

1A

# IIFT QUESTION PAPER

## **Question Booklet Serial No.**

## **ADMISSION TEST FOR PROGRAMME 2016 - 2018**

## **Time: 2 Hours**

**Marks: 100**

## **ROLL NUMBER**

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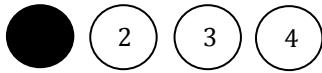
**NAME (in Capital Letters)**

\_\_\_\_\_

## **INSTRUCTIONS**

1. Write the **Question Booklet Serial Number** in the space provided in the **Answer Sheet**. **Question Booklet Serial Number** is given at the top of this page.
  2. Write your **Roll Number** clearly in the space provided in both the **Question Booklet** and the **Answer Sheet**.
  3. Mark your **answers** in the **Answer Sheet** only. The Answer Sheet **alone** will constitute the basis of evaluation.
  4. All **rough work** must be done in the **Question Booklet** only.
  5. Do not make any stray marks anywhere in the answer sheet.
  6. Do not fold or wrinkle the answer sheet.
  7. Use only **HB Pencil** to mark the answers in the answer sheet.
  8. All **Questions have one correct answer. Every answer must be indicated clearly darkening one circle for each answer. If you wish to change an answer, erase completely the already darkened circle, then make a fresh mark.** If you darken more than one circle your answer will be treated as wrong, as shown in the illustrated below:

## **RIGHT METHOD**



## **WRONG METHOD**



In case the circle is not shaded completely or properly, the answer may not be evaluated

9. There is **negative marking**, equivalent to **1/3<sup>rd</sup> of the mark allotted** to the specific question for wrong answer.
  10. There are four sections in the question paper. **Sectional cut-offs** are applicable for each of these four sections. Candidates are advised to spend time judiciously on different sections.
  11. The candidates are advised to **read all options** thoroughly.
  12. No clarification of any sort regarding the question paper is permitted.

**SECTIONS IN THE QUESTION PAPER AND MARKS ALLOTED PER SECTION**

<b>Sections</b>	<b>Part</b>	<b>No. of Questions</b>	<b>Marks/Question</b>	<b>Total</b>
<b>(A)</b>	<b>(B)</b>	<b>(C)</b>	<b>(D)</b>	<b>(E) = (C) × (D)</b>
Section - 1		28 (Questions 1 – 28)	0.50	14
Section - 2		22 (Questions 29 – 50)	1.00	22
Section - 3	Part - 1	20 (Questions 51 – 70)	0.75	15
	Part - 2	18 (Questions 71 – 88)	1.00	18
Section - 4	Part - 1	16 (Questions 89 – 104)	1.00	16
	Part - 2	20 (Questions 105 – 124)	0.75	15
<b>Total</b>		<b>124</b>		<b>100</b>

SECTION - 1



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

- (1) I-d; II-b; III-a; IV-c  
(2) I-b; II-d; III-c; IV-a  
(3) I-a; II-c; III-b; IV-d  
(4) I-c; II-a; III-d; IV-b

3. The remains of which ancient civilization can be seen at the site of Machu Pichu in Peru?  
(1) Incas                    (2) Aztecs                    (3) Mayans                    (4) Indians

4. Who is acknowledged as the creator of Chandigarh's Rock Garden?  
(1) E. Sridharan            (2) Nek Chand Saini            (3) Charles Correa            (4) Geoffrey Ba

5. Which is the first Eurozone nation to exit its bailout package?  
(1) Portugal                (2) Italy                        (3) Ireland                        (4) Spain

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

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

- (1) I-d; II-a; III-b; IV-c  
 (2) I-b; II-c; III-d; IV-a  
 (3) I-c; II-d; III-a; IV-b  
 (4) I-a; II-b; III-c; IV-d

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

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



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

- (1) Lack of antigens in the blood
  - (2) Lack of antibodies in the blood
  - (3) Lack of both antigens and antibodies in the blood
  - (4) Presence of both antigens and antibodies in the blood

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

- (1) Arvind Panagariya (2) Arun Maira (3) Raghuram Rajan (4) Arvind Subramaniam

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

- (1) Singapore      (2) Kandla      (3) Shanghai      (4) Dubai

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

- (1) Thomas Feeney    (2) Thomas Friedman    (3) Thomson Reuters    (4) Thomas Edison

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

	<b>Book</b>		<b>Author</b>
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



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

- (1) Face of a Lion    (2) Face of an Elephant    (3) Face of a Woman    (4) Face of a Dragon

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

- (1) 32% to 42%      (2) 22% to 32%      (3) 42% to 52%      (4) None of the above

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

- (1) Sweden                  (2) Finland                  (3) Norway                  (4) Denmark

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

- (1) 2% to 6%      (2) 4% to 10%      (3) 3% to 9%      (4) 5% to 8%

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

- (1) Clyde Tombaugh    (2) Albert Einstein    (3) Carl Sagan    (4) Jacques Cousteau

**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?

- (1) China      (2) India      (3) USA      (4) Singapore

**22.** Euro dollars are

- (1) A currency issued by European Union  
(2) Special currency issued by the Federal Government of USA for Europe  
(3) US dollars held in Europe  
(4) European currencies exchanged for the US dollar in US

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

	<b>Prime Minister</b>		<b>President</b>
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

- (1) I-a; II-b; III-c; IV-d      (2) I-b; II-a; III-d; IV-c  
(3) I-a; II-c; III-b; IV-d      (4) I-b; II-d; III-a; IV-c

**24.** Mark the wrong combination

- (1) James Watt : Steam Engine      (2) A.G. Bell : Telephone  
(3) J.L. Baird : Television      (4) J. Perkins : Penicillin

**25.** Mother Teresa was born in

- (1) Switzerland      (2) India      (3) Germany      (4) Macedonia

**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

- (1) Glasnost      (2) Gosplans      (3) Irredentism      (4) Oligarchs

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

- (1) The Breakthrough Listen Project      (2) The Cosmic Breakthrough Project  
(3) The Extra Terrestrial Project      (4) The Edge of the Universe Project

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

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

(1) I-d; II-c; III-a; IV-b

(3) I-c; II-a; III-b; IV-d

(2) I-a; II-b; III-d; IV-c

(4) I-b; II-d; III-c; IV-a

## SECTION - 2

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?
- (1) 12/1024      (2) 11/1024      (3) 11/256      (4) 12/256
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?
- (1) 1984      (2) 1986      (3) 1995      (4) 2000
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:
- (1) 1 : 2 : 3      (2) 2 : 3 : 4      (3) 3 : 2 : 1      (4) 1 : 3 : 4
32. If  $\log_{25}5 = a$  and  $\log_{25}15 = b$ , then the value of  $\log_{25}27$  is:
- (1) 3(b+a)      (2) 3(1-b-a)      (3) 3(a+b-1)      (4) 3(1-b+a)
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:
- (1) 3540340      (2) 2874590      (3) 2903040      (4) None of the above
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 can one get from the Airtel post-paid service compared to the post-paid service of Vodafone?
- (1) 3.9% more      (2) 4.7% less      (3) 4.7%more      (4) 2.8% less
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 55% 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:
- (1) 16.52      (2) 20.88      (3) 22.33      (4) 24.08
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?
- (1) 2      (2) 4      (3) 5      (4) 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:

(1) 2000      (2) 10000      (3) 8000      (4) 5000

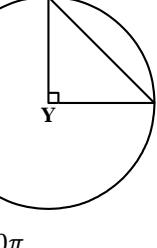
**38.** In the board meeting of a FMCG Company, everybody present in the meeting shakes hand with everybody else. If the total number of handshakes is 78, the number of members who attended the board meeting is:

(1) 7      (2) 9      (3) 11      (4) 13

**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 pages to be printed in the year exceeds

(1) 5000      (2) 10000      (3) 15000      (4) 18000

**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 :



(1)  $10\pi$       (2)  $25\pi$       (3)  $100\pi$       (4) None of the above

**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:

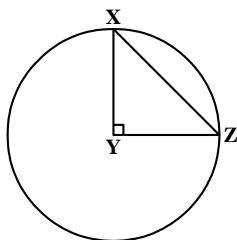
(1) 18% less      (2) 30% greater      (3) 37.5% greater      (4) 50% less

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

(1) 110      (2) 220      (3) 440      (4) 660

**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:

(1) 6 months      (2) 12 months      (3) 18 months      (4) 24 months



- 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:  
(1) Rs. 1,20,000      (2) Rs. 2,90,526      (3) Rs. 2,21,054      (4) Rs. 2,80,000
- 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:  
(1) 11 days      (2) 13 days      (3) 15 days      (4) 17 days
- 46.** There are two alloys P and Q made up of silver, copper and aluminium. Alloy P contains 45% silver and rest aluminum. 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:  
(1) 33% and 29%      (2) 29% and 26%      (3) 35% and 30%      (4) None of the above
- 47.** A ladder of 7.6 m long is standing against a wall and the distance between the wall and the base of the 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:  
(1) 0.4 m      (2) 0.6 m      (3) 0.8 m      (4) 1.2 m
- 48.** The value of x for which the equation  $\sqrt{4x - 9} + \sqrt{4x + 9} = 5 + \sqrt{7}$  will be satisfied, is:  
(1) 1      (2) 2      (3) 3      (4) 4
- 49.** The simplest value of the expression  $\left( \frac{4^{p+\frac{1}{4}} \times \sqrt{2 \times 2^p}}{2 \times \sqrt{2^{-p}}} \right)^{1/p}$  is:  
(1) 4      (2) 8      (3)  $4^p$       (4)  $8^p$
- 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:  
(1) 0.8      (2) 0.6      (3) 0.4      (4) 0.7

## **SECTION - 3 (PART-1)**

**Directions for questions 51 to 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?

- (1) Dinesh                  (2) Anthony                  (3) Carla                  (4) Brad

**52.** The person placed in UAE is in the \_\_\_\_\_ Department

- (1) Electronics      (2) Mechanical      (3) Metallurgy      (4) Chemical

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



**54.** Who joined the IT Department in Australia?

- (1) Frank                  (2) Carla                  (3) Evan                  (4) Brad

**55.** Which combination is true for Dinesh?

- (1) India-Electrical    (2) UAE-Electronics    (3) England-Metallurgy    (4) UAE-Metallurgy

**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.'

- (1) If I went for a walk and didn't have lunch, the breakfast didn't have eggs.
  - (2) If I went for a walk or I had lunch, the breakfast had eggs.
  - (3) If I went for a walk and had lunch, the breakfast had eggs.
  - (4) If I didn't go for a walk and had lunch, the breakfast had eggs.

**Directions for question 57 to 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?

- (1) Kamla                                  (2) Kamlesh                                  (3) Kriti    (4) Kranti

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

- (1) Kamlesh    (2) Kriti    (3) Kripa    (4) Kranti

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

- (1) 2    (2) 3    (3) 5    (4) 4

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

- (1) 3    (2) 5    (3) 4    (4) 2

**61.** Based on the number series given, fill in the missing number.

18, 37, 76, 155, \_\_\_\_\_, 633, 1272

- (1) 322    (2) 314    (3) 341    (4) 250

**Directions for questions 62 to 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 countries can be selected if no condition is imposed?

- (1) 6    (2) 4    (3) 7    (4) 8

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

- (1) 0    (2) 2    (3) 1    (4) 3

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

- (1) 0    (2) 2 or 1    (3) 0 or 1    (4) None of these

**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.

(1) X+Y+Z-W

(2) Z-W\*Y+X

(3) X+Y\*W-Z

(4) X\*Y+W-Z

**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?

(1) 25 miles

(2) 2 miles

(3) 5 miles

(4) 4 miles

**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

(1) Only I & II follow (2) Only I, II & III follow (3) Only II & III follow (4) None of these

**Direction for questions 68 to 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?

(1) 4

(2) 3

(3) 2

(4) 5

**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)?

(1) 2

(2) 4

(3) 3

(4) 5

**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?

(1) Connect cities U to R with a two way connection

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

(3) Connect cities U to Q with a two way connection

(4) Connect cities R to V with a two way connection

## SECTION - 3 (PART-2)

**Directions for questions 71 to 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:

$\frac{\text{Oct 14 to Mar 15 Average Sales} - \text{April 14 to Sep 14 Average Sales}}{\text{April 14 to Sep 14 Average Sales}}$

#### Monthly Sales Performance:

$\frac{\text{Current Month Sales} - \text{Pervious Month Sales}}{\text{Previous Month Sales}}$

#### Sales Volatility:

$\frac{\text{Maximum Monthly Sales} - \text{Minimum Monthly Sales}}{\text{Average Monthly Sales}}$

71. What is the closest average number of 1½ ton Window ACs sold by Torrent Enterprises during April 2014 - March 2015?

(1) 342

(2) 338

(3) 350

(4) 330

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

(1) 1 Ton and ½ Ton (2) 1 Ton and 2 Ton (3) 2 Ton and ½ Ton (4) 1½ Ton and ½ Ton

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

(1) ½ Ton

(2) 1 Ton

(3) 1½ Ton

(4) 2 Ton

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

(1) May 2014

(2) June 2014

(3) October 2014

(4) February 2015

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

- (1)  $\frac{1}{2}$  Ton      (2) 1 Ton      (3)  $1\frac{1}{2}$  Ton      (4) 2 Ton

**Directions for questions 76 to 80:** Read the following information, graph and table and answer the questions that follow.

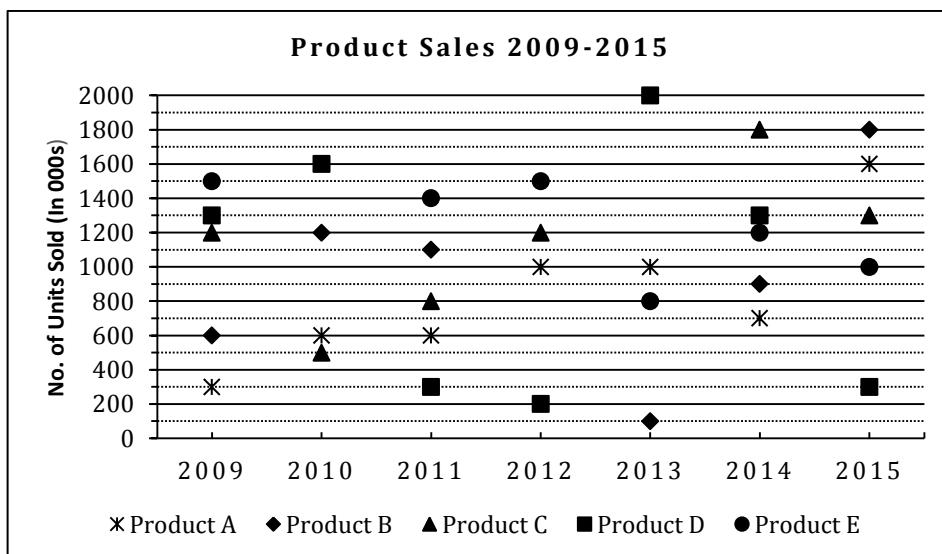
Ellen Inc. is a Mumbai based company which sells five products branded as A, B, C, D and E in India. Anita looks after entire sales of North India working from regional office in Delhi. She was preparing for annual review meeting scheduled next day in Mumbai. She was attempting to analyse sales in North 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:

**Difference Between Average Sales of Products for the 7 year period 2009-15 in Rs Crores**

	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 questions:



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

- (1) Rs. 550 Crores, Rs. 800 Crores and Rs. 500 Crores  
 (2) Rs. 500 Crores, Rs. 700 Crores and Rs. 600 Crores  
 (3) Rs. 500 Crores, Rs. 800 Crores and Rs. 600 Crores  
 (4) Rs. 4000 Crores, Rs. 800 Crores and Rs. 600 Crores

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

(1) 2010

(2) 2011

(3) 2012

(4) 2013

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

(1) Product A

(2) Product B

(3) Product D

(4) Product E

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

(1) Product A and Product B

(3) Product C and Product D

(2) Product B and Product C

(4) Product D and Product E

80. If Year on Year (YoY) Growth is

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

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

(1) 2010

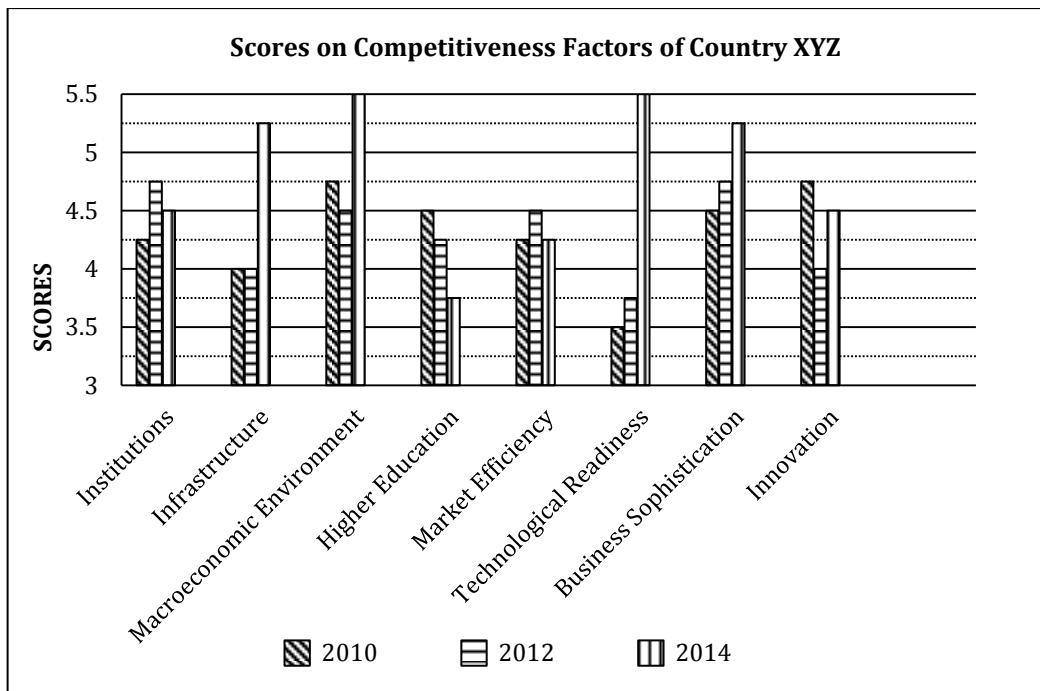
(2) 2011

(3) 2013

(4) 2015

**Directions for questions 81 to 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?

- (1) Innovation (2) Business Sophistication  
(3) Infrastructure (4) Macroeconomic Environment

82. If Factor Performance is measured as

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

then which of the following has best Factor Performance?

- (1) Innovation (2) Business Sophistication  
(3) Infrastructure (4) Macroeconomic Environment

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

- (1) Infrastructure (2) Institutions (3) Technological Readiness (4) Market Efficiency

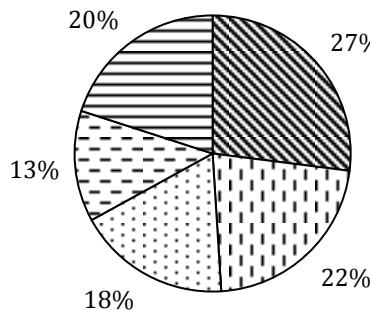
84. Which among the following factors had the least growth rate in 2014 versus scores of 2010?

- (1) Business Sophistication (2) Institutions  
(3) Technological Readiness (4) Infrastructure

**Directions for questions 85 to 88:** Read the following information and the accompanying graphs to answer the questions that follow.

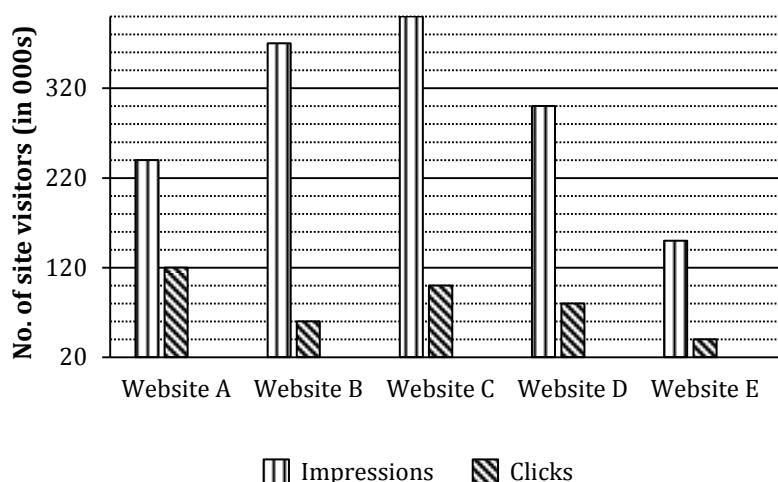
www.jay.com spent \$ 5,57,000 during last 12 months for online display advertisements, also called impressions, on five websites (Website A, Website B, Website C, Website D and Website E). In this arrangement, www.jay.com is the Destination Site, and the five websites are referred to as the Ad Sites. 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**

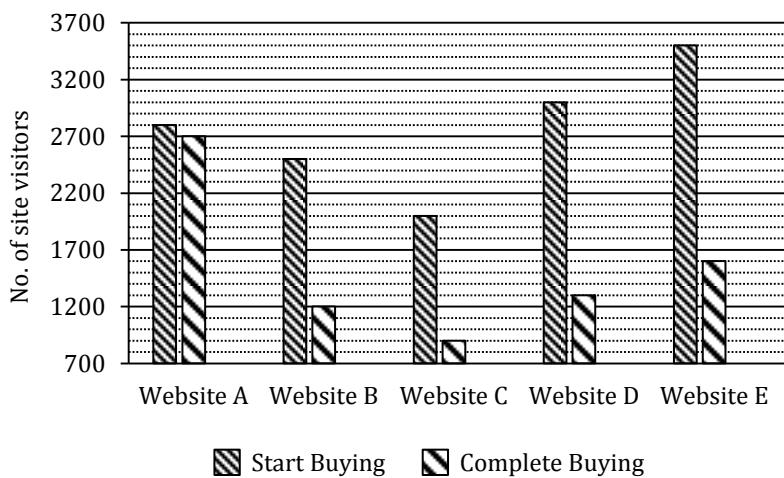


■ Website A □ Website B ☐ Website C □ Website D □ Website E

**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?

- (1) Website A      (2) Website B      (3) Website D      (4) Website E

**86.** Which Ad Site has provided maximum quality traffic?

- (1) Website A      (2) Website B      (3) Website D      (4) Website E

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

- (1) Website B      (2) Website C      (3) Website D      (4) Website E

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

- (1) Website A      (2) Website B      (3) Website C      (4) Website E

## SECTION - 4 (PART-1)

**Directions for 89 to 104:** Read the following passages carefully and answer the questions given at the end of each passage

### Passage 1

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 percent 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 minority stakes in the Turkish company and were eager to get majority control.

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

- (1) In 2003, China consumed more steel than it produced
- (2) Mittal steel was the world's most profitable steel company in mid 2000s
- (3) Arcelor was a bigger producer of steel than Mittal
- (4) All of the above

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

- (1) To consolidate the rather fragmented steel industry
- (2) To facilitate privatisation initiatives of the government
- (3) To have 10% of the industry share
- (4) To increase pricing position with customers

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

- (1) Arcelor had delivered good returns to its shareholders
- (2) Mittal steel was Arcelor's nearest competitor
- (3) By 2005, steel industry was in recession
- (4) A nation's steel production continues to be a good indicator of its wealth

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

- (1) Slow growth in world production
- (2) Lobbying by capitalists
- (3) Havoc played by over-capacity and falling steel prices
- (4) Introduction of the 'mini-mill'

### Passage 2

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?

- (1) That the number of people who will use Internet will increase for the year to come
- (2) That the advent of the Internet is an event of epochal significance
- (3) That millions of people negotiate their personal relationships via online social networks
- (4) That more than a billion people now use web browsers

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

- |                               |                                |
|-------------------------------|--------------------------------|
| (1) Inventing the Internet    | (2) Co-developing the Internet |
| (3) Prophesising the Internet | (4) All of the above           |

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

- (1) Designing a World City with a networked information repository at its epicenter
- (2) Achieving social transformation through the use of available technologies
- (3) Building a vast new "Brain of Humanity"
- (4) Bringing world peace through online social networks

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

- |                |               |             |                      |
|----------------|---------------|-------------|----------------------|
| (1) Futuristic | (2) Visionary | (3) Utopian | (4) All of the above |
|----------------|---------------|-------------|----------------------|

### **Passage-3**

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 in 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:

- (1) Financial crisis in the economy
- (2) Under development in the developing world
- (3) Bargaining power asymmetry between lenders and borrowers
- (4) Inequalities in the world economy

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

- (1) The insured take less precaution to avoid a risk because the risk is covered by insurance
- (2) The insured takes less precaution to avoid risk because he is unaware about the risk
- (3) The insured takes less precaution to avoid risk because he tends to benefit from the risk

(4) The amount spent on insurance is seen as a waste because the risk is unlikely or minimum

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

- (1) The bail-out for the governments of the borrowing countries
- (2) The bail-out for the banks in the borrowing country
- (3) The bail-out for the leading foreign banks
- (4) The bail-out for the governments of the countries of the creditors

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

- (1) The leading banks
- (2) The IMF
- (3) The tax payers of the borrowing country
- (4) The rich countries

#### **Passage - 4**

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.

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

- |  |   |
|--|---|
| (1) Mass media and political communication | (2) Mass media and economic development |
| (3) Mass media and social development      | (4) Mass media and cultural development |

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

- |                                 |                       |
|---------------------------------|-----------------------|
| (1) Media moguls                | (2) Political parties |
| (3) The family and social class | (4) Journalist        |

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

- |   |  |
|---|--|
| (1) The impact of primary agents of socialization has reduced                   |  |
| (2) The technology has increased the penetration of mass media in everyday life |  |
| (3) Infotainment industry has emerged as a big economic force                   |  |
| (4) All of the above reasons  |  |

**104.** 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?

- |   |   |
|---|---|
| (1) The Market Model<br>(3) The Pluralist Model | (2) The Elite Values Model<br>(4) The Dominant Ideology Model |
|---|---|

## SECTION - 4 (PART-2)

**Direction for questions 105 and 106:** The first line (S1) of each question is fixed. Arrange the other four lines P, Q, R and S in a logical sequence.

**105.** 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*.

- (1) QRSP                    (2) RPSQ                    (3) PSQR                    (4) SQPR

**106.** 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

- (1) SPRQ                    (2) PQSR                    (3) QRPS                    (4) RSQP

**Direction for questions 107 and 108:** Identify the option which gives the correct meaning of the Idiom/Phrase given below:

**107.** To drive home

- (1) To find one's roots                    (2) To return to place of rest  
(3) To lose all money in betting                    (4) To emphasize

**108.** To have an axe to grind

- (1) To have a private end to serve                    (2) To fail to arouse interest  
(3) To have result                    (4) To work for both sides

**Direction for questions 109 and 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.

**109.**

- 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.

**110.**

- 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.

**Direction for questions 111 and 112:** 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.



**Direction for questions 113 and 114:** Given below are some French words commonly used in English language. What is the meaning of these French words?

- ## **113. Milieu**

(1) Millennium      (2) Century      (3) Social Environment    (4) Feudal

- 114. Gaffe**

(1) Blunder      (2) Loud laughter      (3) Iron hook      (4) House

**Direction for questions 115 and 116:** In the following sentences, fill in the blank space with the correct word from the options provided.

- 115.** During the winter, many deer become \_\_\_\_\_ and die because of a food shortage.

(1) emancipated      (2) enunciated      (3) elevated      (4) emaciated



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

- (1) Concavity                  (2) Misgiving                  (3) Amplitude                  (4) Repute

**Direction for questions 118 and 119:** Choose the correct option to fill in the blank spaces in the given sentences

**Direction for questions 120 and 121:** Identify the oxymoron

- 120.** (1) Behave properly (2) Act naturally (3) Speak honestly (4) Drive slowly

- 121.** (1) Original Copy (2) Small Crowd (3) Open Secret (4) All of the above

**122.** 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, \_\_\_\_\_

- (1) they are not ranked among the top causes of death.
- (2) they are certainly incapacitating and tragic.
- (3) there is no proof of the same.
- (4) they do not get reported.

**123.** 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 ::

- |                            |                         |
|----------------------------|-------------------------|
| (1) Belligerent : Serene   | (2) Loneliness : Peace  |
| (3) Horrific : Sympathetic | (4) Nocturnal : Diurnal |

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

- |             |              |              |             |
|-------------|--------------|--------------|-------------|
| (1) Ascetic | (2) Reverent | (3) Inferior | (4) Blarney |
|-------------|--------------|--------------|-------------|

# DETAILED SOLUTIONS

IIFT 2015

**29.** Average marks of the first three quizzes  
 $= 80$

So, for Rahul to have average internal marks more than 80, he has to score more than 80 marks in the last quiz.

This is possible if he attempts 10 questions or 9 questions correctly.

Number of ways this can be done  
 $= 1 + {}^{10}C_9 = 1 + 10 = 11$

Total number of ways the quiz can be solved  $= 2^{10} = 1024$

$$\therefore \text{The required probability} = 11/1024$$

Hence, **option 2.**

**30.** Let Rohini's age in the year 2014 is  $R$  and Arvind's age is  $A$ .

$$\therefore R - A = 6 \quad \dots (\text{i})$$

$$\therefore \text{Rohini's age in 2004} = R - 10 \text{ and}$$

$$\text{Arvind's age in 2004} = A - 10$$

$$\therefore (R - 10) = 3(A - 10)$$

$$\therefore 3A - R = 20 \quad \dots (\text{ii})$$

Solving (i) and (ii), we get

$$R = 19$$

$\therefore$  Rohini was born in year  $(2014 - 19) = 1995$ .

Hence, **option 3.**

*Alternatively,*

Rohini's age in 2004 for the given options:

1. 1984 : 20
2. 1986 : 22
3. 1995 : 9
4. 2000 : 4

As Rohini's age was thrice as old as her brother, the correct answer should be option 3.

Hence, **option 3.**

**31.** Without loss of generality,  $p < q < r$

$$\therefore r - q = q - p = d$$

$p, r - q$  and  $q - p$  are in G.P.

i.e.,  $p, d, d$  are in G. P.

So,  $p = d$

$$\therefore q = p + d = 2d \text{ and } r = 3d$$

$$\therefore p : q : r = 1 : 2 : 3$$

Hence, **option 4.**

**32.**  $a + b = \log_{25}5 + \log_{25}15 = \log_{25}75 = \log_{25}25$

$$+ \log_{25}3$$

$$a + b = 1 + \log_{25}3$$

$$a + b - 1 = \log_{25}3$$

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

Hence, **option 3.**

**33.** Number of ways in which 10 students can sit  $= 10!$

The number of ways in which two students (batchmates) sit together  $= 9! \times 2$

$\therefore$  The number of ways in which the student can sit so that the two batchmates are not sitting next to each other  $= 10! - 9! \times 2 = 9! \times 8 = 2903040$

Hence, **option 3.**

**34.** Assume that for price  $P$ , assume that Vodafone gives talk time of 100 seconds.

So, for the same price  $P$ , Airtel gives talk time of 79 (= 21% less than 100) seconds.

The post-paid talk time for the same price by Airtel and Vodafone is  $1.12 \times 79$  and  $100 \times 0.85$ , i.e., 88.48 seconds and 85 seconds respectively.

One can get  $88.48 - 85 = 3.48$  seconds more from Airtel post-paid service compared to the Vodafone post-paid service.

$$\text{Required percentage} = 3.48/85 = 4.07$$

The closest option is option 1.

Hence, **option 1.**

**35.** Let original service charges be Rs.  $x$ .

Rohan has paid  $x, 0.9x, (0.9 \times 0.89x) = 0.801x, (0.88 \times 0.89 \times 0.9x) \approx 0.705x, 0.55x$  for the five services.

Total payment done by Rohan  $\approx 3.956x$

Discount availed by Rohan  $\approx 1.044x$

Percentage discount  $\approx (1.044 \times 100)/5 = 20.88$

Hence, **option 2.**

**36.** Let there be  $x$  and  $y$  inlet and outlet pipes respectively.

$$\therefore x + y = 11 \quad \dots (\text{i})$$

Assume that the capacity of the tank is 35 units.

So, inlet pipe fills 5 units and the outlet pipes empties 7 units of the tank in one hour.

The completely filled tank empties in 7 hours.

$$\therefore 7y - 5x = 5 \quad \dots \text{(ii)}$$

Solving the two equations, we get  $y = 5$  and  $x = 6$

Hence, **option 4.**

37. Let total number of families in the village be  $T$

Number of families own agricultural land,  $n(A) = 0.22T$

Number of families own mobile phone,  $n(M) = 0.18T$

Number of families own both agricultural land and mobile phone,  $n(A \cap M) = 1600$

Number of families own agricultural land or mobile phone,  $n(A \cup M) = T - 0.68T = 0.32T$

$$\therefore n(A \cup M) = n(A) + n(M) - n(A \cap M)$$

$$\therefore n(A \cap M) = 0.08T$$

$$0.08T = 1600 \Rightarrow T = 20000$$

Hence, **option 1.**

38. Let  $n$  members attended the board meeting.

Number of handshakes =  $n \times (n - 1)/2 = 78$

$$\text{Solving this, } n = 13$$

Hence, **option 4.**

39. Let minimum number of pages to be printed be  $x$ .

$$\therefore 5000 + 1.8x = 8000 + 1.5x$$

$$\text{Solving, we get } x = 10000$$

Hence, **option 2.**

40. Y is the centre of the circle.

Let  $r$  be the radius of the circle.

$$\therefore \text{Length of arc } XZ = \frac{1}{4}(2\pi r) = 10\pi$$

$$\therefore r = 20$$

$$\text{Arc of sector } XYZ = \frac{1}{4}(\pi r^2) = 100\pi$$

Hence, **option 3.**

41. Let the bus travels at speed ' $V$ ' km/hr for time ' $T$ ' hours in the morning.

$\therefore$  Distance travelled in the morning =  $VT$  km

$\therefore$  In the evening, it travels at speed ' $1.5V$ ' km/hr for ' $1.5T$ ' hours respectively.

$\therefore$  Distance travelled in the evening =  $1.5V \times 1.5T = 2.25VT$

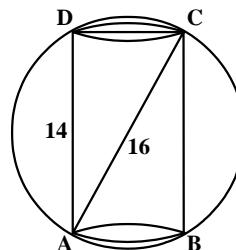
$$\therefore \text{Average Speed} = \frac{\text{Total Distance}}{\text{Total Time}}$$

$$\begin{aligned} &= \frac{VT + 2.25VT}{T + 1.5T} \\ &= \frac{3.25V}{2.5} = 1.3V \end{aligned}$$

$\therefore$  The average speed of the chartered bus for the entire journey is greater than its average speed in the morning by 30%.

Hence, **option 2.**

42.



DC is diameter of the cylinder.

$$\angle ADC = 90^\circ$$

$\therefore$  AC is the diameter of the sphere.

Thus, AC = 16 and AD = height of the cylinder = 14

$$DC^2 = 16^2 - 14^2 = 60$$

$$\therefore \text{Radius}^2 = 60/4 = 15$$

$$\therefore \text{Volume of cylinder} = \pi r^2 h = \pi \times 15 \times 14 = 660$$

Hence, **option 4.**

43. Seema saves Rs. 900 in first three months.

Let she reach the given amount in  $X$  more months.

$$\begin{aligned} \text{She would save } 300X + 50 + 50 \times 2 + 50 \times 3 + \dots + 50 \times X &= 11400 - 900 \\ \therefore 300X + 50(1 + 2 + 3 + \dots + X) &= 10500 \end{aligned}$$

$$\therefore X^2 + 13X - 420 = 0$$

On solving, we get  $X = 15$ .

Thus, in  $15 + 3 = 18$  months her savings will be Rs. 11,400.

Hence, **option 3.**

44. Sailesh earns Rs. 6,000 as commission from first Rs. 1,00,000.

Let his total sales =  $X$

$$\begin{aligned} \text{Total commission} &= 6000 + 0.05 \\ (X - 100000) &= 0.05X + 1000 \end{aligned}$$

$$\therefore X - 0.05X + 1000 = 265000$$

Solving, we get  $X = 280000$

Hence, **option 4.**

45. Assume that P does  $p$  units of work in one day.

$$\therefore \text{Total work} = 42p$$

So, Q and R do  $1.26p$  and  $(1.26 \times 1.5 =) 1.89p$  units of work in one day respectively.

$$\therefore \text{Total work done by Q and R in one day} \\ = 1.26p + 1.89p = 3.15p$$

So, Q and R can finish the work in  $(42p/3.15p \approx) 13$  days.

Hence, **option 2.**

46. P and Q are mixed in the ratio  $1 : 4.5$  i.e.,  $2 : 9$ .

Assume that 1 kg of P is mixed with 4.5 kg of Q.

1 kg of P has 0.45 kg of silver.

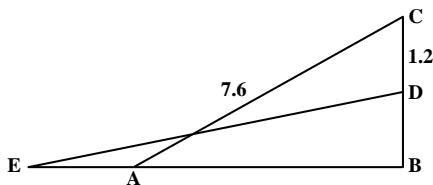
4.5 kg of Q has  $(0.3 \times 4.5 =) 1.35$  kg of silver and  $(0.35 \times 4.5 =) 1.575$  kg of copper.

Thus, the newly formed alloy of 5.5 kg has 1.8 kg of silver and 1.575 kg of copper.

$$\therefore \% \text{ of silver} \approx 33 \text{ and \% of copper} = 29$$

Hence, **option 1.**

47.



$$AC = ED = 7.6 \text{ and } AB = 6.4$$

$$\text{From the given diagram ; } BC^2 = 7.6^2 - 6.4^2 \\ = 16.8$$

$$\therefore BC \approx 4.1 \text{ m}$$

When the ladder slips 1.2 m, its top edge would be at D at a height of  $4.1 - 1.2$

$$\approx 2.9 \text{ m}$$

$$\therefore BE^2 = 7.6^2 - 2.9^2 \approx 49$$

$$\therefore BE \approx 7$$

$\therefore$  Ladder shifts approximately  $7 - 6.4 = 0.6$  m.

Hence, **option 2.**

48. Substituting values given in options, the equation is satisfied for  $x = 4$ .

Hence, **option 4.**

$$49. \left\{ \frac{4^{p+\frac{1}{4}} \times \sqrt{2 \times 2^p}}{2 \times \sqrt{2^{-p}}} \right\}$$

$$= \left\{ \frac{4^p \times 4^{\frac{1}{4}} \times \sqrt{2} \times \sqrt{2^p}}{2 \times \sqrt{2^{-p}}} \right\}$$

$$= \left\{ \frac{2^{2p} \times \sqrt{2} \times \sqrt{2} \times \sqrt{2^p}}{2 \times \sqrt{2^{-p}}} \right\}$$

$$= 2^{2p} \times \sqrt{2^p} \times \sqrt{2^p} = 2^{3p}$$

$$\left\{ \frac{4^{p+\frac{1}{4}} \times \sqrt{2 \times 2^p}}{2 \times \sqrt{2^{-p}}} \right\}^{1/p} = (2^{3p})^{1/p} = 8$$

Hence, **option 2.**

50. We consider that the student fails in the first year if he fails in the first trimester.

Therefore, the probability that the student will complete the first year the first year in the Engineering College is approximately = Probability that he passes 1<sup>st</sup> trimester  $\times$  Probability that he passes 1<sup>st</sup> semester and is promoted to the second year) =  $0.92 \times 0.87 \approx 0.8$

Hence, **option 1.**

51. Using all the statements, we can fill the following data directly,

From 5,

**Chemical Engineer is offered job in India.**

So, Brad is offered job in India

Hence, **Carla is offered job at Germany.**

From 4 and 6,

Evan is from Mechanical branch,

**So, Frank is from IT branch;**

**Hence, Anthony is from Electrical branch and Carla is from Electronics branch.**

So the final arrangement is,

From the table we get,

Carla is the one from electronics department.

Hence, **option 3.**

52. Considering solution to the first question, The person in UAE has Metallurgy branch. Hence, **option 3.**

53. Considering solution to the first question, Brad -India -Chemical is the correct combination.

Hence, **option 2.**

54. Considering solution to the first question, Frank joined IT Department in Australia.

Hence, **option 1.**

55. Considering solution to the first question, Dinesh - UAE - Electronics is the correct combination.

Hence, **option 4.**

**56.** Let,

A = The breakfast doesn't have eggs  
B = I will not go for a walk and will not have lunch.

From the logical deductions,

$$AB = \sim B \sim A$$

Also, and is replaced by or and vice versa.

So,

$\sim A$  = The breakfast has eggs.

$\sim B$  = I will go for a walk or will have lunch.

So, we get,

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

Hence, **option 2.**

**57.** Let us rank their heights and their qualification on a scale from 1 to 6.

Rank 1 is the tallest and the most qualified and Rank 6 is the shortest and the least qualified.

Kamla is not the tallest. So Kamla's height can be any rank from 2 to 5.

Kripa is the least qualified amongst the daughters. So  $Kripa_Q = 6$  (sub-script Q and H denote rank for qualification and height respectively).

From St iv, v and vi, we conclude that

$Kamla_H > Kamlesh_H > Kriti_H > Kalpana_H > Kranti_H$

But Kamla is not be the tallest. Therefore Kripa is the tallest and Kamla is the 2<sup>nd</sup> tallest and the order follows as shown above.

From St ii,  $Kranti_Q = 1$ .

From St iii and from st vi, we conclude that

$Kalpana_Q > Kamlesh_Q > Kriti_Q > Kamla_Q$

Therefore on the basis of the qualification, Kalpana's rank is 2, Kamlesh's rank is 3, Kriti's rank is 4 and Kamla's rank is 5.

The following table can be regarding their height and qualification :

Name	Height	Qualification
Kamla	2	5
Kamlesh	3	3
Kirti	4	4
Kripa	1	6
Kranti	6	1
Kalpana	5	2

Decreasing order of height are the ranks starting from 1 upto 6.

Third tallest amongst all is Kamlesh

Hence, **option 2.**

**58.** Most qualified is the person with rank 1.

The person with rank 1 is Kranti.

Hence, **option 4.**

**59.** The ranks in the increasing order of qualification are from 6 to 1.

Kriti's rank in decreasing order of qualification is 4.

Therefore Kriti's rank in the increasing order of qualification is 3.

Hence, **option 2.**

**60.** The ranks in the increasing order of height are from 6 to 1.

Kamla's rank in decreasing order of height is 2.

Therefore Kamla's rank in increasing order of height is 5.

Hence, **option 2.**

**61.** The Pattern here is,

$$18 \times 2 + 1 = 37,$$

$$37 \times 2 + 2 = 76,$$

$$76 \times 2 + 3 = 155,$$

So,

$$155 \times 2 + 4 = 314,$$

$$314 \times 2 + 5 = 633,$$

$$633 \times 2 + 6 = 1272,$$

Hence, **option 2.**

**62.** If no condition is imposed then we can select countries in  $2^3 - 1 = 7$  ways.

So, we have total 7 combinations.

Hence, **option 3.**

**Note:-** This question is ambiguous, as it is asking number of countries. In that case, we can select only 3 countries. But we don't have options. So here we are assuming number different combinations are asked.

**63.** If only condition 1 is imposed then we can select,

USA-UAE and USA-UAE-UK.

So, we have two combination.

Hence, **option 2.**

**Note:** This question is ambiguous, as it is asking number of countries. In that case, we can select 2 or 3 countries. But we don't have options. So here we are

assuming number of different combinations are asked.

64. If only condition 2 and 3 are imposed then we can select,  
UK-UAE, USA, USA-UAE.  
So, we can select 1 or 2 countries considering all possible combinations.  
Hence, **option 2**.

65. From the question W is the niece of X, So W is a female.

In option A, We see that all X, Y, Z and W are brothers and sisters.

In option B, W is father of Y. So, W is a male.

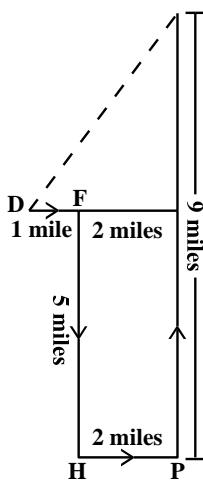
Consider option C.

It says X is Y's brother, Y is W's father and W is Z's sister.

Hence W is X's niece.

Hence, **option 3**.

66.



From the figure, the final position is E and the starting point is D.

$$\begin{aligned} \text{Distance DT} &= \text{Distance DF} + \text{Distance FT} \\ &= \text{Distance DF} + \text{Distance HP} \\ &= 1 + 2 \\ &= 3 \text{ miles.} \end{aligned}$$

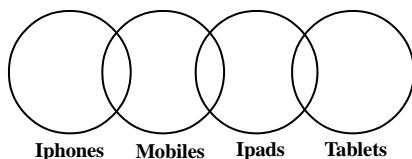
$$\begin{aligned} \text{Distance ET} &= \text{Distance EP} - \text{Distance TP} \\ &= \text{Distance EP} - \text{Distance FH} \\ &= 9 - 5 \\ &= 4 \text{ miles} \end{aligned}$$

From the figure, the distance between starting point and the end point is

$$\begin{aligned} (\text{DE})^2 &= 3^2 + 4^2 \\ &= 9 + 16 \\ &= 25 \end{aligned}$$

DE = 5 miles  
Hence, **option 3**.

67.



The statements i, ii and iii can be represented as shown above

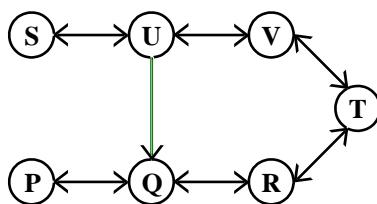
From the figure, Set of iphones do not intersect with the set of ipads and the set of tablets, and the set of mobiles do not intersect with the set of tablets.

Consider the conclusions,

From the figure, first three conclusions are not true. In this set, the fourth conclusion cannot be concluded.

Hence, **option 4**.

68.



From the figure, Excluding cities S and T cargo can go from city S to city T in 2 ways i.e S-U-Q-R-T and S-U-V-T. The shortest path from S to T is S-U-V-T. Therefore the minimum number of cities that the cargo has to cross in transit is 2.

Hence, **option 3**.

69. From the figure, Cargo can go from city P to city U in only one possible way i.e. P-Q-R-T-V-U. Going through this path, the cargo will have to pass through 4 cities.  
Hence, **option 2**.

70. Consider option A. The path is P-Q-R-U. We have to cross 2 intermediate cities in it.

Consider option B. If we connect cities from P to S with a one way connection from cities S to P. The path formed will be P-Q-R-T-V-U. It becomes a longer path than option A.

Using option C, the path formed is the shortest path. The path formed is P-Q-U. This smaller than that in option A.

Consider option D. The path formed using option D is longer compared to the path formed using option C. Hence options A, B, and D are eliminated.

Hence, **option 3.**

**71.** Sum of 1½ ton Window ACs sold by Torrent Enterprises during April 2014 – March 2015

$$\begin{aligned} &= 0.19(\text{Sum of number of units sold in April-14, May-14, Sep-14, Feb-15, Mar-15 and Aug-14}) + 0.33(\text{Sum of number of units sold in Jun-14, Jul-14, Dec-14, Oct-14, Nov-14 and Jan-15}) \\ &= 0.19 \times (1266 + 1268 + 1296 + 1340 + 1350 + 1296) + 0.33 \times (1272 + 1292 + 1300 + 1298 + 1300 + 1330) \\ &= 0.19 \times 7816 + 0.33 \times 7772 = 1485.04 + 2571.36 \approx 338 \end{aligned}$$

Hence, **option 2.**

**72.** Units sold in Apr-14, May-14 and Sep-14 = 3830

Units sold in Jun-14, Jul-14 and Dec-14 = 3864

Units sold in Aug-14, Feb-15 and Mar-15 = 3986

Units sold in Oct-14, Nov-14 and Jan-15 = 3928

WAC Type (Tonnage)	Apr-14, May-14 and Sep-14	Jun-14, Jul-14 and Dec-14	Aug-14, Feb-15 and Mar-15	Oct-14, Nov-14 and Jan-15	Total
Two Ton	766	966	1236	982	3950
One & Half Ton	728	1275	757	1296	4056
One Ton	536	464	1355	1021	3376
Half Ton	1800	1159	638	628	4226

Thus, the absolute difference between average annual sales (in units) of 1 ton and ½ ton is maximum.

Hence, **option 1.**

**73.** Sales for various WAC types from Oct-14 to Mar-15:

$$\begin{aligned} \text{Two ton: } & 0.25 \times 1300 + 0.31(1340 + 1350) \\ & + 0.25(3928) = 2141 \end{aligned}$$

$$\begin{aligned} \text{One & Half ton: } & 0.33 \times 1300 + 0.19(1340 + 1350) \\ & + 0.33(3928) = 2236 \end{aligned}$$

$$\begin{aligned} \text{One ton: } & 0.12 \times 1300 + 0.34(1340 + 1350) \\ & + 0.26(3928) = 2092 \end{aligned}$$

$$\begin{aligned} \text{One & Half ton: } & 0.3 \times 1300 + 0.16(1340 + 1350) \\ & + 0.16(3928) = 1449 \end{aligned}$$

Referring to previous solution, the sales for various WAC types from Apr-14 to Sep-14:

$$\text{Two ton: } 3950 - 2141 = 1809$$

$$\text{One & Half ton: } 4056 - 2236 = 1820$$

$$\text{One ton: } 3376 - 2092 = 1284$$

$$\text{One & Half ton: } 4226 - 1449 = 2777$$

Half yearly sales performance for various types is:

$$2 \text{ ton} = \frac{\left(\frac{2141}{6}\right) - \left(\frac{1809}{6}\right)}{\left(\frac{1809}{6}\right)}$$

$$= \frac{2141 - 1809}{1809} \approx 0.18$$

$$1 \frac{1}{2} \text{ ton} = \frac{2236 - 1820}{1820} \approx 0.23$$

$$1 \text{ ton} = \frac{2092 - 1284}{1284} \approx 0.63$$

$$\frac{1}{2} \text{ ton} = \frac{1449 - 2777}{2777} \approx -0.48$$

Thus, second best performance in Half Yearly Sales Performance is of 1½ ton WACs.

Hence, **option 3.**

**74.** Monthly sales performance:

- May 2014 = 2/1266

- June 2014 = 4/1268

- October 2014 = 2/1296

- February 2015 = 10/1330

10/1330 is the highest fraction.

Hence, **option 4.**

75. Sales volatility of 2 ton WAC

$$= \frac{419 - 253}{329} \approx 0.5$$

Sales volatility of 1½ ton WAC

$$= \frac{439 - 241}{338} \approx 0.59$$

Sales volatility of 1 ton WAC

$$= \frac{459 - 153}{281} \approx 1.09$$

Sales volatility of ½ ton WAC

$$= \frac{609 - 207}{352} \approx 1.14$$

Thus, 2 ton of WAC has the least Sales Volatility.

Hence, **option 4.**

76. The first table gives the difference between the average sales of various products over seven years.

e.g. A - B = 214.29 crores

Hence, total difference between A and B over the seven year period is:

$$A - B = 214.29 \times 7 = 1500 \text{ crores}$$

Similarly,

$$\begin{aligned} C - A &= 900 \text{ cr}, A - D = 1000 \text{ cr}, A - E = 300 \\ \text{cr}, C - B &= 2400 \text{ cr}, D - B = 500 \text{ cr}, E - B \\ &= 1200 \text{ cr}, C - D = 1900 \text{ cr}, C - E = 1200 \text{ cr}, \\ E - D &= 700 \text{ cr} \end{aligned}$$

Let the sales of A in 2013 be  $a$  ('000s), C in 2010 be  $c$  ('000s) and D in 2012 be  $d$  ('000s).

The total sales, by volume, of each product are:

$$A = (6800 + a) \times 10^3$$

$$B = 5800 \times 10^3$$

$$C = (7400 + c) \times 10^3$$

$$D = (5700 + d) \times 10^3$$

$$E = 7000 \times 10^3$$

Hence, difference between number of units sold of B and E =  $1200 \times 10^3$

Assuming that each product is sold at the same cost in each year,

$$\begin{aligned} \text{Cost per product} &= (1200 \text{ cr})/(1200 \text{ thousand}) = (1200 \times 10^7)/(1200 \times 10^3) \\ &= 10000 \end{aligned}$$

$$\therefore \text{Total sales of B over the given period} = 5800 \times 10^3 \times 10000 = 5800 \times 10^7 = 5800 \text{ crores}$$

Similarly, total sales of E over the given period =  $7000 \times 10^3 \times 10000 = 7000 \times 10^7 = 7000$  crores

Using these values in the equations above,  $A = 7300$  crores,  $C = 8200$  crores,  $D = 6300$  crores

$$\begin{aligned} \text{Also, total sales of A} &= (6800 + a) \times 10^3 \times 10000 = (6800 + a) \times 10^7 \\ &= (6800 + a) \text{ crores} \end{aligned}$$

Comparing this value with 7300 crores (found as total sales of A earlier),  $a = 7300 - 6800 = 500$  crores

Similarly,  $c = 800$  crores and  $d = 600$  crores

Hence, **option 3.**

77. Because the cost per product is assumed to be the same for each product for each year, the average sales (or total sales) for any year across products can be found on the basis of units sold itself.

i.e., the year with highest units sold will also have highest average annual sales.

$$\begin{aligned} 2010: 500 + 600 + c + 1200 + 1600 \\ &= 3900 + c = 3900 + 800 = 4700 \end{aligned}$$

$$\begin{aligned} 2011: 800 + 600 + 1400 + 1100 + 300 \\ &= 4200 \end{aligned}$$

$$\begin{aligned} 2012: 1200 + 1000 + 1500 + d + 200 \\ &= 3900 + d = 3900 + 600 = 4500 \end{aligned}$$

$$\begin{aligned} 2013: a + 1000 + 800 + 100 + 2000 \\ &= a + 3900 = 4400 \end{aligned}$$

Thus, the minimum sales are in 2011.

Hence, **option 2.**

78. Consider the solution to the first question of the set.

The product having the least total sales over the given period will also have the least average.

Hence, this product is B, with total sales of Rs. 5800 crores.

Hence, **option 2.**

79. This question can be directly answered from the table given in the question.

The least difference between average sales (among the given options) is between products D and E.

Hence, **option 4.**

80. Consider the solution to the earlier question where the average sale per year was found.

The same concept can be used for this question.

The values for 2010, 2011, 2012 and 2013 were already known.

Based on the options, find the values for 2009, 2014 and 2015.

$$2009: 1200 + 300 + 1500 + 600 + 1300 = 4900$$

$$2014: 1800 + 700 + 1200 + 900 + 1300 = 5900$$

$$2015: 1300 + 1600 + 1000 + 1800 + 300 = 6000$$

Since the sales increase from 2014 to 2015, option 4 can be directly eliminated as we need to find % decline.

For the other three values, it can be observed that the maximum % decline is in 2011.

Hence, **option 3.**

#### 81. Factor performance

$$= 0.3 \times \text{Factor score in 2014} + 0.35 \times \text{Factor score of 2012} + 0.35 \times \text{Factor score in 2010}$$

Among the given options, Factor score of Macroeconomic Environment is the highest for 2010 and 2014.

For the year 2012, Factor Score of Business Sophistication is the highest and that of Macroeconomic Environment is second highest.

Thus, by comparing the values of Business Sophistication and Macroeconomic Environment, it can be concluded that Macroeconomic Environment has the best Factor Performance.

Hence, **option 4.**

#### 82. From the graph, it is clear that among the given options, the difference between the Factor Score of 2014 and Factor Score of 2012 is maximum and the Factor Score of 2010 is the least for Infrastructure.

Therefore, Infrastructure has the best Factor Performance.

Hence, **option 3.**

#### 83. By observation,

i. Sum of Factor Scores of Infrastructure > Sum of Factor Scores of Technological Readiness

ii. Sum of Factor Scores of Institutions > Sum of Factor Scores of Market Efficiency

So, it is sufficient to compare values of Infrastructure and Institution.

$$\text{The total score for Infrastructure} = 4 + 4 + 5.25 = 13.25$$

$$\text{The total score for Institution} = 4.25 + 4.75 + 4.5 = 13.5$$

Therefore, Institutions has the highest average across indices of 2010, 2012 and 2014.

Hence, **option 2.**

**84.** Among the given options, the difference between Factor Score in 2014 and that in 2010 is minimum for Institutions.

Hence, **option 2.**

**85.** [www.jay.com](http://www.jay.com) spent \$(27% of 557000) for 240 impressions.

$$\text{So, cost per advertisement on Website A} = 0.27 \times 557000 / 240 \approx \$ 626.63$$

Similarly,

$$\text{Cost per advertisement on Website B} = 0.22 \times 557000 / 370 \approx \$ 331.19$$

$$\text{Cost per advertisement on Website D} = 0.13 \times 557000 / 300 \approx \$ 241.37$$

$$\text{Cost per advertisement on Website E} = 0.20 \times 557000 / 150 \approx \$ 742.67$$

Thus, Website D provide facility of least cost per advertisement.

Hence, **option 3.**

#### 86. Quality traffic provided by:

$$\text{Website A} = \frac{2800}{120} = 23.33$$

$$\text{Website B} = \frac{2500}{60} = 41.67$$

$$\text{Website D} = \frac{3000}{80} = 37.5$$

$$\text{Website E} = \frac{3500}{40} = 87.5$$

Thus, Website E has provided maximum quality traffic.

Hence, **option 4.**

**87.** Least the value of (Complete buying/Start buying) for a website, maximum is the leakage in online buying.

Values of (Complete buying/Start buying) are  $(1200/2500 =) 0.48$ ,  $(900/2000 =) 0.45$ ,  $(1300/3000 =) 0.43$  and  $(1600/3500 =) 0.46$  for Website B, Website C, Website D and Website E respectively.

So, Website D sent traffic to www.jay.com with maximum leakage.

Hence, **option 3**.

88. Efficiency of online display advertising expenditure on

$$\text{Website A} = \frac{2700}{27\% \text{ of } 557000} = \frac{10}{557}$$

Efficiency of online display advertising expenditure on

$$\text{Website B} = \frac{1200}{22\% \text{ of } 557000} = \frac{5.45}{557}$$

Efficiency of online display advertising expenditure on

$$\text{Website C} = \frac{900}{18\% \text{ of } 557000} = \frac{5}{557}$$

Efficiency of online display advertising expenditure on

$$\text{Website E} = \frac{1600}{20\% \text{ of } 557000} = \frac{8}{557}$$

Advertising budget was spent most efficiently on Website A.

Hence, **option 1**.

89. Option 3 is negated in Paragraph 5, since it says that "Mittal was the biggest producer of 'long' products." The passage does not directly mention the overall biggest producer of steel.

Since Option 3 is incorrect, Option 4 is also incorrect.

Option 2 is incorrect since Paragraph 5 contradicts it.

Option 1 is mentioned in Paragraph 1.

Hence, the correct answer is **option 1**.

90. Option 4 is mentioned in Paragraph 4.

Option 2 is not mentioned in the passage.

Options 1 and 4 are indirectly useful for achieving better pricing position.

Hence, the correct answer is **option 4**.

91. Options 1, 3 and 4 are contradicted in Paragraph 7, start of Paragraph 3, and Paragraph 1 respectively.

Option 2 is mentioned in Paragraph 4.

Hence, the correct answer is **option 2**.

92. Option 3 is mentioned in Paragraph 1 and the start of Paragraph 2.

The other options are not mentioned in the passage in the context of privatisation.

Hence, the correct answer is **option 3**.

93. Option 2 is directly mentioned in the context of hyperbole at the end of Paragraph 2.

Hyperbole does not occur in other contexts in the passage.

Hence, the correct answer is **option 2**.

94. The entire passage talks about Option 3. Since in Otlet's time, the requisite technologies required for invention and development were not available, he could not have done those (refer start of Paragraph 3 - where it says he did not invent the internet. Also refer Paragraph 5 and the start of Paragraph 6). All he did was prophesize that such a technology would one day exist.

Hence, the correct answer is **option 3**.

95. Option 2 has been directly mentioned near the end of Paragraph 6.

The other options are not mentioned in this context.

Hence, the correct answer is **option 2**.

96. Note the use of "envisioned" in Paragraph 3 (Option 1), and "looked far ahead to a future" (Option 2) in Paragraph 4 and the context in which they are used.

Also, note "larger utopian project", "permanent and lasting peace", and "collective spiritual enlightenment" (Option 3) in Paragraph 4.

Hence, the correct answer is **option 4**.

97. The underlying point that the author makes throughout the passage is that there is a moral hazard which incentivizes lenders to lend without undertaking due diligence. This creates a financial crisis.

The other options are not the focus of the passage.

Hence, the correct answer is **option 1**.

98. Option 1 is directly mentioned as the explanation of the moral hazard in Paragraph 5.

The other options are not mentioned in the passage.

Hence, the correct answer is **option 1**.

99. Option 3 is mentioned in Paragraph 3.

There is no support for the other options in the passage.

Hence, the correct answer is **option 3**.

**100.** Option 3 is mentioned in Paragraph 3.

There is no support for the other options in the passage.

Hence, the correct answer is **option 3**.

**101.** Note the consistent use of terms related to politics:

Paragraph 1: political socialization, political allegiances, politics

Paragraph 4: political attitudes, political impact

Paragraph 5: political views and sympathies

Paragraph 6: politically conservative

Paragraph 7: political bias

Given the above focus, Option 1 is the answer.

Hence, the correct answer is **option 1**.

**102.** Option 3 is mentioned in the passage in Paragraph 1 using the same language as the question.

Hence, the correct answer is **option 3**.

**103.** Options 1, 2, and 3 are mentioned in Paragraphs 1, 2 and 3 respectively.

Hence, the correct answer is **option 4**.

**104.** Option 3 is mentioned in Paragraph 5. The other options do not have support in the passage.

Hence, the correct answer is **option 3**.

**105.** The passage starts off by saying that the beginning of the universe has long been a topic of discussion. This will ideally be followed by statement R, which mentions one theory: that the start of the universe was at a definite point in time. This is supported by the reasoning in statement P where it is said that a 'first cause' explains the universe's existence. Then statements S and Q put forth another theory by St. Augustine and elaborate upon it.

The correct sequence is RPSQ.

Hence, the correct answer is **option 2**.

**106.** The passage opens with a statement on the author's eagerness to please his parents by running errands. Statement S exemplifies this by beginning to narrate an incident wherein the author is running an errand for his neighbours. This is followed by statement P, which describes an accident

that occurred on the way. Then comes R, which shows the author's determination to carry out his task despite being in pain. Q says that the author allowed himself to cry only after reaching home.

The correct sequence is SPRQ.

Hence, the correct answer is **option 1**.

**107.** The idiom 'to drive home' means 'to emphasize an important point'.

None of the other options are related.

Hence, the correct answer is **option 4**.

**108.** 'To have an axe to grind' is an idiom meaning 'to have a strong personal opinion about something that you want people to accept and that is the reason why you do something'. This fits with option 1.

The other options are incorrect.

Hence, the correct answer is **option 1**.

**109.** "Carried away" means 'to become overly excited or involved and to take things too far'. This fits well in the first sentence.

"To carry on" means 'to continue an activity or task'. It has been used correctly in sentence 2.

"To carry out" means 'to put into execution'. Sentence 3 is correct.

The correct idiom to be used in sentence 4 is 'get carried away' meaning 'to become overly excited'. This sentence incorrectly uses 'carried on'.

Hence, the correct answer is **option 4**.

**110.** The correct idiom to have been used in sentence 1 is 'hang on', meaning 'wait for a short time'. This sentence is incorrect.

A player is said to have 'hung up his boots' when he/she decides to stop playing or retire. This idiom has been used correctly in sentence 2.

"Hang around" means 'loiter or wait around'. This fits well in sentence 3.

"Hanging on to" someone's words means 'listen very attentively to someone'. This sentence is correct.

Hence, the correct answer is **option 1**.

**111.** The adjective "grossly" is a hint here, since it expresses the negative nature of the word in the first blank. 'Grossly understood' makes no sense- eliminate option 4.

It is absurd that the British would ‘misrepresent’ the toughness of local fighters; this is contextually incorrect since the sentence talks about fighting against them. Eliminate option 1.

The word “similar” does not fit the second blank contextually; it is illogical that the same kind of terrain should discomfit the British. Eliminate option 3.

Option 2 makes sense- the British had “underestimated” the local fighters, and they found the terrain very “different” from Europe.

Hence, the correct answer is **option 2**.

**112.**The fact that the processes were “complicated” implies that they went against reason. This validates “defied” in option 3.

“To work around” is an idiom meaning ‘to manage to do one’s work while avoiding something’. “Around” fits the second blank. Hence, the correct answer is **option 3**.

**113.**“Milieu” means ‘surroundings, especially of a social or cultural nature’.

The other options are unrelated in meaning to the given word.

Hence, the correct answer is **option 3**.

**114.**A “gaffe” is defined as ‘a clumsy social error; a faux pas’. The word closest to this is “blunder”.

The other options are incorrect.

Hence, the correct answer is **option 1**.

**115.**The words “food shortage” and “die” point towards starvation. “Emaciated” meaning ‘extremely thin, as a result of starvation’ is an apt fit for this blank. Option 1 is validated.

“Emancipated” means ‘free, as from slavery or bondage’.

“Enunciated” means ‘to utter or pronounce words in an articulate manner’.

“Elevated” means ‘raised up’.

None of these words gives the sentence logical coherence.

Hence, the correct answer is **option 4**.

**116.**“Removed” means ‘to take something or someone away from’. Hence, the appropriate preposition succeeding it would be “from”.

Hence, the correct answer is **option 3**.

**117.**“Qualm” means ‘a feeling of doubt or uncertainty about whether you are doing the right thing’ and is synonymous with “misgiving” meaning ‘a feeling of doubt or apprehension about the outcome or consequences of something’.

Hence, the correct answer is **option 2**.

**118.**Since the sentence talks about pipes being used as a substitute for cigarettes, the appropriate word that would fit the blank is “alternative”.

For the second blank, ‘likely to higher rates’ is grammatically incorrect. So, eliminate option 1.

People being responsible for higher rates of lung and mouth cancers is absurd. So, eliminate option 2.

People cannot be involved with higher rates of lung and mouth cancers. So, eliminate option 4.

Hence, the correct answer is **option 3**.

**119.**The key to finding the word for the first blank lies in the word “plot” which indicates ‘a plan made in secret by a group of people to do something illegal or harmful’. Thus, only “clandestinely” meaning ‘secretly’ qualifies for the blank.

“Referendum” meaning ‘a **vote** in which all the **people** in a **country** or an **area** are asked to give their **opinion** about’, “invocation” meaning ‘the action of invoking someone or something’ and “upheaval” meaning ‘violent or sudden change or disruption to something’ cannot be **plotted** and can be eliminated.

Hence, the correct answer is **option 2**.

**120.**“Oxymoron” is a figure of speech in which two opposite ideas are joined to create an effect. Hence, option 2 with “act naturally” fits the criteria. “Act” meaning ‘something done voluntarily’ is contradictory to “naturally” which means ‘instinctively’.

Hence, the correct answer is **option 2**.

**121.**“Oxymoron” is a figure of speech in which two opposite ideas are joined to create an effect. In option 1 with “original” is contradictory to “copy” which means ‘an imitation of an original’.

In option 2 with "small" is contradictory to "crowd" meaning 'large number of people collected together'.

In option 3 "open" is contradictory to "secret" which means 'some information kept concealed'.

Hence, the correct answer is **option 4**.

**122.**The use of the conjunction "although" at the start of the sentence indicates presence of contrasting ideas before and after the comma.

Option 1 reflects the same meaning as first part of the sentence. So, eliminate option 1. Options 3 and 4 do not pertain to the contradictory tone of the sentence. So, eliminate options 3 and 4.

Option 2 puts forth the fact that injuries that are not fatal can still be tragic and appropriately completes the sentence.

Hence, the correct answer is **option 2**.

**123.**"Cacophony" means 'a harsh discordant mixture of sounds' and "euphony" means 'the quality of being pleasing to the ear.' It can be concluded that the two words are antonyms of each other, with the first word having a negative connotation while the second has a positive connotation.

In option 1, "belligerent" means 'hostile and aggressive' and "serene" means 'calm, peaceful, and untroubled'. These two words are opposite in meaning and also show a negative and positive connotation respectively. This is the correct option.

"Loneliness" and "peace" are not related in meaning. So eliminate option 2.

"Horrific" meaning 'causing horror' and "sympathetic" meaning 'resulting from sympathy' are not antonyms of each other. Eliminate option 3.

In option 4, "nocturnal" meaning 'active during the night' and "diurnal" meaning 'active during the daytime' are also opposite in meaning, making this a very close option. However, both words have a neutral connotation- we cannot say that either word is positive or negative. Therefore, this option loses out to option 1.

Hence, the correct answer is **option 1**.

**124.**"Blasphemous" means 'An act of disrespect or impiety toward something regarded as sacred'.

"Ascetic" means 'a person who abstains from the normal pleasures of life or denies himself or herself material satisfaction'.

"Reverent" means 'Feeling or showing deep and solemn respect'.

"Inferior" means 'lower in rank, status, or quality'

"Blarney" means 'talk which aims to charm, flatter, or persuade'.

Hence, 'reverent' is antonymous to 'blasphemous'.

Hence, the correct answer is **option 2**.

## Answer Key

Section I		Section II		Section III (Part 1)		Section III (Part 2)		Section IV (Part 1)		Section IV (Part 2)	
Q.	Ans.	Q.	Ans.	Q.	Ans.	Q.	Ans.	Q.	Ans.	Q.	Ans.
1	1	29	2	51	3	71	2	89	1	105	2
2	4	30	3	52	3	72	1	90	4	106	1
3	1	31	1	53	2	73	3	91	2	107	4
4	2	32	3	54	1	74	4	92	3	108	1
5	3	33	3	55	4	75	4	93	2	109	4
6	1	34	1	56	2	76	3	94	3	110	1
7	1	35	2	57	2	77	1	95	2	111	2
8	3	36	4	58	4	78	2	96	4	112	3
9	2	37	1	59	2	79	4	97	1	113	3
10	1	38	4	60	2	80	2	98	1	114	1
11	2	39	2	61	2	81	4	99	3	115	4
12	1	40	2	62	3	82	3	100	3	116	3
13	2	41	2	63	2	83	2	101	1	117	2
14	1	42	4	64	2	84	2	102	3	118	3
15	2	43	3	65	3	85	3	103	4	119	2
16	3	44	4	66	3	86	4	104	3	120	2
17	1	45	2	67	4	87	3			121	4
18	3	46	1	68	3	88	1			122	2
19	1	47	2	69	2					123	4
20	1	48	4	70	3					124	2
21	1	49	2								
22	1	50	1								
23	4										
24	4										
25	4										
26	1										
27	1										
28	3										