None of the above

Answer: C

Explanation:

Consider the case where batchmates are sitting together and then subtract those cases from total no. of cases.

When 10 students are arranged in a line, total arrangements possible are $10!$

Now considering batchmates sitting together,

$B_1 B_2$ -----

Then total arrangements possible are $9! \cdot 2!$

Total ways = $10! - 9! \cdot 2!$

$9! \cdot 8 = 2903040$

34. The pre-paid recharge of Airtel gives 21% less talktime than the same price pre-paid recharge of Vodafone. The post-paid talktime of Airtel is 12% more than its pre-paid recharge, having the same price. Further, the post-paid talktime of same price of Vodafone is 15% less than its pre-paid recharge. How much percent less / more talktime (approximately) can one get from the Airtel post-paid service compared to the post-paid service of Vodafone?

- A 4.09% more
- B 4.7% less
- C 4.7%more
- D 2.8% less

Answer: A

Explanation:

Let the value of pre-paid recharge of Vodafone be 100.

Then the value of pre-paid recharge of Airtel is 79.

Airtel gives 12% more to post-paid, so post-paid value is $79 \times 1.12 = 88.48$

Vodafone gives 15% less to post-paid than its pre-paid so its value is 85.

Clearly Airtel gives more to its post-paid customers.

$$\text{Percentage} = \frac{3.48}{85} \times 100 = 4.09\%$$

Therefore, option A is the right answer.

35. **As a strategy towards retention of customers, the service centre of a split AC machine manufacturer offers discount as per the following rule: for the second service in a year, the customer can avail of a 10% discount; for the third and fourth servicing within a year, the customer can avail of 11% and 12% discounts respectively of the previous amount paid, Finally, if a customer gets more than four services within a year, he has to pay just 45% of the original servicing charges. If Rohan has availed 5 services from the same service centre in a given year, the total percentage discount availed by him is approximately:**

- A** 16.52
- B** 22.88
- C** 22.33
- D** 24.08

Answer: B

Explanation:

Let the original service charge be Rs. 1000

1st service charge = Rs. 1000

2nd service charge @ 10% discount = Rs. 900

3rd service charge @ 11% discount = Rs. 801

4th service charge @ 12% discount = Rs. 704.88

5th service charge @ 45% = Rs. 450

Total service charge for Rohan = Rs. 1000 + Rs. 900 + Rs. 801 + Rs. 704.88 + Rs. 450 = Rs. 3855.887

Discount % = 22.88%

Hence, option B is the correct answer.

36. **A tank is connected with both inlet pipes and outlet pipes. Individually, an inlet pipe can fill the tank in 7 hours and an outlet pipe can empty it in 5 hours. If all the pipes are kept open, it takes exactly 7 hours for a completely filled-in tank to empty. If the total number of pipes connected to the tank is 11, how many of these are inlet pipes?**

- A** 2
- B** 4
- C** 5
- D** 6

Answer: D

Explanation:

Let the number of inlet pipes be x , then the number of outlet pipes will be $11-x$.

The rate of emptying the tank is more than filling the tank if all the pipes are kept opened.

$$\frac{11-x}{5} - \frac{x}{7} = \frac{1}{7}$$

Solving, $12x = 72$, Hence $x = 6$

Therefore, the number of inlet pipes is 6.

37. In a certain village, 22% of the families own agricultural land, 18% own a mobile phone and 1600 families own both agricultural land and a mobile phone. If 68% of the families neither own agricultural land nor a mobile phone, then the total number of families living in the village is:

A 20000

B 10000

C 8000

D 5000

Answer: A

Explanation:

22% of the families own agricultural land, 18% own a mobile phone, 1600 families own both and 68% families own none.

$$P(A \cup B) = P(A) + P(B) - P(A \cap B)$$

$$32 = 22 + 18 - x$$

$x=8$. Hence, there will be 8% families who own both.

8% = 1600 (Given in question)

Total families in a village $\Rightarrow 100\% = 20000$

38. In the board meeting of a FMCG Company, everybody present in the meeting shakes hand with everybody else. If the total number of handshakes is 78, the number of members who attended the board meeting is:

A 7

B 9

C 11

D 13

Answer: D

Explanation:

Total handshakes are given by: ${}^N C_2$

$${}^N C_2 = 78$$

$$\frac{N*(N-1)}{2} = 78$$

$$N=13$$

Hence, option D is the correct answer.

39. A firm is thinking of buying a printer for its office use for the next one year. The criterion for choosing is based on the least per-page printing cost. It can choose between an inkjet printer which costs Rs. 5000 and a laser printer which costs Rs. 8000. The per-page printing cost for an inkjet is Rs. 1.80 and that for a laser printer is Rs. 1.50. The firm should purchase the laser printer, if the minimum number of a pages to be printed in the year exceeds

- A 5000
- B 10000
- C 15000
- D 18000

Answer: B

Explanation:

We have to find for how many pages, the cost of printing including the price of the printer, will be same for both the printers.

Let the number of pages be n

For inkjet printer, the cost is $5000 + 1.80 \cdot n$

For laser printer, the cost is $8000 + 1.50 \cdot n$

Equating: $5000 + 1.80 \cdot n = 8000 + 1.50 \cdot n$

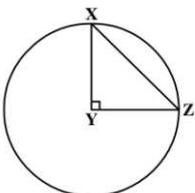
$n = 10000$

For $n > 10000$, the per page printing cost is lesser for laser printer than inkjet printer.

So, firm should purchase laser printer if number of pages printed are more than 10000.

Hence, option B is the correct answer.

40. If in the figure below, angle $XYZ = 90^\circ$ and the length of the arc $XZ = 10\pi$, then the area of the sector XYZ is



- A 10π
- B 25π
- C 100π

D None of the above

Answer: C

Explanation:

Length of arc XZ is the perimeter of quarter circle.

$$\frac{\pi r}{2} = 10\pi$$

$$r=20$$

$$\text{Area of sector XYZ} = \text{Area of quarter circle} = \frac{\pi r^2}{4}$$

$$\text{Area} = 100\pi$$

41. **A chartered bus carrying office employees travels everyday in two shifts- morning and evening. In the evening, the bus travels at an average speed which is 50% greater than the morning average speed; but takes 50% more time than the amount of time it takes in the morning. The average speed of the chartered bus for the entire journey is greater/less than its average speed in the morning by**

A 18% less

B 30% greater

C 37.5% greater

D 50% less

Answer: B

Explanation:

Distance = Speed x Time

In morning slot, Let speed be S and time taken be T, then distance covered = ST

Then, in evening slot, speed will be 1.5S and time taken will be 1.5T, then distance covered = 2.25ST

$$\text{Average Speed} = \frac{\text{Total distance covered}}{\text{Total time taken}}$$

For entire journey, average speed is:

$$\text{Average Speed} = \frac{ST+2.25ST}{T+1.5T} = \frac{3.25ST}{2.5T} = 1.3S$$

For morning, Average Speed is S.

Hence, the average speed of the bus for the entire journey is greater than its average speed in the morning by 30%

42. **If a right circular cylinder of height 14 cm is inscribed in a sphere of radius 8 cm, then the volume of the cylinder is:**

A 110 cm³

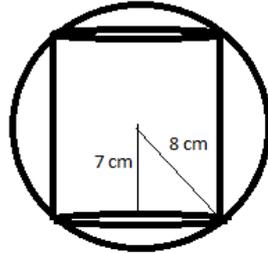
B 220 cm³

C 440 cm^3

D 660 cm^3

Answer: D

Explanation:



The radius of sphere is 8 cm . Then applying Pythagoras, the radius of base of cylinder is $\sqrt{15} \text{ cm}$

The height of cylinder is given as 14 cm . Volume of cylinder is $\pi r^2 h$

$$\frac{22}{7} * 15 * 14 = 660 \text{ cm}^3$$

43. **Seema has joined a new Company after the completion of her B.Tech from a reputed engineering college in Chennai. She saves 10% of her income in each of the first three months of her service and for every subsequent month, her savings are Rs. 50 more than the savings of the immediate previous month. If her joining income was Rs. 3000, her total savings from the start of the service will be Rs. 11400 in:**

A 6 months

B 12 months

C 18 months

D 24 months

Answer: C

Explanation:

Seema saved Rs. 900 in the first 3 months. She must saved Rs. $(11400 - 900) = \text{Rs. } 10500$ in the subsequent months.

The sequence will be of the form: $350 + 400 + \dots \dots \dots n \text{ terms} = 10500$

$$\Rightarrow \frac{n}{2} [2*350 + (n-1)*50] = 10500$$

$$\Rightarrow \frac{n}{2} [70 + (n-1)5] = 10500$$

$$\Rightarrow n^2 + 13n = 420$$

Solving, we get $n = 15$

The savings of Rs. 10500 is done in 15 months. Seema saved Rs. 11400 in $15+3 = 18$ months.

Hence, option C is the correct answer.

44. **Sailesh is working as a sales executive with a reputed FMCG Company in Hyderabad. As per the Company's policy, Sailesh gets a commission of 6% on all sales upto Rs. 1,00,000 and 5% on all sales in excess of this amount. If Sailesh remits Rs. 2,65,000 to the FMCG company after deducting his commission, his total sales were worth:**

- A** Rs. 1,20,000
- B** Rs. 2,90,526
- C** Rs. 2,21,054
- D** Rs. 2,80,000

Answer: D

Explanation:

Let total sales be 'x'

The commission that Sailesh will get is $x - 265000$

He gets 6% on sales upto 100000 and 5% on sales greater than that.

Calculating his commission on total sales:

$$0.06*100000 + 0.05(x-100000)$$

Equating,

$$0.05x + 1000 = x - 265000$$

$$0.95x = 266000$$

$$x = 280000$$

Hence, his sales were worth 280,000

45. **Three carpenters P, Q and R are entrusted with office furniture work. P can do a job in 42 days. If Q is 26% more efficient than P and R is 50% more efficient than Q, then Q and R together can finish the job in approximately:**

- A** 11 days
- B** 13 days
- C** 15 days
- D** 17 days

Answer: B

Explanation:

P is doing a job in 42 days. In one day, he does $\frac{1}{42}$ of the work.

Q is more efficient than P by 26%.

Then, the part of work that Q does in one day is: $\frac{1}{42} \times 1.26 = \frac{3}{100}$

R is more efficient than Q by 50%.

Then, the part of work that R does in one day is: $\frac{3}{100} \times 1.5 = \frac{9}{200}$

If Q and R are put together then part of work they will finish in a day is:

$$\frac{3}{100} + \frac{9}{200} = \frac{15}{200}$$

Hence total work can be done in $200/15 = 13.33$ days $\cong 13$ days

46. **There are two alloys P and Q made up of silver, copper and aluminium. Alloy P contains 45% silver and rest aluminium. Alloy Q contains 30% silver, 35% copper and rest aluminium. Alloys P and Q are mixed in the ratio of 1 : 4 . 5. The approximate percentages of silver and copper in the newly formed alloy is:**

- A** 33% and 29%
- B** 29% and 26%
- C** 35% and 30%
- D** None of the above

Answer: A

Explanation:

Composition of alloy P

Silver:Copper:Aluminium = 45:0:55

Composition of alloy Q

Silver:Copper:Aluminium = 30:35:35

They are mixed in ratio of 1: 4.5

Let us consider alloy P is taken 200 grams and alloy Q is taken 900 grams.

Then for alloy P :-

Silver:Copper:Aluminium = 90:0:110

For alloy Q:

Silver:Copper:Aluminium = 270:315:315

Total weight of P and Q combined is 1100 grams.

When P and Q are mixed, the new combined ratio of

Silver:Copper:Aluminium = 360:315:425

Percentage of Silver in mixture = $\frac{360}{1100} \times 100 \cong 33\%$

Percentage of Copper in mixture = $\frac{315}{1100} \times 100 \cong 29\%$

47. A ladder of 7.6 m long is standing against a wall and the distance between the wall and the base of the a ladder is 6.4 m. If the top of the ladder now slips by 1.2m, then the foot of the ladder shifts by approximately:

A 0.4 m

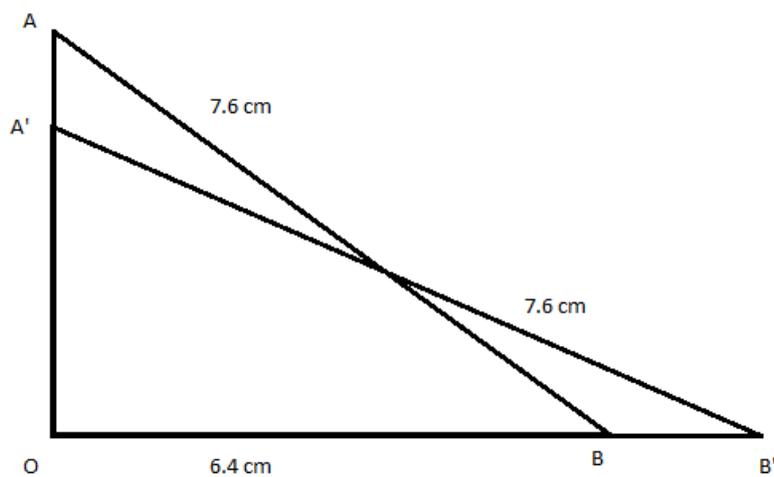
B 0.6 m

C 0.8 m

D 1.2 m

Answer: B

Explanation:



The starting position of ladder is AB.

AB = 7.6 cm and OB = 6.4 cm

Applying Pythagoras Theorem in $\triangle AOB$

$$OA^2 + OB^2 = AB^2$$

$$OA = 4.10 \text{ cm}$$

Now ladder top slips by 1.2 cm, the new position of ladder becomes A'B'

$$OA' = 4.10 - 1.2 = 2.9 \text{ cm}$$

Applying Pythagoras Theorem in $\triangle A'OB'$

$$OA'^2 + OB'^2 = A'B'^2$$

$$OB' = 7.02 \text{ cm}$$

Hence, the foot of the ladder is shifted by approximately $OB' - OB = 0.6 \text{ cm}$

48. The value of x for which the equation $\sqrt{4x - 9} + \sqrt{4x + 9} = 5 + \sqrt{7}$ will be satisfied, is:

A 1

B 2

C 3

D 4

Answer: D

Explanation:

This question can be solved with the help of options easily.

We can say that $4x - 9 \geq 0$. Hence $x \geq 2.25$. Now we can check option C and D.

Option C: $\sqrt{4x - 9} + \sqrt{4x + 9} = \sqrt{3} + \sqrt{21}$ Which is not same as what we have in the question. Hence, this is not the correct answer.

Option D: $\sqrt{4x - 9} + \sqrt{4x + 9} = \sqrt{7} + \sqrt{25} = 5 + \sqrt{7}$. Which is the same as what we have in the question. Hence, we can say that option D the correct answer.

49. The simplest value of the expression $\left(\frac{4^{p+\frac{1}{4}} \times \sqrt{2 \times 2^p}}{2 \times \sqrt{2^{-p}}} \right)^{\frac{1}{p}}$

A 4

B 8

C 4p

D 8p

Answer: B

Explanation:

Simplifying the surds, and writing everything on numerator we get:

$$= (2^{2p+1/2+1/2+p/2-1+p/2})^{1/p}$$

$$= (2^{3p})^{1/p}$$

$$= 2^3 = 8$$

50. In a reputed engineering college in Delhi, students are evaluated based on trimesters. The probability that an Engineering student fails in the first trimester is 0.08. If he does not fail in the first trimester, the probability that he is promoted to the second year is 0.87. The probability that the student will complete the first year in the Engineering College is approximately:

A 0.8

B 0.6

C 0.4

D 0.7

Answer: A

Explanation:

The probability that the student passes in the first trimester is 0.92

Now given that if the student passes in the first trimester then probability of moving into second second year is 0.87

Hence, the probability of completing first year is $0.92 \times 0.87 = 0.80$

Section III part 1

Instructions [51 - 55]

Solve the questions based on the information provided in the passage below:

Six engineers Anthony, Brad, Carla, Dinesh, Evan and Frank are offered jobs at six different locations - England, Germany, India, Australia, Singapore and UAE. The jobs offered are in six different branches, and are based on their competence as well as preference. The branches are IT, Mechanical, Chemical, Electronics, Metallurgy and Electrical, though not necessarily in the same order. Their placements are subject to the following conditions:

i. The engineer in the Electrical Department is not placed in Germany.

ii. Anthony is placed in Singapore while Dinesh in UAE.

iii. Frank is not in the Metallurgy Department but Brad is in the Chemical Department.

iv. Evan is placed in the Mechanical Department while Frank is offered a job in Australia.

v. The only department offering jobs in India is the Chemical Department while there are no vacancies for IT in Singapore.

vi. Anthony is interested in IT and Electrical Department while Frank is interested in IT and Mechanical Department. Both of them settle for the options available based on their interests in the locations allotted to them.

vii. In recent years, UAE has emerged as a hub for metallurgy exports and thus recruitment is done for the

same while all mechanical posts are in England.

51. **Who joined the Electronics Department?**

- A** Dinesh
- B** Anthony
- C** Carla
- D** Brad

Answer: C

Explanation:

In statement 2 it is given that Anthony is placed in Singapore while Dinesh in UAE and in statement 4 it is given that Evan is placed in the Mechanical Department while Frank is offered a job in Australia.

Name	Place	Branch
A	Singapore	
B		
C		
D	UAE	
E		Mechanical
F	Australia	

In statement 6, it is given that UAE has emerged as a hub for metallurgy exports and thus recruitment is done for the same while all mechanical posts are in England. In statement 3, it is mentioned that Brad is in the chemical department and in statement 5 it is mentioned that only India is offering chemical department jobs.

Name	Place	Branch
A	Singapore	
B	India	Chemical
C	Germany	
D	UAE	Metallurgy
E	England	Mechanical
F	Australia	

In statement 6, it is mentioned that Anthony is interested in IT and Electrical Department while Frank is interested in IT and Mechanical Department. This implies Frank secured a job in IT department and Anthony in Electrical department.

Name	Place	Branch
A	Singapore	Electrical
B	India	Chemical
C	Germany	Electronics
D	UAE	Metallurgy
E	England	Mechanical
F	Australia	IT

Carla joined the Electronics department.
The answer is option C.

52. **The person placed in UAE is in the _____ Department**

- A** Electronics
- B** Mechanical
- C** Metallurgy
- D** Chemical

Answer: C

Explanation:

In statement 2 it is given that Anthony is placed in Singapore while Dinesh in UAE and in statement 4 it is given that Evan is placed in the Mechanical Department while Frank is offered a job in Australia.

Name	Place	Branch
A	Singapore	
B		
C		
D	UAE	
E		Mechanical
F	Australia	

In statement 6, it is given that UAE has emerged as a hub for metallurgy exports and thus recruitment is done for the same while all mechanical posts are in England. In statement 3, it is mentioned that Brad is in the chemical department and in statement 5 it is mentioned that only India is offering chemical department jobs.

Name	Place	Branch
A	Singapore	
B	India	Chemical
C	Germany	
D	UAE	Metallurgy
E	England	Mechanical
F	Australia	

In statement 6, it is mentioned that Anthony is interested in IT and Electrical Department while Frank is interested in IT and Mechanical Department. This implies Frank secured a job in IT department and Anthony in Electrical department.

Name	Place	Branch
A	Singapore	Electrical
B	India	Chemical
C	Germany	Electronics
D	UAE	Metallurgy
E	England	Mechanical
F	Australia	IT

The person placed in UAE is in the Metallurgy department.
The answer is option C.

53. Out of the following, which is the correct combination?

- A** Anthony-Germany-Electrical
- B** Brad-India-Chemical
- C** Evan-England-Electronics

D Frank-Australia-Metallurgy

Answer: B

Explanation:

In statement 2 it is given that Anthony is placed in Singapore while Dinesh in UAE and in statement 4 it is given that Evan is placed in the Mechanical Department while Frank is offered a job in Australia.

Name	Place	Branch
A	Singapore	
B		
C		
D	UAE	
E		Mechanical
F	Australia	

In statement 6, it is given that UAE has emerged as a hub for metallurgy exports and thus recruitment is done for the same while all mechanical posts are in England. In statement 3, it is mentioned that Brad is in the chemical department and in statement 5 it is mentioned that only India is offering chemical department jobs.

Name	Place	Branch
A	Singapore	
B	India	Chemical
C	Germany	
D	UAE	Metallurgy
E	England	Mechanical
F	Australia	

In statement 6, it is mentioned that Anthony is interested in IT and Electrical Department while Frank is interested in IT and Mechanical Department. This implies Frank secured a job in IT department and Anthony in Electrical department.

Name	Place	Branch
A	Singapore	Electrical
B	India	Chemical
C	Germany	Electronics
D	UAE	Metallurgy
E	England	Mechanical
F	Australia	IT

Among the given options, option B is the correct combination.

The answer is option B.

54. Who joined the IT Department in Australia?

- A** Frank
- B** Carla
- C** Evan
- D** Brad

Answer: A

Explanation:

In statement 2 it is given that Anthony is placed in Singapore while Dinesh in UAE and in statement 4 it is

given that Evan is placed in the Mechanical Department while Frank is offered a job in Australia.

Name	Place	Branch
A	Singapore	
B		
C		
D	UAE	
E		Mechanical
F	Australia	

In statement 6, it is given that UAE has emerged as a hub for metallurgy exports and thus recruitment is done for the same while all mechanical posts are in England. In statement 3, it is mentioned that Brad is in the chemical department and in statement 5 it is mentioned that only India is offering chemical department jobs.

Name	Place	Branch
A	Singapore	
B	India	Chemical
C	Germany	
D	UAE	Metallurgy
E	England	Mechanical
F	Australia	

In statement 6, it is mentioned that Anthony is interested in IT and Electrical Department while Frank is interested in IT and Mechanical Department. This implies Frank secured a job in IT department and Anthony in Electrical department.

Name	Place	Branch
A	Singapore	Electrical
B	India	Chemical
C	Germany	Electronics
D	UAE	Metallurgy
E	England	Mechanical
F	Australia	IT

Frank joined the IT Department in Australia.

The answer is option A.

55. Which combination is true for Dinesh?

- A India-Electrical
- B UAE-Electronics
- C England-Metallurgy
- D UAE-Metallurgy

Answer: D

Explanation:

In statement 2 it is given that Anthony is placed in Singapore while Dinesh in UAE and in statement 4 it is given that Evan is placed in the Mechanical Department while Frank is offered a job in Australia.

Name	Place	Branch
A	Singapore	
B		
C		
D	UAE	
E		Mechanical
F	Australia	

In statement 6, it is given that UAE has emerged as a hub for metallurgy exports and thus recruitment is done for the same while all mechanical posts are in England. In statement 3, it is mentioned that Brad is in the chemical department and in statement 5 it is mentioned that only India is offering chemical department jobs.

Name	Place	Branch
A	Singapore	
B	India	Chemical
C	Germany	
D	UAE	Metallurgy
E	England	Mechanical
F	Australia	

In statement 6, it is mentioned that Anthony is interested in IT and Electrical Department while Frank is interested in IT and Mechanical Department. This implies Frank secured a job in IT department and Anthony in Electrical department.

Name	Place	Branch
A	Singapore	Electrical
B	India	Chemical
C	Germany	Electronics
D	UAE	Metallurgy
E	England	Mechanical
F	Australia	IT

Dinesh - UAE - Metallurgy

The answer is option D.

56. **Based on the given statement, choose the right conclusion:**

'If the breakfast doesn't have eggs, I will not go for a walk and will not have lunch.'

- A** If I went for a walk and didn't have lunch, the breakfast didn't have eggs.
- B** If I went for a walk or I had lunch, the breakfast had eggs.
- C** If I went for a walk and had lunch, the breakfast had eggs.
- D** If I didn't go for a walk and had lunch, the breakfast had eggs.

Answer: B

Explanation:

Let P = The breakfast doesn't have eggs

Q = I will not go for a walk and will not have lunch

So, $\sim P$ = The breakfast has eggs

$\sim Q$ = I will go for a walk or will have lunch, the breakfast has eggs

$\sim Q \sim P$ = I will go for a walk or will have lunch, the breakfast has eggs.

Hence option B is correct.

Instructions [57 - 60]

Read the details below and answer the questions that follow.

Due to astrological reasons, a mother named all her daughters with the alphabet 'K' as Kamla, Kamlesh, Kriti, Kripa, Kranti and Kalpana.

- i. Kamla is not the tallest while Kripa is not the most qualified.
- ii. The shortest is the most qualified amongst them all.
- iii. Kalpana is more qualified than Kamlesh who is more qualified than Kriti.
- iv. Kamla is less qualified than Kamlesh but is taller than Kamlesh.
- v. Kalpana is shorter than Kriti but taller than Kranti.
- vi. Kriti is more qualified than Kamla while Kamlesh is taller than Kriti.
- vii. Kripa is the least qualified amongst the daughters.

57. **Who is the third tallest starting in decreasing order of height?**

- A** Kamla
- B** Kamlesh
- C** Kriti
- D** Kranti

Answer: B

Explanation:

Kamlesh is the third tallest person. Therefore, option B is the right answer.

58. **Who is the most qualified?**

- A** Kamlesh
- B** Kriti
- C** Kripa
- D** Kranti

Answer: D

Explanation: Kranti is the most-qualified among the daughters. Therefore, option D is the right answer.

59. **What is the rank of Kriti in increasing order of qualification?**

- A** 2
- B** 3

C 5

D 4

Answer: B

Explanation:

Rank of Kriti in the **increasing order of qualification** is 3. Therefore, option B is the right answer.

60. **What is the rank of Kamla in increasing order of height?**

A 3

B 5

C 4

D 2

Answer: B

Explanation:

Rank of Kamala in **the increasing order of height** is 5. Therefore, option B is the right answer.

61. **Based on the number series given, fill in the missing number. 18, 37, 76, 155, _____, 633, 1272**

A 322

B 314

C 341

D 250

Answer: B

Explanation:

The logic employed is as follows:

$$18*2 + 1 = 36 + 1 = 37$$

$$37*2 + 2 = 74 + 2 = 76$$

$$76*2 + 3 = 152 + 3 = 155$$

$$155*2 + 4 = 310 + 4 = 314$$

$$314*2 + 5 = 628 + 5 = 633$$

As we can see, the blank should be filled by 314. Therefore, option B is the right answer.

Instructions [62 - 64]

Based on the conditions stated in the passage below, answer the questions that follow.

There are three countries, USA, UAE and UK. An exporter can select one country or two countries or all the three countries subject to the conditions below:

Condition 1: Both USA and UAE have to be selected.

Condition 2: Either USA or UK, but not both have to be selected.

Condition 3: UAE can be selected only if UK has been selected.

Condition 4: USA can be selected only if UK is selected.

62. **How many ways countries can be selected if no condition is imposed?**

A 6

B 4

C 7

D 8

Answer: C

Explanation:

Since there is no condition for the selection of the countries, we can select

USA; UK; UAE, USA & UK; USA & UAE; UAE & UK, USA, UAE& UK

=7 ways

63. **How many countries can be selected to meet only condition 1?**

A 0

B 2

C 1

D 3

Answer: B

Explanation:

According to condition 1, both USA and UAE are selected.

To make sure that none of the other conditions are met, UK cannot be selected.

Thus, only 2 countries can be selected.

Hence, the answer is option B.

64. **How many countries can be selected to meet only conditions 2 and 3?**

A 0

- B** 2 or 1
- C** 0 or 1
- D** None of these

Answer: B

Explanation:

According to condition 2, Either USA or UK can be selected but not both.

According to condition 3, UAE can be selected if the UK is selected.

Thus, the choices are:

- a. Only USA
- b. Only UK
- c. UK and UAE

Hence, either 2 or 1 countries can be selected.

The answer is option B.

65. **Based on the following relations, which of the given options indicate that W is the niece of X?**
A+B means that A is the brother of B.
A*B means that A is the father of B.
A-B means that A is the sister of B.

- A** $X+Y+Z-W$
- B** $Z-W*Y+X$
- C** $X+Y*W-Z$
- D** $X*Y+W-Z$

Answer: C

Explanation:

Options A and D indicate that W is the sister of X.

Option B indicates that W is the father of X.

Only option C gives the required relationship, i.e., W is the niece of X.

Hence, the answer is option C.

66. **Alex walks 1 mile towards East and then he turns towards South and walks further 5 miles. After that he turns East and walks 2 miles further. Finally he turns to his North and walks 9 miles. How far is he from the starting point?**

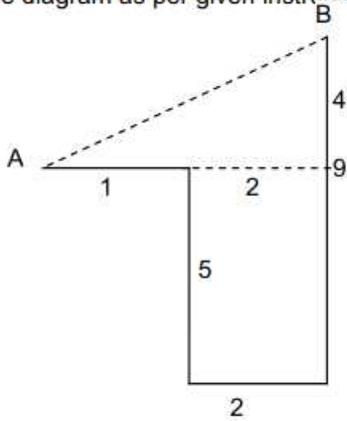
- A** 25 miles
- B** 2 miles
- C** 5 miles

D 4 miles

Answer: C

Explanation:

Making the diagram as per given instructions



Now, From the diagram it is clear that the distance between starting point A and end point B is 5 miles using Pythagoras theorem.

67. From the given statements, choose the conclusions which follow logically:

Statements:

- i. Some iphones are mobiles
- ii. Some mobiles are ipads
- iii. Some ipads are tablets

Conclusions:

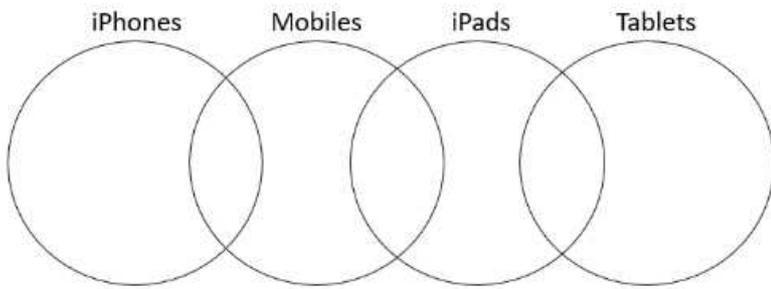
- I. Some tablets are iphones
- II. Some mobiles are tablets
- III. Some ipads are iphones
- IV. All iphones are tablets

- A** Only I & II follow
- B** Only I, II & III follow
- C** Only II & III follow
- D** None of these

Answer: D

Explanation:

The basic diagram from the given conditions is as follows.



Thus, we can observe that none of the conclusions are definitely correct.

Hence, the answer is option D.

Instructions [68 - 70]

Read the passage below and answer the questions that follow.

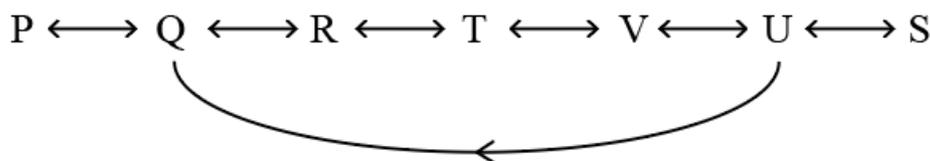
Export cargo of a trader can go through seven cities P, Q, R, S, T, U and V. The following cities have a two way connection i.e., Cargo can move in both directions between them; S and U, P and Q, Q and R, V and T, R and T, V and U. Cargo can move only in one direction from U to Q.

68. If the trader wants the cargo to move from City S to City T then excluding cities S and T, what is the minimum number of cities that the cargo has to cross in transit?

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

Answer: C

Explanation:



S -> U -> V -> T

The minimum number of cities that the cargo has to cross in transit = 2 (U and V)

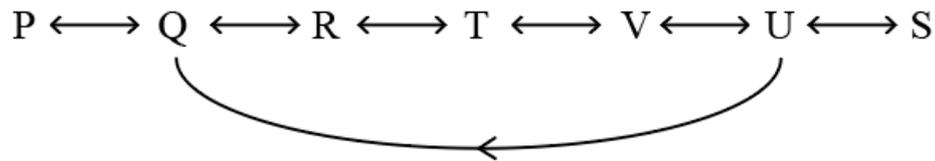
The answer is option C.

69. If the trader wants the cargo to go to City U from City P through the longest route, how many cities will he be required to cross (excluding cities P and U)?

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

Answer: B

Explanation:



U → V → T → R → Q → P

The number of cities required to cross = 4

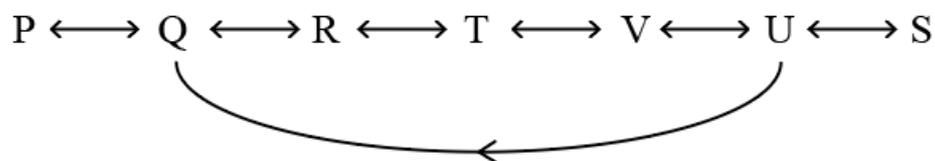
The answer is option B.

70. To move cargo from City P to City U, which of the following statements will minimise the number of cities to be crossed in transit?

- A** Connect cities U to R with a two way connection
- B** Connect cities P to S with a one way connection from cities S to P
- C** Connect cities U to Q with a two way connection
- D** Connect cities R to V with a two way connection

Answer: C

Explanation:



A) Connect cities U to R with a two way connection

Number of cities to be crossed = 2 (Q and R)

B) Connect cities P to S with a one way connection from cities S to P

Number of cities to be crossed = 4

C) Connect cities U to Q with a two way connection

Number of cities to be crossed = 1

D) Connect cities R to V with a two way connection

Number of cities to be crossed = 3

The answer is option C.

Section III part 2

Instructions [71 - 75]

Read the following information and tables and answer the questions that follow.

Torrent Enterprises sells air conditioners of Eagle Brand in the retail market of Delhi. The month-wise total number of Window Air Conditioner (WAC) units sold by Torrent during April 2014 to March 2015 are shown below in Table A. Table B shows the share of different types of WACs in total monthly sales for the said period.

Number of Units Sold by Torrent Enterprises During the Period April 14 to March 15

Table A

Month	Units Sold	Month	Units Sold	Month	Units Sold
Apr-14	1266	Aug-14	1296	Dec-14	1300
May-14	1268	Sep-14	1296	Jan-15	1330
Jun-14	1272	Oct-14	1298	Feb-15	1340
Jul-14	1292	Nov-14	1300	Mar-15	1350

Table B

WAC Type (Tonnage)	April, May & Sep	Jun, Jul & Dec	Aug, Feb & Mar	Oct, Nov & Jan
Two Ton	20.00%	25.00%	31.00%	25.00%
One & Half Ton	19.00%	33.00%	19.00%	33.00%
One Ton	14.00%	12.00%	34.00%	26.00%
Half Ton	47.00%	30.00%	16.00%	16.00%

Performance measures are as follows:

Half Yearly Sales Performance:

Oct 14 to Mar 15 Average Sales - April 14 to Sep 14 Average Sales
 April 14 to Sep 14 Average Sales

Monthly Sales Performance:

Current Month Sales - Pervious Month Sales
 Previous Month Sales

Sales Volatility:

Maximum Monthly Sales - Minimum Monthly Sales
 Average Monthly Sales

71. **What is the closest average number of 1 1/2 ton Window ACs sold by Torrent Enterprises during April 2014 - March 2015?**

- A** 342
- B** 338
- C** 350
- D** 330

Answer: B

Explanation:

Let's calculate the different WAC types during April 2014 - March 2015 and tabulate it as follows

Month	Two Ton	One & Half Ton	One Ton	Half Ton
Apr-14	253.20	240.54	177.24	595.02
May-14	253.60	240.92	177.52	595.96
Jun-14	318.00	419.76	152.64	381.60
Jul-14	323.00	426.36	155.04	387.60
Aug-14	401.76	246.24	440.64	207.36
Sep-14	259.20	246.24	181.44	609.12
Oct-14	324.50	428.34	337.48	207.68
Nov-14	325.00	429.00	338.00	208.00
Dec-14	325.00	429.00	156.00	390.00
Jan-15	332.50	438.90	345.80	212.80
Feb-15	415.40	254.60	455.60	214.40
Mar-15	418.50	256.50	459.00	216.00

Average number of 1 1/2 ton Window ACs sold by Torrent Enterprises during April 2014 - March 2015=

$$=(727.7+1275.12+757.34+1296.24)/12$$

$$=338$$

Hence B is the correct answer.

72. The absolute difference between average annual sales (in units) of which pair of WACs type is the highest

- A 1 Ton and 1/2 Ton
- B 1 Ton and 2 Ton
- C 2 Ton and 1/2 Ton
- D 1 1/2 Ton and 1/2 Ton

Answer: A

Explanation:

Let's calculate the different WAC types during April 2014 - March 2015 and tabulate it as follows

Month	Two Ton	One & Half Ton	One Ton	Half Ton
Apr-14	253.20	240.54	177.24	595.02
May-14	253.60	240.92	177.52	595.96
Jun-14	318.00	419.76	152.64	381.60
Jul-14	323.00	426.36	155.04	387.60
Aug-14	401.76	246.24	440.64	207.36
Sep-14	259.20	246.24	181.44	609.12
Oct-14	324.50	428.34	337.48	207.68
Nov-14	325.00	429.00	338.00	208.00
Dec-14	325.00	429.00	156.00	390.00
Jan-15	332.50	438.90	345.80	212.80
Feb-15	415.40	254.60	455.60	214.40
Mar-15	418.50	256.50	459.00	216.00

Let's solve the options one by one,

Option A :The absolute difference between average annual sales of 1 Ton and 1/2 Ton = $338.03 - 281.37 = 56.66$

Option B: The absolute difference between average annual sales of 1 Ton and 2 Ton = $329.138 - 281.37 = 47.768$

Option C: The absolute difference between average annual sales of 2 Ton and 1/2 Ton = $352.128 - 329.138 = 22.99$

Option D: The absolute difference between average annual sales of 1 1/2 Ton and 1/2 Ton = $352.128 - 338.03 = 14.098$

The absolute difference between average annual sales of 1 Ton and 1/2 Ton is the highest.

Hence A is the correct answer.

73. Which type of WAC has performed the second best in Half Yearly Sales Performance?

- A** 1/2 Ton
- B** 1 Ton
- C** 1 1/2 Ton
- D** 2 Ton

Answer: C

Explanation:

Let's calculate the different WAC types during April 2014 - March 2015 and tabulate it as follows

Month	Two Ton	One & Half Ton	One Ton	Half Ton
Apr-14	253.20	240.54	177.24	595.02
May-14	253.60	240.92	177.52	595.96
Jun-14	318.00	419.76	152.64	381.60
Jul-14	323.00	426.36	155.04	387.60
Aug-14	401.76	246.24	440.64	207.36
Sep-14	259.20	246.24	181.44	609.12
Oct-14	324.50	428.34	337.48	207.68
Nov-14	325.00	429.00	338.00	208.00
Dec-14	325.00	429.00	156.00	390.00
Jan-15	332.50	438.90	345.80	212.80
Feb-15	415.40	254.60	455.60	214.40
Mar-15	418.50	256.50	459.00	216.00

Let's calculate Half yearly Sales for Various WAC types:

2 Ton: $(2141/6) - (1809/6) / (1809/6) = 0.18$ (approx)

1/2 Ton: $(1449/6) - (2777/6) / (2777/6) = -0.48$ (approx)

1 1/2 Ton: $(2236/6) - (1820/6) / (1820/6) = 0.23$ (approx)

1 ton : $(2092/6) - (1284/6) / (1284/6) = 0.63$ (approx)

Therefore 1 1/2 Ton WAC has performed the second best in Half Yearly Sales Performance.

Hence C is the correct answer.

74. In which of the months given below, the total WAC Monthly Sales Performance was the highest?

- A May 2014
- B June 2014
- C October 2014
- D February 2015

Answer: D

Explanation:

Let's calculate the different WAC types during April 2014 - March 2015 and tabulate it as follows

Month	Two Ton	One & Half Ton	One Ton	Half Ton
Apr-14	253.20	240.54	177.24	595.02
May-14	253.60	240.92	177.52	595.96
Jun-14	318.00	419.76	152.64	381.60
Jul-14	323.00	426.36	155.04	387.60
Aug-14	401.76	246.24	440.64	207.36
Sep-14	259.20	246.24	181.44	609.12
Oct-14	324.50	428.34	337.48	207.68
Nov-14	325.00	429.00	338.00	208.00
Dec-14	325.00	429.00	156.00	390.00
Jan-15	332.50	438.90	345.80	212.80
Feb-15	415.40	254.60	455.60	214.40
Mar-15	418.50	256.50	459.00	216.00

Monthly Sales Performance in May 2014 $= (1268 - 1266) / 1266 = 0.00128$

Monthly Sales Performance in June 2014 $= (1272 - 1268) / 1268 = 0.0032$

Monthly Sales Performance in October 2014 $= (1298 - 1296) / 1296 = 0.00154$

Monthly Sales Performance in February 2015 $= (1340 - 1330) / 1330 = 0.0075$

So the Monthly Sales Performance in February 2015 is the highest.

Hence D is the correct answer.

75. Which type of WAC has the least Sales Volatility?

- A** 1/2 Ton
- B** 1 Ton
- C** 1 1/2 Ton
- D** 2 Ton

Answer: D

Explanation:

Let's calculate the different WAC types during April 2014 - March 2015 and tabulate it as follows

Month	Two Ton	One & Half Ton	One Ton	Half Ton
Apr-14	253.20	240.54	177.24	595.02
May-14	253.60	240.92	177.52	595.96
Jun-14	318.00	419.76	152.64	381.60
Jul-14	323.00	426.36	155.04	387.60
Aug-14	401.76	246.24	440.64	207.36
Sep-14	259.20	246.24	181.44	609.12
Oct-14	324.50	428.34	337.48	207.68
Nov-14	325.00	429.00	338.00	208.00
Dec-14	325.00	429.00	156.00	390.00
Jan-15	332.50	438.90	345.80	212.80
Feb-15	415.40	254.60	455.60	214.40
Mar-15	418.50	256.50	459.00	216.00

Sales Volatility can be calculated by the formula (Maximum Monthly Sales - Minimum Monthly sales)/ Average Monthly sales

$$1/2 \text{ Ton} = 609-207/352.128 = 1.14$$

$$1 \text{ Ton} = 459-153/281.37 = 1.09$$

$$1\ 1/2 \text{ Ton} = 439-241/338.03 = 0.59$$

$$2 \text{ Ton} = 419-253/ 329.138 = 0.5$$

Among the different WAC types 2 Ton has the lowest Sales volatility.

Hence D is the correct answer.

Instructions [76 - 80]

Read the following information, graph and table and answer the questions that follow.

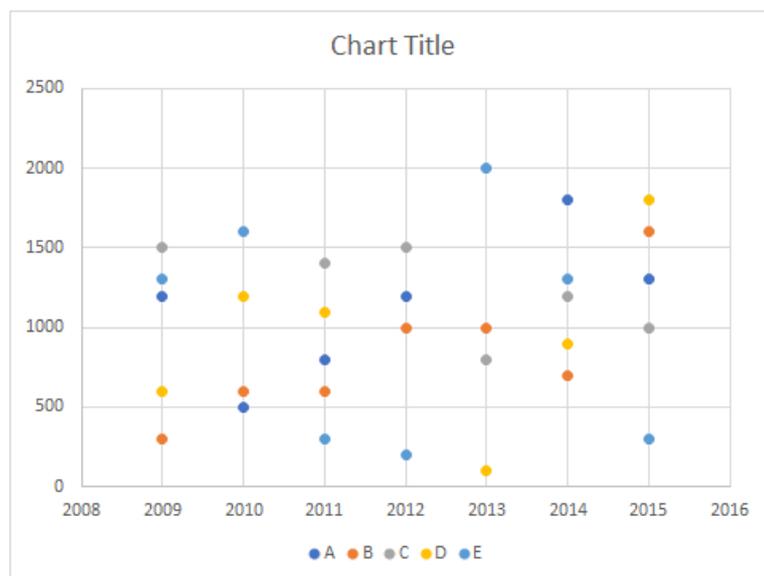
Ellen Inc. is a Mumbai based company which sells five products branded as A, B, C, D and E in India. Anita looks after entire sales of North India working from regional office in Delhi. She was preparing for annual review meeting scheduled next day in Mumbai. She was attempting to analyse sales in North India for the seven year period from 2009 to 2015. She first calculated average sales in rupees of all the five brands and constructed a table exhibiting the difference between average sales of each pair of brands as shown in the following table:

	Product A	Product B	Product C	Product D	Product E
Product A	0	214.29	-128.57	142.86	42.86
Product B		0	-342.86	-71.43	-171.43
Product C			0	271.43	171.43
Product D				0	-100
Product E					0

Average Sales of Product A minus Average Sales of Product B

After taking a print out of the above table, she attempted to look at the trend of sales and plotted a graph in MS Excel. Later she took a print out of the graph and left for a meeting. While on her way she figured out that due to some printer cartridge problem sales of Product A in 2013, Product C in 2010, and Product D in

2012 were not visible in the graph as reproduced below. Anita had to make some quick calculations to arrive at the information outlined in the following question.



76. What are the sales of Product A in 2013, Product C in 2010 and Product D in 2012?

- A Rs. 550 Crores, Rs. 800 Crores and Rs. 500 Crores
- B Rs. 500 Crores, Rs. 700 Crores and Rs. 600 Crores
- C Rs. 500 Crores, Rs. 800 Crores and Rs. 600 Crores
- D Rs. 4000 Crores, Rs. 800 Crores and Rs. 600 Crores

Answer: C

Explanation:

Let's tabulate the chart ,

Year	A	B	C	D	E
2009	1200	300	1500	600	1300
2010	500	600		1200	1600
2011	800	600	1400	1100	300
2012	1200	1000	1500		200
2013		1000	800	100	2000
2014	1800	700	1200	900	1300
2015	1300	1600	1000	1800	300

Since difference in average sales is given , Difference in sales can be found by multiplying it by 7

For example

Let the sales of A be $a_1, a_2, a_3, a_4, a_5, a_6, a_7$ in 2009 - 2015 respectively.

Let the sales of B be $b_1, b_2, b_3, b_4, b_5, b_6, b_7$

Given that $\frac{(a_1+a_2+a_3+a_4+a_5+a_6+a_7)}{7} - \frac{(b_1+b_2+b_3+b_4+b_5+b_6+b_7)}{7} = 214.29$

Hence A- B = 214.29 * 7 = 1500

Similarly, all the remaining differences in sales can be calculated

A-B	1500
A-C	-900
A-D	1000
A-E	300
B-C	-2400
B-D	-500
B-E	-1200
C-D	1900
C-E	1200
D-E	-700

Let the sales of A in 2013 be 'a', C in 2010 be 'c', D in 2012 be 'd' .

Total sales of A = (6800+a)

B = 5800

C = (7400+c)

D = (5700+d)

E = 7000

A - B = 6800+a - 5800 = 1500 => a = 500 crores

B - C = 5800 - 7400 - c = -2400 => c = 800 crores

D - E = 5700 + d - 7000 = -700 => d = 600 crores

Hence C is the correct answer.

77. Annual sales average of all products is the least in which year?

A 2010

B 2011

C 2012

D 2013

Answer: B

Explanation:

On Tabulating the chart , we get

Year	A	B	C	D	E
2009	1200	300	1500	600	1300
2010	500	600		1200	1600
2011	800	600	1400	1100	300
2012	1200	1000	1500		200
2013		1000	800	100	2000
2014	1800	700	1200	900	1300
2015	1300	1600	1000	1800	300

from the previous question value of a=500,c=800,d=600

The product having the least sales value will obviously have the least avg sales value

Sales in the year 2010=4700

Sales in the year 2011=4200

Sales in the year 2012=4500

Sales in the year 2013=4400

Hence in 2011 average of all the products sold is the least

So B is the correct answer

78. Which product has the least average sales for the seven year period 2009-15?

A Product A

B Product B

C Product D

D Product E

Answer: B

Explanation:

On Tabulating the chart , we get

Year	A	B	C	D	E
2009	1200	300	1500	600	1300
2010	500	600		1200	1600
2011	800	600	1400	1100	300
2012	1200	1000	1500		200
2013		1000	800	100	2000
2014	1800	700	1200	900	1300
2015	1300	1600	1000	1800	300

Since difference in average sales is given

Difference in sales can be found out by multiplying it by 7

A-B	1500
A-C	-900
A-D	1000
A-E	300
B-C	-2400
B-D	-500
B-E	-1200
C-D	1900
C-E	1200
D-E	-700

Let the sales of A in 2013 be a , C in 2010 be c, d in 2012 be d

Total sales of A = (6800+a)

B = 5800

C = (7400+c)

D = (5700+d)

E = 7000

On evaluating we get value of a = 500,c=800,d= 600 crores

Sales of product A = 7300

Sales of product B = 5800

Sales of product D = 6300

Sales of product E = 7000

Product B has the least average sales.

Hence B is the correct answer.

79. **The difference between average sales of products for the period 2009-15 is the least for which pair of products?**

A Product A and Product B

B Product B and Product C

C Product C and Product D

D Product D and Product E

Answer: D

Explanation:

On Tabulating the chart , we get

Year	A	B	C	D	E
2009	1200	300	1500	600	1300
2010	500	600		1200	1600
2011	800	600	1400	1100	300
2012	1200	1000	1500		200
2013		1000	800	100	2000
2014	1800	700	1200	900	1300
2015	1300	1600	1000	1800	300

Since difference in average sales is given

Difference in sales can be found out by multiplying it by 7

A-B	1500
A-C	-900
A-D	1000
A-E	300
B-C	-2400
B-D	-500
B-E	-1200
C-D	1900
C-E	1200
D-E	-700

Let the sales of A in 2013 be a , C in 2010 be c, d in 2012 be d

Total sales of A = (6800+a)

B = 5800

C = (7400+c)

D = (5700+d)

E = 7000

On evaluating we get value of a = 500,c=800,d= 600 crores

On substituting all the values in the tables ,

Year	A	B	C	D	E	Sum
2009	1200	300	1500	600	1300	4900
2010	500	600	800	1200	1600	4700
2011	800	600	1400	1100	300	4200
2012	1200	1000	1500	600	200	4500
2013	500	1000	800	100	2000	4400
2014	1800	700	1200	900	1300	5900
2015	1300	1600	1000	1800	300	6000
Sum	7300	5800	8200	6300	7000	

Option A: The difference between the average sales of products A and B = $7300 - 5800 = 1500$

Option B: The difference between the average sales of products B and C = $8200 - 5800 = 2400$

Option C: The difference between the average sales of products C and D = $8200 - 6300 = 1900$

Option D: The difference between the average sales of products D and E = $7000 - 6300 = 700$

The difference between the average sales of products D and E is the least.

Hence option D is the correct answer.

80. If Year on Year (YoY) Growth is

$\frac{\text{Current Year Sales} - \text{Previous Year Sales}}{\text{Previous Year Sales}}$

then the YoY growth of combined sales of all products has suffered maximum decline in which year?

A 2010

B 2011

C 2013

D 2015

Answer: B

Explanation:

Let's tabulate the chart,

Year	A	B	C	D	E
2009	1200	300	1500	600	1300
2010	500	600		1200	1600
2011	800	600	1400	1100	300
2012	1200	1000	1500		200
2013		1000	800	100	2000
2014	1800	700	1200	900	1300
2015	1300	1600	1000	1800	300

Since difference in average sales is given, Difference in sales can be found by multiplying it by 7

A-B	1500
A-C	-900
A-D	1000
A-E	300
B-C	-2400
B-D	-500
B-E	-1200
C-D	1900
C-E	1200
D-E	-700

Let the sales of A in 2013 be 'a', C in 2010 be 'c', D in 2012 be 'd'.

Total sales of A = $(6800 + a \times 1000)$

$$B = 5800$$

$$C = (7400+c)$$

$$D = (5700+d)$$

$$E = 7000$$

On evaluating we get value of $a = 500, c=800, d= 600$ crores

On finding the unknown values , we get the below table

Year	A	B	C	D	E	Sum
2009	1200	300	1500	600	1300	4900
2010	500	600	800	1200	1600	4700
2011	800	600	1400	1100	300	4200
2012	1200	1000	1500	600	200	4500
2013	500	1000	800	100	2000	4400
2014	1800	700	1200	900	1300	5900
2015	1300	1600	1000	1800	300	6000
Sum	7300	5800	8200	6300	7000	

Let's evaluate the options one by one,

Option A: YoY growth of combined sales of all products in 2010 = $\frac{4700-4900}{4900} = -0.0408$

Option B: YoY growth of combined sales of all products in 2011 = $\frac{4200-4700}{4700} = -0.1064$

Option C: YoY growth of combined sales of all products in 2013 = $\frac{4400-4500}{4500} = -0.0222$

Option D: YoY growth of combined sales of all products in 2015 = $\frac{6000-5900}{5900} = 0.0169$

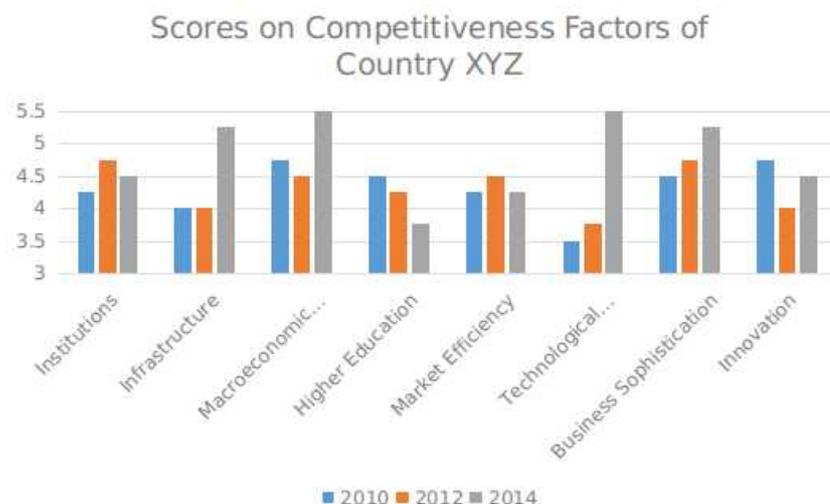
Among the above values, it is clear that the YoY growth of combined sales of all products in 2011 had a maximum decline.

Hence B is the correct answer.

Instructions [81 - 84]

Read the following information and graph and answer the questions that follow.

An international Organisation produces a Competitive Index of countries every two years based on eight factors (Institutions, Infrastructure, Macroeconomic Environment, Higher Education, Market Efficiency, Technological Readiness, Business Sophistication and Innovation). The last three indices were developed in 2010, 2012 and 2014. The scores for all eight factors of XYZ country are shown in the graph below:



81. If Factor performance is measured as $0.30 \times \text{Factor Score in 2014} + 0.35 \times \text{Factor Score in 2012} + 0.35 \times \text{Factor Score in 2010}$, then which of the following has best Factor Performance?

- A Innovation
- B Business Sophistication
- C Infrastructure
- D Macroeconomic Environment

Answer: D

Explanation:

Factor performance is measured as $0.30 \times \text{Factor Score in 2014} + 0.35 \times \text{Factor Score in 2012} + 0.35 \times \text{Factor Score in 2010}$

Let's calculate Factor performance for each of the given options.

Factor performance For Innovation = $0.3 \times 4.5 + 0.35 \times 4 + 0.35 \times 4.75 = 4.4125$

Factor performance for Business Sophistication = $0.3 \times 5.25 + 0.35 \times 4.75 + 0.35 \times 4.5 = 4.8125$

Factor performance for Infrastructure = $0.3 \times 5.25 + 0.35 \times 4 + 0.35 \times 4 = 4.375$

Factor performance for Macroeconomic Environment = $0.3 \times 5.5 + 0.35 \times 4.5 + 0.35 \times 4.75 = 4.8875$

Factor performance for Macroeconomic Environment is the highest.

Hence option D is the correct answer.

82. If Factor Performance is measured as

$$\frac{\text{Factor Score 2014} - \text{Factor Score 2012}}{\text{Factor Score 2010}}$$

then which of the following has best Factor Performance?

- A Innovation
- B Business Sophistication
- C Infrastructure
- D Macroeconomic Environment

Answer: C

Explanation:

$$4.5 - 4$$

Factor performance in Innovation = $\frac{4.5 - 4}{4.75} \times 100 = 10.53$

$$5.25 - 4.75$$

Factor performance in Business Sophistication = $\frac{5.25 - 4.75}{4.5} \times 100 = 11.11$

$$5.25 - 4$$

Factor performance in Infrastructure = $\frac{5.25 - 4}{4} \times 100 = 31.25$

$$5.5 - 4.5$$

Factor performance in Macroeconomic Environment = $\frac{5.5 - 4.5}{4.75} \times 100 = 21.05$

We can see that option C is the correct answer.

83. Which of the following factors has the highest average score across indices of 2010, 2012 and 2014?

- A Infrastructure
- B Institutions
- C Technological Readiness
- D Market Efficiency

Answer: B

Explanation:

For Infrastructure

$$\text{Average of the indices} = 4+4+5.25/3=13.25/3 \\ =4.4167$$

For Institutions

$$\text{Average of the indices} =4.25+4.75+4.5/3=13.5/3 \\ =4.5$$

For Technological readiness

$$\text{Average of the indices} =3.5+3.75+5.5/3=12.75/3 \\ =4.25$$

For Market Efficiency

$$\text{Average of the indices} =4.25+4.5+4.25/3=13/3 \\ =4.33$$

The average of the index is highest for Institutions.

Hence B is the correct answer.

84. Which among the following factors had the least growth rate in 2014 versus scores of 2010?

- A Business Sophistication
- B Institutions
- C Technological Readiness
- D Infrastructure

Answer: B

Explanation:

The growth rate in 2014 versus scores of 2010 for Business Sophistication = $5.25/4.5 = 1.167$

Growth rate in 2014 versus scores of 2010 for Institutions = $4.5/4.25 = 1.058$

Growth rate in 2014 versus scores of 2010 for Technological Readiness = $5.5/3.5 = 1.571$

Growth rate in 2014 versus scores of 2010 for Infrastructure = $5.25/4 = 1.3125$

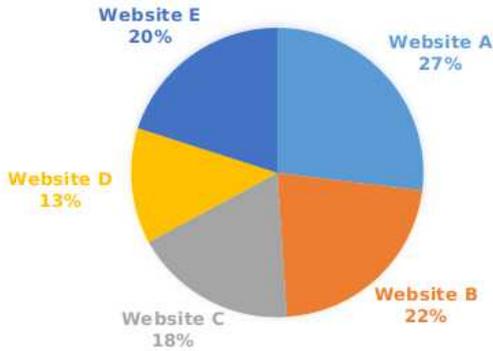
Among the above values, growth rate for institutions was least.

Hence B is the correct answer.

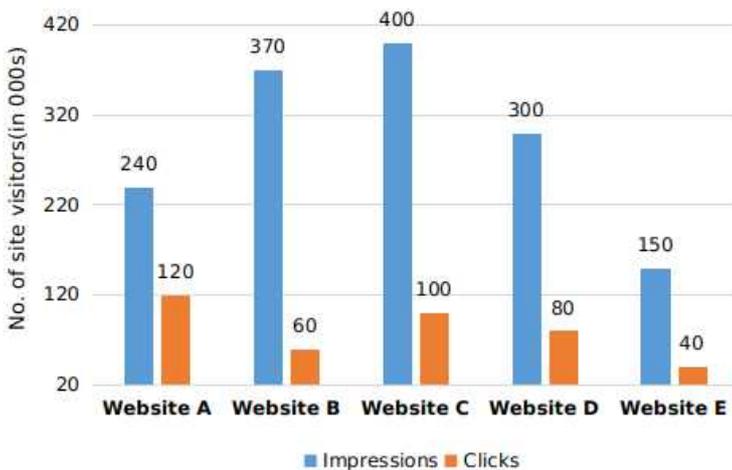
Instructions [85 - 88]

Read the following information and the accompanying graphs to answer the questions that follow. www.jay.com spent \$ 5,57,000 during last 12 months for online display advertisements, also called impressions, on five websites (Website A, Website B, Website C, Website D and Website E). In this arrangement, www.jay.com is the Destination Site, and the five websites are referred to as the Ad Sites. The allocation of online display advertising expenditure is shown in Graph A. The online display advertisements helped www.jay.com to get visitors on its site. Online visitors, visiting the Ad Sites, are served display advertisements of www.jay.com and on clicking they land on the Destination Site (Graph B). Once on the Destination Site, some of the visitors complete the purchase process(Graph C)

GRAPH A : ALLOCATION OF ONLINE DISPLAY ADVERTISING EXPENDITURE



Graph B: Action at Display Websites



Graph C: Purchase Action at www.jay.com



Quality traffic = $\frac{\text{No. of site visitors who start purchase on destination site}}{\text{No. of visitors who click the online display advertisement}}$

Leakage in online buying = $1 - \frac{\text{Complete buying on the destination website}}{\text{Start buying on the destination website}}$

Efficiency of online display advertising expenditure on an Ad Site = $\frac{\text{No. of visitors from the Ad Site who complete the purchase process}}{\text{Amount spent on the Ad Site}}$

85. Which of following Ad Sites provide facility of least cost per advertisement?

- A Website A
- B Website B
- C Website D
- D Website E

Answer: C

Explanation:

Let's calculate the Cost per advertisement by using the formula

Cost per advertisement = Advertising expenditure / Impressions made

For website A= $557000 * 0.27 / 240 = 626.625$

For website B= $557000 * 0.22 / 370 = 331.19$

For website D= $557000 * 0.13 / 300 = 219.42$

For website E= $557000 * 0.20 / 150 = 742.67$

So the least cost per advertisement is for Website D.

Hence C is the correct answer.

86. Which Ad Site has provided maximum quality traffic?

- A Website A
- B Website B
- C Website D
- D Website E

Answer: D

Explanation:

Let's calculate the Quality traffic using the formula,

$$\text{Quality traffic} = \frac{\text{No. of site visitors who start purchase on destination site}}{\text{No. of visitors who click the online display advertisement}}$$

$$\text{For Website A} = 2800/120k = 23.33 \times 10^{-3}$$

$$\text{For Website B} = 2500/ 60k = 41.67 \times 10^{-3}$$

$$\text{For Website D} = 3000 / 80k = 37.50 \times 10^{-3}$$

$$\text{For Website E} = 3500 / 40k = 87.50 \times 10^{-3}$$

The quality traffic for website E is the maximum.

Hence D is the correct answer.

87. Which Ad Site sent traffic to www.jay.com with maximum leakage?

- A** Website B
- B** Website C
- C** Website D
- D** Website E

Answer: C

Explanation:

Let's calculate the Leakage in online buying by using the formula,

$$\frac{\text{Complete buying on the destination website}}{\text{Start buying on the destination website}}$$

Leakage in online buying = $1 -$

For Website B = $1 - (1200/2500) = 0.52$

For Website C = $1 - (900/2000) = 0.55$

For Website D = $1 - (1300/3000) = 0.5667$

For Website E = $1 - (1600/3500) = 0.5428$

For Website D the leakage is maximum .

Hence C is the correct answer.

88. On which Ad Site is the advertising budget spent most efficiently?

- A** Website A
- B** Website B
- C** Website C
- D** Website E

Answer: A

Explanation:

Website A : $2700/150390 = 0.0179$

Website B : $1200/122540 = 0.009$

Website C : $900/100260 = 0.0089$

Website E : $1600/111400 = 0.014$

Hence for website A the advertising budget was spent efficiently

Section IV part 1

Instructions [89 - 92]

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

Because of the critical role played by steel in economic development, the steel industry is often considered, especially by the governments, which traditionally owned it, to be an indicator of economic prowess. World production has grown exponentially, but there were big highs and equally big lows all through the 1990s and up to 2002. Recovery from the two World Wars and the Great Depression of the 1930s caused massive disruption and lay-offs. Over-capacity and low steel prices continued to play havoc through the 1970s and 1980s and politicians began to lose their belief that the wealth of a nation was directly coupled to its steel production.

This led to a wave of privatisations, as state-owned enterprises shed their financial liabilities to hungry capitalists. A whole new breed of steel-makers came into being using a new technology, the mini-mill. This used a smaller electric-arc furnace fed that just melts down 'cold' scrap. It was a cheaper process than the traditional 'hot metal integrated mills' with their mountains of ore and coal and monumental machinery, but it was used almost exclusively for lower-grade building and other 'long' products.

By the beginning of 2005, the world steel industry was on a high, after decades of moving from apocalypse to break-even and then back to apocalypse. Since 2003, when a staggering 960 million tonnes were produced-compared to 21.9 million tonnes for aluminium-there had been unprecedented demand, mainly from China and India. China was both the biggest producer, the first country to exceed 200 million tonnes of crude steel in a year, and also its biggest consumer at 244 million tonnes. The global economy was also booming, but this was creating production bottlenecks for all steel-makers and by 2004 steel had for the first time hit an average of \$650 per tonne shipped. Profit margins were better, but where was the growth to come from? In tandem, the costs of essential raw materials for steel-making - iron ore coking coal-had

gone through the roof, along with bulk shipping costs. The key to future growth was to secure plants in emerging markets where ore and coal were close to production sites, labour costs were much lower and where technology and investment could spur greater savings.

But the central issue was that globally the industry remained a very fragmented one. No single company was producing 100 million tonnes a year, or 10 per cent of total world production. The name of the game was consolidation into fewer, bigger players. With this would come the chance for steel-makers to gain greater pricing power, increasing their profitability and the value of their shares.

Two groups had begun to move ahead of the pack. One was Mittal Steel with its operational headquarters in London's prestigious Berkeley Square. Mittal Steel was the world's biggest producer of 'long' products. It was young, aggressive, fast, and a big risk-taker, fuelled by its founder Lakshmi Mittal's visionary zeal to consolidate the industry. Its nearest rival, Arcelor - the world's most profitable steel company, focusing on 'flat' products - was headed by the Frenchman Guy Dolle, and was a combination of three former state-owned European steel plants: Arbed of Luxembourg, Usinor from France and Spain's Aceralia. These three were now merged, restructured and administered from the grandiose, chateau-like former Arbed headquarters in Luxembourg's Avenue de la Liberte.

Both groups were passionate about steel. Mittal, already dubbed 'the Carnegie from Calcutta', had a clearer vision of the need to streamline steel, but Arcelor was determined to become the biggest as well as the best. Dominating the market would enable either firm to increase its pricing position with customers, the car-makers, ship-builders and construction firms, as well as chasing growth in the new markets of Asia, South America and Eastern Europe.

Guy Dolle could hear the clump of Mittal's feet marching ahead, and it hurt. Arcelor was Europe's reigning steel champion and was arrogantly proud of it. It had a commanding market share of the specialised high-strength steel supplied to European car-makers, and a total overall production approaching 50 million tonnes a year, all with state-of-the-art technology. The group had repaired its consolidated balance sheet, ravished by decades of downturns and continual restructuring costs. It had invested heavily in the quest for best technology and had also acquired companies in Brazil, set up joint ventures in Russia, Japan and China and now was eagerly eyeing gateways to the North American car market. And to its long-suffering shareholders, starved of decent dividends, Arcelor was at last moving in the right direction, after the blood, sweat and tears of shifting from public to private sector. The Luxembourg group was clearly on a wake-up call, gunning to overtake Mittal Steel and keep it at bay.

By 2005, the battle for supremacy had begun to heat up. Two projected state sell-offs by public auction, in Turkey and Ukraine, were particularly attractive commercially. Both auctions were taking place in October, within three weeks of each other. The first, in Turkey, was for the 46.3 per cent of government-owned shares in Erdemir, a steel-maker producing 3.5 million tonnes a year for car-makers and other industrial clients in a country of seventy million people shaping up to join the European Union. Mittal and Arcelor both already owned minitory stakes in the Turkish company and were eager to get majority control.

89. **Which of the following statements is true?**

- A** In 2003, China consumed more steel than it produced
- B** Mittal steel was the world's most profitable steel company in mid 2000s
- C** Arcelor was a bigger producer of steel than Mittal
- D** All of the above

Answer: A

Explanation:

Option A: True, In the second paragraph " China was both the biggest producer, the first country to exceed 200 million tonnes of crude steel in a year, and also its biggest consumer at 244 million tonnes." Thus Option A is correct.

Option B: False, In the fifth paragraph "It's nearest rival, Arcelor- the world's most profitable steel company, focusing on 'flat' products-was headed by the Frenchman Guy Dolle" Arcelor was the world's most profitable steel company.

Option C: False, Never mentioned in the passage.

Option D: False

90. **Which among the following is the common objective both Mittal and Arcelor had for aspiring to become bigger steel-makers?**

- A** To consolidate the rather fragmented steel industry
- B** To facilitate privatisation initiatives of the government
- C** To have 10% of the industry share
- D** To increase pricing position with customers

Answer: D

Explanation:

In the passage it is given "Both groups were passionate about steel..... Dominating the market would enable either firm to increase its pricing position with customers, the car-makers, ship-builders and construction firms, as well as chasing growth in the new markets of Asia, South America and Eastern Europe. "

Thus both of them wanted to dominate the market to increase their pricing position with customers.

Hence D is the correct answer.

91. **From the above passage, it clearly emerges that:**

- A** Arcelor had delivered good returns to its shareholders
- B** Mittal steel was Arcelor's nearest competitor
- C** By 2005, steel industry was in recession
- D** A nation's steel production continues to be a good indicator of its wealth

Answer: B

Explanation:

Option A is false as given in the passage " And to its long-suffering shareholders, starved of decent dividends, Arcelor was at last moving in the right direction, after the blood, sweat and tears of shifting from public to private sector." We can infer that Arcelor had not delivered good returns.

Option B is correct as throughout the latter half it is mentioned that Mittal and Arcelor were the only competitors in the market.

Option C is false as in the second paragraph it is given "By the beginning of 2005, the world steel industry was on a high, after decades of moving from apocalypse to break-even and then back to apocalypse. "

Option D cannot be inferred as "Over-capacity and low steel prices continued to play havoc through the 1970s and 1980s and politicians began to lose their belief that the wealth of a nation was directly coupled to its steel production."

92. **What are the plausible reasons for privatization in steel industry?**

- A** Slow growth in world production
- B** Lobbying by capitalists
- C** Havoc played by over-capacity and falling steel prices
- D** Introduction of the 'mini-mill'

Answer: C

Explanation:

From the first two paragraphs we can infer that privatization thrived because of the falling prices and overcapacity.

In the first paragraph "Recovery from the two World Wars and the Great Depression of the 1930s caused massive disruption and lay-offs. Over-capacity and low steel prices continued to play havoc through the 1970s and 1980s and politicians began to lose their belief that the wealth of a nation was directly coupled to its steel production." explained the reason for privatization of the steel industry which is given in the second paragraph

Hence Option C is correct.

Instructions [93 - 96]

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

In the decades that Otlet's papers had sat gathering dust, his dream of a universal knowledge of network had found a new expression across the Atlantic, where a group of engineers and computer scientists laid the groundwork for what would eventually become the Internet. Beginning during the Cold War, the United States poured money into a series of advanced research projects that would eventually lead to the creation of the technologies underpinning the present-day Internet. In 1990s, the World Wide Web appeared and quickly attracted a widespread audience, eventually establishing itself as the foundation of a global knowledge-sharing network much like the one that Otlet envisioned.

Today, the emergence of that network has triggered a series of dramatic - perhaps even "axial" - transformation. In 2011, the world's population generated more than 1.8 zettabytes of data, including documents, images, phone calls, and radio and television signals. More than a billion people now use Web browsers, and that number will almost certainly increase for years to come. In an era when almost anyone with a mobile phone can press a few keys to search the contents of the world's libraries, when millions of people negotiate their personal relationships via online social networks, and when institutions of all stripes find their operations disrupted by the sometimes wrenching effects of networks, it scarcely seems like hyperbole - and has even become cliché - to suggest that the advent of the Internet ranks as an event of epochal significance.

While Otlet did not by any stretch of imagination "invent" the Internet - working as he did in an age before digital computers, magnetic storage, or packet-switching networks - nonetheless his vision looks nothing short of prophetic. In Otlet's day, microfilm may have qualified as the most advanced information storage technology, and the closest thing anyone had ever seen to database was a drawer full of index cards. Yet despite these analog limitations, he envisioned a global network of interconnected institutions that would alter the flow of information around the world, and in the process lead to profound social, cultural, and political transformations.

By today's standards, Otlet's proto-Web was a clumsy affair, relying on a patchwork system of index cards, file cabinets, telegraphs machines, and a small army of clerical workers. But in his writing he looked far ahead to a future in which networks circled the globe and data could travel freely. Moreover, he imagined a wide range of expression taking shape across the network: distributed encyclopaedias, virtual classrooms, three-dimensional information spaces, social networks, and other forms of knowledge that anticipated the hyperlinked structure of today's Web. He saw these developments as fundamentally connected to a larger utopian project that would bring the world closer to a state of permanent and lasting peace and toward a state of collective spiritual enlightenment.

The conventional history of the Internet traces its roots through an Anglo-American lineage of early computer scientists like Charles Babbage, Ada Lovelace, and Alan Turing; networking visionaries like Vinton G. Cerf and Robert E. Kahn; as well as hypertext seers like Vannevar Bush, J.C. R. Licklider, Douglas Engelbart, Ted Nelson, and of course Tim Berners-Lee and Robert Cailliau, who in 1991 released their first version of the World Wide Web. The dominant influence of the modern computer industry has placed computer science at the center of this story.

Nonetheless Otlet's work, grounded in an age before microchips and semiconductors, opened the door to an alternative stream of thought, one undergirding our present-day information age even though it has little to do with the history of digital computing. Well before the first Web servers started sending data packets across the Internet, a number of other early twentieth-century figures were pondering the possibility of a

new, networked society: H.G. Wells, the English science fiction writer and social activist, who dreamed of building a World Brain, Emanuel Goldberg, a Russian Jew who invented a fully functional mechanical search engine in 1930s Germany before fleeing the Nazis; Scotland's Patrick Geddes and Austria's Otto Neurath, who both explored new kinds of highly designed, propagandistic museum exhibits designed to foster social change; Germany's Wilhelm Ostwald, the Nobel Prize-winning chemist who aspired to build a vast new 'brain of humanity'; the sculptor Hendrik Andersen and the architect Le Corbusier, both of whom dreamed of designing a World City to house a new, one-world government with a networked information repository at its epicentre. Each shared a commitment to social transformation through the use of available technologies. They also each shared a direct connection to Paul Otlet, who seems to connect a series of major turning points in the history of the early twentieth-century information age, synthesizing and incorporating their ideas along with his own, and ultimately coming tantalizingly close to building a fully integrated global information network.

93. **What is the remark that the author of this passage considers a defensible one, rather than a hyperbole?**

- A** That the number of people who will use Internet will increase for the year to come
- B** That the advent of the Internet is an event of epochal significance
- C** That millions of people negotiate their personal relationships via online social networks
- D** That more than a billion people now use web browsers

Answer: B

Explanation:

In second paragraph it is mentioned that it scarcely seems like hyperbole - and has even become cliché - to suggest that the advent of the Internet ranks as an event of epochal significance. Therefore, the answer is option B.

94. **In the above passage, Otlet is being credited with**

- A** Inventing the Internet
- B** Prophesising the Internet
- C** Co-developing the Internet
- D** All of the above

Answer: C

Explanation:

In third paragraph it is mentioned, 'While Otlet did not "invent" the Internet - working as he did in an age before digital computers, magnetic storage, or packet - switching networks - nonetheless his vision looks nothing short of prophetic.' Therefore, the answer is option C.

95. **What has been said as the common commitment shared by the early twentieth-century figures who imagined and worked for a networked society?**

- A** Designing a World City with a networked information repository at its epicenter

- B** Achieving social transformation through the use of available technologies
- C** Building a vast new “Brain of Humanity”
- D** Bringing world peace through online social networks

Answer: B

Explanation:

In the last paragraph, it is mentioned, 'Each shared a commitment to social transformation through the use of available technologies.' Among the given options, option B is the appropriate one.

The answer is option B.

96. **Otlet’s original idea of network can be described as:**

- A** Futuristic
- B** Visionary
- C** Utopian
- D** All of the above

Answer: D

Explanation:

Paragraph 4 talks about Otlet's idea being Futuristic, Visionary and Utopian. The answer is option D.

Instructions [97 - 100]

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

Every loan has a lender and a borrower; both voluntarily engage in the transaction. If the loan goes bad, there is at least a prima facie case that the lender is as guilty as the borrower. In fact, since lenders are supposed to be sophisticated in risk analysis and in making judgments about a reasonable debt burden, they should perhaps bear even more culpability.

Does it make a difference if we say there is over-lending rather than over-borrowing? The difference is where we see the problem affects where we seek the solution. Is the problem more on the side of the lenders, that they are not exercising due diligence in judging who is creditworthy? Or on the borrowers, being profligate and irresponsible? If we consider the problem to be over borrowing, then we naturally think of making it more difficult for borrowers to discharge their debts, on the contrary, if the problem is over lending, we focus on strengthening incentives for lenders to exercise due diligence.

The political economy of over-borrowing is easy to understand. The current borrowing government benefits and later governments have to deal with the consequences. But why have sophisticated, profit maximizing lenders so often over-lent? Lenders encourage indebtedness because it is profitable. Developing country governments are sometimes even pressured to over-borrow. There may be kickbacks in loans, or even to be influenced by Western businessmen and financiers. They wine and dine those responsible for borrowing as they sell their loan packages, and tell them why this is good time to borrow, why their particular package is attractive, why this is the right time to restructure debt? Countries that are not sure that borrowing is worth the risk are told how important it is to establish a credit rating: borrow even if you really don't need the

money.

Excessive borrowing increases the chance of a crisis, and the cost of a crisis are borne not just by lenders but by all of society. In recent years, IMF programs may have resulted in significant further distortions in lenders' incentives. When crisis occurred, the IMF lent money in what was called a 'bail-out'- but the money was not really a bail-out for the country; it was a bail out for western banks. In both East Asia and Latin America, bail-outs provided money to repay foreign creditors, thus absolving creditors from having to bear the costs of their mistaken lending. In some instances, governments even assumed private liabilities, effectively socializing private risk. The creditors were left off the hook, but the IMF's money wasn't gift, just another loan- and the developing country was left to pay the bill. In effect, the poor country's taxpayers paid for rich country's lending mistakes.

The bail-outs give rise to the famous 'moral hazard' problem. Moral hazard arises when a party does not bear all the risks associated with his action and as a result does not do everything he can to avoid risk. The term originates in the insurance literature; it was deemed immoral for an individual to take less care in preventing a fire simply because he had insurance coverage. It is of course, simply a matter of incentives: those with insurance may not set their houses on fire deliberately, but their incentive to avoid a fire is still weakened. With loans, the risk is default, with all of its consequences; lenders can reduce that risk simply by lending less. If they perceive a high likelihood of a bail-out, they lend more than they otherwise would.

Lending markets are also characterized by, in the famous words of former chairman of the U.S. Federal Reserve Alan Greenspan, 'irrational exuberance', as well as irrational pessimism. Lenders rush into a market in a mood of optimism, and rush out when the mood changes. Markets move in fads and fashions, and it is hard to resist joining the latest fad. If only one firm were affected by a mood of irrational optimism, it would have to bear the cost of its mistake; but when large numbers share the mood, in a fad, there are macroeconomic consequences, potentially affecting everyone in the country.

97. **The author is trying to find the underlying cause of:**

- A** Financial crisis in the economy
- B** Under development in the developing world
- C** Bargaining power asymmetry between lenders and borrowers
- D** Inequalities in the world economy

Answer: A

Explanation:

In most of the passage author is talking about underlying cause of financial crisis in the economy. The answer is option A.

98. **The moral hazard arises because:**

- A** The insured take less precaution to avoid a risk because the risk is covered by insurance
- B** The insured takes less precaution to avoid risk because he is unaware about the risk
- C** The insured takes less precaution to avoid risk because he tends to benefit from the risk
- D** The amount spent on insurance is seen as a waste because the risk is unlikely or minimum

Answer: A

Explanation:

In second last paragraph it is mentioned that moral hazard arises when a party does not bear all the risks associated with his action because he had insurance coverage. The answer is option A.

99. **According to the author the IMF bail-outs for the countries in crisis have been in effect:**

- A** The bail-out for the governments of the borrowing countries
- B** The bail-out for the banks in the borrowing country
- C** The bail-out for the leading foreign banks
- D** The bail-out for the governments of the countries of the creditors

Answer: C

Explanation:

In fourth paragraph it is mentioned, bail-outs provided money to repay foreign creditors, thus absolving creditors from having to bear the costs of their mistaken lending. The answer is option C.

00. **The author believes that the cost of the crisis is ultimately borne by:**

- A** The leading banks
- B** The IMF
- C** The tax payers of the borrowing country
- D** The rich countries

Answer: C

Explanation:

From the last line of fourth paragraph, it can be inferred that the author believes that the cost of the crisis is ultimately borne by the tax payers of the borrowing country. Therefore, the answer is option C.

Instructions [101 - 104]

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

The mass media have been recognized as politically significant since the advent of mass literacy and the popular press in the late nineteenth century. However, it is widely accepted that, through a combination of social and technological changes, the media have become increasingly more powerful political actors and, in some respects, more deeply enmeshed in the political process. Three developments are particularly noteworthy. First, the impact of the so-called 'primary' agents of political socialization, such as the family and social class, has declined. Whereas once people acquired, in late childhood and adolescence in particular, a framework of political sympathies and leanings that adult experience tended to modify or deepen, but seldom radically transformed, this has been weakened in modern society by values. Abiding political allegiances and habitual voting patterns have thus given way to a more instrumental approach to

politics, in which people make political choices according to a calculations of personal self-interest based on the issues and policy positions on offer. This, in turn, widens the scope for the media's political influence, as they are the principal mechanism through which information about issues and policies, and therefore political choices, is presented to the public.

Second, the development of mass television audience from the 1950s onwards, and more recently the proliferation of channels and media output associated with the 'new' media, has massively increased the mass media's penetration into people's everyday lives. This means that the public now relies on the mass media more heavily than ever before: for instance, television is a much more important source of news and current affairs information than political meetings; many more people watch televised sport than participate in it; and even shopping is increasingly being carried out through shopping channels and the internet.

Third, the media have become more powerful economic actors. Not only have major media corporations become more powerful global players, but also a series of mergers has tended to incorporate the formerly discrete domains of publishing, television, film, music, computers and telecommunications into a single massive 'infotainment' industry. Media businesses such as Microsoft, AOL-Time Warner, Disney and Rupert Murdoch's News Corporation have accumulated so much economic and market power that no government can afford to ignore them. Few commentators doubt the media's ability to shape political attitudes and values or, at least, to structure political and electoral choice by influencing public perceptions about the nature and importance of issues and problems, thereby. However, there is considerable debate about the political significance of this influence. A series of rival theories offer contrasting views of the media's political impact.

The pluralist model of the mass media portrays the media as an ideological marketplace in which wide range of political views are debated and discussed. While not rejecting the idea that the media can affect political views and sympathies, this nevertheless suggests that their impact is essentially neutral in that they reflect the balance of forces within the society at large. The pluralist view nevertheless portrays the media in strongly positive terms. In ensuring the 'informed citizenry', the mass media both enhance the quality of democracy and guarantee that government power is checked. This 'watchdog' role was classically demonstrated in the 1974 Washington Post investigation into the Watergate scandal, which led to the resignation of Richard Nixon as US President. Some, moreover, argue that the advent of the 'new' media, and particularly the Internet, has strengthened pluralism and political competition by giving protest groups a relatively cheap and highly effective means of disseminating information and organizing campaigns.

The dominant ideology model portrays media as a politically conservative force that is aligned to the interests of economic and social elites, and serves to promote compliance or passivity amongst the masses. The ownership ultimately determines the political and other views that the mass media disseminate, and ownerships are increasingly concentrated in the hands of a small number of global media corporations.

The elite-values model shifts attention away from the ownership of media corporations to the mechanism through which media output is controlled. This view suggests that editors, journalists and broadcasters enjoy significant professional independence, and that even the most interventionist of media moguls is able only to set a broad political agenda but not the day-to-day editorial decision-making. The media's political bias therefore reflects the values of groups that are disproportionately represented amongst its senior professionals.

The market model of the mass media differs from the other models in that it dispenses with the idea of media bias: it holds that newspaper and television reflect, rather than shape, the views of general public. This occurs because, regardless of the personal views of media owners and senior professionals, private

media outlets are first and foremost businesses concerned with profit maximization and thus with extending market share. The media therefore give people 'what they want', and cannot afford to alienate existing or potential viewers and readers by presenting political viewpoints with which they may disagree

01. **Which of the following is the most appropriate title for the passage?**

- A** Mass media and political communication
- B** Mass media and social development
- C** Mass media and economic development
- D** Mass media and cultural development

Answer: A

Explanation:

In the passage the author discusses about the mass media and its impact on political system. So, from the overall reading of the passage only option A can be implied.

02. **Who, according to the author, are the primary agents of political socialization?**

- A** Media moguls
- B** The family and social class
- C** Political parties
- D** Journalist

Answer: C

Explanation:

From the first paragraph "the impact of the so-called 'primary' agents of political socialization, such as the family and social class, has declined.

Whereas once people acquired, in late childhood and adolescence in particular, a framework of political sympathies and leanings that adult experience tended to modify or deepen, but seldom radically

transformed, this has been weakened in modern society by values.", we can infer that the agents of the political socialization are the political parties.

Hope this helps

03. **According to the author the mass media is a powerful political actor because:**

- A** The impact of primary agents of socialization has reduced
- B** The technology has increased the penetration of mass media in everyday life
- C** Infotainment industry has emerged as a big economic force

D All of the above reasons

Answer: D

Explanation:

The author has mentioned all of the following reasons in the passage to justify why mass media is powerful actor so option D is correct.

04. **Which of the following rival theories discussed in the passage portrays the media in a more positive light in term of its role in the society?**

A The Market Model

B The Pluralist Model

C The Elite Values Model

D The Dominant Ideology Model

Answer: C

Explanation:

From the lines, 'The dominant ideology model portrays media as a politically conservative force that is aligned to the interests of economic and social elites, and serves to promote compliance or passivity amongst the masses. The ownership ultimately determines the political and other views that the mass media disseminate, and ownerships are increasingly concentrated in the hands of a small number of global media corporations.', we can conclude that option C must be the answer.

Section IV part 2

Instructions [105 - 106]

The first line (S1) of each question is fixed. Arrange the other four lines P, Q, R and S in a logical sequence.

05. **S1: The beginning of the universe had, of course, been discussed for a long time.**

P: One argument of such a beginning was the feeling that it was necessary to have a first cause to explain the existence of the universe.

Q: He pointed out that civilization is progressing, and we remember who performed this deed or developed that technique;

R: According to a number of early cosmologies in the Jewish/Christian/Muslim tradition, the universe started at a finite and not very distant time in the past.

S: Another argument was put forward by St. Augustine in his book, The City of God.

A QRSP

B RPSQ

C PSQR

D SQPR

Answer: B

Explanation:

The passage starts by saying that the beginning of universe has been discussed for long time. This should be followed by statement R saying that the universe started a finite time ago. This statement is supported by statement P followed by statement S. 'He' in statement Q refers to St. Augustine in statement S.

Therefore, statement S is followed by Q. The correct sequence is R-P-S-Q.

The answer is option B.

06. **S1: I was so eager not to disappoint my parents that I ran errands for anyone.**

P: On the way a boy on a bicycle crashed into me and my left shoulder hurt so much that my eyes watered.

Q: Only then did I cry

R: But I still went and bought the maize, took it to my neighbours and then went home.

S: One day my neighbours asked me to buy some maize for them from the bazaar

A SPRQ

B PQSR

C QRPS

D RSQP

Answer: A

Explanation:

The passage start of with the author not disappointing his parents that he ran errands. This should be followed by statement S which starts with what he has done for his neighbours. Statement P describes the accident happened during the incident. Statement R shows author's determination towards his work. The correct sequence is S-P-R-Q.

The answer is option A.

Instructions [107 - 108]

Identify the option which gives the correct meaning of the Idiom/Phrase given below:

07. **To drive home**

A To find one's roots

B To return to place of rest

C To lose all money in betting

D To emphasize

Answer: D

Explanation:

'To drive home' means to emphasize one's point. Therefore, option D is the right answer.

08. To have an axe to grind

A To have a private end to serve

B To fail to arouse interest

C To have result

D To work for both sides

Answer: A

Explanation:

'To have an axe to grind' means to have a personal interest (gain) in doing something. Option A captures the meaning of the phrase and hence, option A is the right answer.

Instructions [109 - 110]

In each of the following options, the same word has been used in different sentences in different ways. Choose the option where the word has been used incorrectly.

A He got carried away with the unruly mob and indulged in stone pelting

B She carried on with life in spite of her personal difficulties.

C It will be difficult to carry out the plan now

D If they get carried on with their overspending, they will soon be bankrupt.

Answer: D

Explanation:

'Carried away' means to become excited or to lose sanity (often in a negative sense).

Option A implies that the person joined the stone pelters and indulged in the same. Therefore, the word 'carry' has been used correctly in option A.

'Carry on' means to continue doing something. Also, a point to be noted is that 'carry on' acts as a verb.

Option B conveys that the person continued with her life despite the difficulties. Therefore, the word has been used correctly.

'Carry out' means to do or execute something. Option C states that it will be difficult to execute the plan now. Therefore, the term has been used correctly in option C as well.

As we have seen, 'carry on' should be used as a verb. Option D intends to convey that if they continue with their spending habits, they will be bankrupt soon. Therefore, 'if they carry on' should have been used instead of 'if they get carried on with their spending habits'. The word has been used incorrectly in option D and hence, option D is the right answer.

- A** Hang over for a minute, and I will attend to you
- B** He decided to hang up his boots after his poor form in the last season.
- C** Please do not hang around outside our gate.
- D** She was hanging on to each word I spoke.

Answer: A

Explanation:

Since the phrasal verb 'hang over' means hang or suspend something over a place, this is contextually incorrect in statement A. Rather 'Hang on' should be used in statement I which means hold or wait. Hence, option A is the correct answer.

Instructions [109 - 110]

Each of the following questions has a sentence with two blanks. Given below in the options are four pairs of words. Choose the pair that best completes the sentence.

09. **Not for the last time, the British had grossly _____ the toughness of local fighters, and the very _____ kind of terrain from Europe.**

- A** misrepresented; mild
- B** underestimated; different
- C** miscalculated; similar
- D** understood; hostile

Answer: B

Explanation:

The sentence intends to convey that the British failed to gauge the level of resistance that will be offered by the local rulers and the difference in the terrain.

Let us try to fill the second blank first.

The preposition 'from' has been used after the blank.

'Similar' will take the preposition 'to'. Therefore, we can eliminate option C.

Before the first blank, the term 'grossly' has been used. 'Understood' and 'misrepresented' cannot be used to fill the blank since the term 'grossly' intends to convey that the British were way off the mark. Therefore, 'underestimated' is the correct term to be used. Option B is the correct answer.

10. The complicated processes, which often _____ reason, forced us to become very creative in finding ways to work _____ the challenges.

A explained; out

B reflected; over

C defied; around

D beyond; about

Answer: C

Explanation:

Let us try to infer what the author intends to convey through the sentence.

The meaningless complicated processes forced the author to find methods to skip the processes.

'Defied' is the correct term to be used in the first blank since the first part should convey that the processes were meaningless.

Also, work 'around' something means to bypass something. From the sentence, we can infer that the author found a way to skip the complex meaningless processes. Therefore, option C is the right answer.

Instructions [111 - 112]

Given below are some French words commonly used in English language. What is the meaning of these French words?

11. **Milieu**

A Millennium

B Century

C Social Environment

D Feudal

Answer: C

Explanation:

A milieu is a term used to describe the social environment. The word is obtained by the combination of the terms mi (from) +lieu (place). Therefore, option C is the right answer.

12. **Gaffe**

A Blunder

B Loud laughter

C Iron hook

D House

Answer: A

Explanation:

'Gaffe' is a term used to describe a blunder. Therefore, option A is the right answer.

Instructions [113 - 114]

In the following sentences, fill in the blank space with the correct word from the options provided.

13. **During the winter, many deer become _____ and die because of a food shortage.**

A emancipated

B enunciated

C elevated

D emaciated

Answer: D

Explanation:

Emancipate means to become free from political restrictions.

Enunciate means to pronounce clearly.

Elevated means to raise something.

Emaciated means to become thin and weak.

During winter, the deers become thin and weak and die as a result.

Therefore, 'emaciated' is the correct term to be used and hence, option D is the right answer.

14. **Though fictional; the story of Shylock is not removed _____ Venetian reality.**

A of

B with

C from

D through

Answer: C

Explanation:

The author intends to convey that though the story is fictional, it is not detached from reality.

'From' is the correct preposition to be used in this context.

Therefore, option C is the right answer.

15. **Choose the option closest in meaning to the word 'Qualm'**

- A** Concavity
- B** Misgiving
- C** Amplitude
- D** Repute

Answer: B

Explanation:

'Qualm' is a term used to describe the feeling of uneasiness regarding something. 'Misgiving' also means the same.

Concavity: Quality of being concave.

Amplitude: Maximum extent of vibrations.

Repute: reputation, opinion generally held.

Therefore, option B is the right answer.

Instructions [116 - 117]

Choose the correct option to fill in the blank spaces in the given sentences

16. **Pipes are not a safer _____ to cigarettes because, though pipe smokers do not inhale, they are still _____ higher rates of lung and mouth cancers than non-smokers.**

- A** option.....likely to
- B** answer.....responsible for
- C** alternative.....subject to
- D** preference.....involved with

Answer: C

Explanation:

The sentence intends to convey that pipes are not safer than cigarettes since pipe smokers are exposed to a heightened risk of acquiring lung and mouth cancer.

Let us try to fill the second blank first.

Pipe smokers are not responsible for higher rates of cancer. Therefore, we can eliminate option B.

'Likely to' cannot be used to fill the blank since the sentence will lack structure. If 'likely to' is used, then some other word such as 'acquire' should be used after the blank. We can eliminate option A as well.

'Involved with cancer' is an incorrect expression. Therefore, we can eliminate option D as well.

Option C captures both the points that pipes are not an alternative to cigarettes since pipe smokers are also subject to a higher risk of cancer than non-smokers. Therefore, option C is the right answer.

17. The conspirators met _____ in order to plot a(n) _____ against the oppressive governance of Julius Caesar.

- A aggressively.....referendum
- B clandestinely.....revolt
- C wittily.....upheaval
- D wickedly.....invocation

Answer: B

Explanation:

The term 'conspirators' has been used in the first part of the sentence. A conspirator is someone who plots a conspiracy i.e, secretly plot to overthrow the government. 'Clandestine' means to do something secretly. 'A referendum' is a term used to describe a plebiscite. Therefore, 'plot a plebiscite' is an incorrect expression. We can eliminate option A.

'Wittily' cannot be used to fill the first blank. The sentence talks about a serious event. Therefore, we can eliminate option C as well.

Among met 'clandestinely' and 'wickedly', clandestinely is a better option since it captures the nature in which a conspiracy is carried out. Therefore, option B is the right answer.

Instructions [118 - 119]

Identify the oxymoron

- A Behave properly
- B Act naturally
- C Speak honestly
- D Drive slowly

Answer: B

Explanation:

An oxymoron is a term which contains conflicting ideas or statements. We have to find the option that contains conflicting ideas.

Behave properly, Drive slowly, and Speak honestly do not have any conflicting meanings in them.

Act naturally - Act means to behave in an artificial way. Therefore, 'act naturally' is an oxymoron and hence, option B is the right answer.

- A** Original Copy
- B** Small Crowd
- C** Open Secret
- D** All of the above

Answer: D

Explanation:

An oxymoron is a term used to indicate a phrase that contains conflicting ideas.

A copy is a duplicate of the original. Therefore, 'a original copy' is an oxymoron as the original cannot be a copy.

'Crowd' means a large gathering. Therefore, 'a small crowd' is an oxymoron.

A secret is something that is supposed to be known by others. Therefore, 'open secret' is an oxymoron as well.

All the given options are oxymorons. Therefore, option D is the right answer.

18. **A part of the following sentence is left unfinished. From the alternatives given to complete the sentence, choose the best alternative.**

Although these injuries are not fatal, ___

- A** they are not ranked among the top causes of death.
- B** they are certainly incapacitating and tragic.
- C** there is no proof of the same.
- D** they do not get reported.

Answer: B

Explanation:

Let us analyze what the author intends to convey through the given sentence.

'Although these injuries are not fatal,.....!'

The author acknowledges that the injuries are not fatal. By using the word 'although', the author conveys that he expects something to be done but that is not the case. The part that completes the sentence should capture this point.

Option A:

'they are not ranked among top causes of death'. Had the option been 'they are ranked ...', we could have used this option to fill the blank. The given option cannot be used since it contradicts the term 'although' used in the first part of the sentence.

Option D:

'they do not get reported'. There is nothing peculiar about minor injuries going unreported. This option will also make the usage of although in the first part of the sentence incorrect and hence, option D can be eliminated as well.

Option C:

'there is no proof of the same'. This statement can be used to fill the blank. Let us check the other option and choose the most appropriate one between the two.

Option B:

'they are certainly incapacitating and tragic'. This option aptly concludes by continuing the chain of thought. Though the injuries are not life threatening, they are certainly crippling. Therefore, option B is deemed better than option C and hence, option C is the right answer.

19. **The word in the following pair have a certain relationship with each other. Given in the options are four pairs of related words. Select the pair with the same relationship as the given pair.**

Cacophony:Euphony

- A** Belligerent : Serene
- B** Loneliness : Peace
- C** Horrific : Sympathetic
- D** Nocturnal : Diurnal

Answer: D

Explanation:

Cacophony is a term used to describe a noisy condition. Euphony is a term used to describe sounds that are pleasing to the ears. Therefore, the given pair of words are antonyms.

Belligerent is an adjective used to describe someone who is aggressive.

Serene is a term used to describe a calm situation. Mostly, belligerent is used as an attribute to describe a person and serene is used to describe a situation.

Loneliness and peace cannot be termed as antonyms. The same is the case with horrific and sympathetic.

Nocturnal is a term used to denote animals that are active at night. Diurnal is a term used to denote animals that are active during the day. Therefore, nocturnal and diurnal are antonyms and hence, option D is the right answer.

20. **Choose the option which is the antonym of the word 'Blasphemous'**

- A** Ascetic

B Reverent

C Inferior

D Blarney

Answer: B

Explanation:

'Blasphemous' means to commit something sacrilegious (against the religion or God).

Ascetic means to renounce worldly pleasures and live as a hermit.

Reverent means to hold something (God or elders) in high regard.

Blarney is a term used to describe flattery.

'Reverent' is the term opposite in meaning to 'blasphemous'. Therefore, option B is the right answer.