

Symbiosis International University

SNAP TEST 2011

Time: 120 minutes

Sunday December 18, 2011

SNAP ID

Please read the following instructions carefully. Do not open the seal until the Invigilator instructs you to open.

1. Answer OMR Sheet is contained inside the Test Booklet. Make sure that the Answer OMR Sheet is not damaged in any way.
2. Use only a blue/black ball point pen to darken circles on Answer OMR Sheet.
3. Write your SNAP-Id and darken appropriate circles in the Answer OMR Sheet.
4. The sequence of the sections differs in each Booklet series. However as mentioned in SNAP Test 2011 Bulletin, the Sections remain the same;

Sr. No	Sections	Total Marks	No. of questions
1	General English	40	40
2	Quantitative & Data Interpretation & Data Sufficiency	40	40
3	General Awareness: General Knowledge, Current Affairs, Business Scenario	40	40
4	Analytical & Logical Reasoning	60	30
	<b>Total</b>	<b>180</b>	<b>150</b>

5. In the Answer OMR Sheet, darken the circles against the question numbers indicating your answers. For example, if your answer is 2 for a question, then darken as follows:

1      2      3      4  
           

Darken only one circle. If you darken more than one circle against any question, you will score zero mark.

**Use Blue/Black ballpoint pen for filling the OMR sheet. DO NOT use pencil.**

6. **For every wrong answer, you will score 25% negative marks.**
7. Do not attempt to copy nor allow or help others in copying. Any malpractice will invalidate your candidature.
8. Return Answer OMR Sheet to the Invigilator before you leave the hall.
9. Do not leave the hall at any point of time without handing over your Test Booklet and Answer Sheet to the Invigilator.
10. You may take the question paper back with you.
11. Once you go out of the hall, re-entry is not permitted.

**Use this Page for Rough Work**

## Section I - General Awareness

**For all questions in this section, correct answers carry 1 mark each.**

1. "Swayamsidha" is a scheme launched by the Government of India to help
  - (1) School Children only
  - (2) Health workers only
  - (3) Senior citizen without any regular income
  - (4) Women only
2. What is 'Share swap'?
  - A. A business takeover in which acquiring company uses its own stock to pay for the acquired company.
  - B. When a company uses its own share to get some short term loan for working capital requirement
  - C. When companies are require to float a new issue to earn capital for their expansion programmes, each shareholder gets some additional preferential share. The process is known as Share Swap.
  - (1) Only A
  - (2) Only A and B
  - (3) Only C
  - (4) None of the above
3. Regarding "carbon credits" which of the following statements is not correct?
  - (1) The carbon credits system was ratified in conjunction with Kyoto Protocol
  - (2) Carbon credits are awarded to those countries or groups who have reduced the green house gases below their emission quota
  - (3) The goal of carbon credit system is to reduce carbon dioxide emission
  - (4) Carbon credits are traded at a price fixed from time to time by the United Environment Programme
4. Both Foreign Direct Investment (FDI) and Foreign Institutional Investor (FII) are related to investment in a country. Which one of the following statements best represents an important difference between the two?
  - (1) FII helps bring better management skills and technology while FDI only bring capital
  - (2) FII helps in increasing capital availability in general, while FDI only targets specific sectors
  - (3) FDI flows only into secondary markets while FII targets primary markets
  - (4) FII is considered to be more stable than FDI
5. In context of global oil prices, "Brent crude oil" is frequently referred to in the news. What does this term imply?
  - 1) It is a major classification of crude oil
  - 2) It is sourced from North sea
  - 3) It does not contain sulphur

Which of the statement given above is /are correct?

  - (1) 2 only
  - (2) 1 and 2 only
  - (3) 1 and 3 only
  - (4) 1, 2 and 3
6. With reference to "Look East Policy" of India consider the following statements:
  1. India wants to establish itself as an important regional player in the East Asian affairs.
  2. India wants to plug the vacuum created by the termination of Cold war.
  3. India wants to restore the historical and cultural ties with its neighbors in Southeast and East Asia.

Which of the statements given above is/are correct?

  - (1) 1 only
  - (2) 1 and 3 only
  - (3) 3 only
  - (4) 1, 2 and 3

7. Recently "oilzapper" was in news. What is it?
- (1) It is eco friendly technology for the remediation of oily sludge and oil spills
  - (2) It is the latest technology developed under sea oil exploration
  - (3) It is genetically engineered high biofuel – yielding maize variety
  - (4) It is the latest technology to control accidentally caused flames from oil wells.
8. Why is the offering of "teaser loans" by commercial banks a cause of economic concern?
1. The teaser loans are considered to be an aspect of sub – prime lending and banks may be exposed to the risk of defaulters in future.
  2. The teaser loans are given to inexperienced entrepreneurs to set up manufacturing or export units.
- Which of the statements given above is/are correct?
- (1) 1 only                      (2) 2 only
  - (3) Both 1 and 2              (4) Neither 1 nor 2
9. Why is the government of India disinvesting its equity in the Central Public Sector Enterprises (CPSE)?
1. The Government intends to use the revenue earned from disinvestment mainly to pay the External debt
  2. The Government no longer intends to retain the management control of CPSEs
- Which of the statements given above is/are correct?
- (1) 1 only                      (2) 2 only
  - (3) Both 1 and 2              (4) Neither 1 nor 2
10. The book "Unto this Last" which influenced Gandhiji, was authored by
- (1) Boris Yeltsin              (2) Pushkin
  - (3) Ruskin Bond              (4) John Ruskin
11. Besides USA, India has signed, with which of the following countries the agreement being named as "Cooperation Agreement on the development of Peaceful Uses of Nuclear Energy"?
- (1) Italy                              (2) Germany
  - (3) France                          (4) Australia
12. Which of the following country is not a member of the Nuclear Suppliers Group (NSG)?
- (1) Russia                          (2) USA
  - (3) Italy                              (4) Iran
13. Many times we read in the newspaper that several companies are adopting the FCCBs route to raise capital. What is the full form of FCCB?
- (1) Foreign Currency Convertible Bonds
  - (2) Foreign Convertible Credit Bonds
  - (3) Financial Consortium and Credit Bureau
  - (4) None of these
14. As per the reports published in various newspapers, RBI has asked banks to make plan to provide banking services in villages having population of 2000. This directive issued by the RBI will fall in which of the following categories?
- (1) Plan for financial inclusion
  - (2) Efforts to meet Priority sector lending
  - (3) Extension of Internet and Branchless banking.
  - (4) None of these
15. Which of the following is/ are treated as artificial currency?
- (1) ADR
  - (2) GDR
  - (3) Both ADR and GDR
  - (4) SDR
16. Which of the following terms indicates a mechanisms used by commercial banks to provide credit to the Government?
- (1) Cash Credit Ratio
  - (2) Debit Service Obligation

- (3) Liquidity Adjustment Facility  
(4) Statutory Liquidity Ratio
17. Who among the following was not part of the drafting committee of the Lokpal Bill?  
(1) Salman Khurshid (2) Anna Hazare  
(3) Arvind Kejriwal (4) Kiran Bedi
18. Criminal procedure is a subject of which of the following lists?  
(1) State List (2) Concurrent List  
(3) Union List (4) Both 1 and 3
19. One of the world's biggest Uranium resources was recently found in  
(1) Andhra Pradesh (2) Maharashtra  
(3) Jharkhand (4) Uttarakhand
20. Which of the following was the first venture of Kishore Biyani  
(1) Pantaloons (2) Big Bazaar  
(3) Central (4) Future Capital Holdings
21. Who among the following is often referred to as father of India's "Green Revolution"?  
(1) Dr. Verghese Kurien  
(2) Dr. Amrita Patel  
(3) M. S. Swaminathan  
(4) Gurudev Khush
22. Who among the following directed the movie Peepli Live?  
(1) Ashutosh Gowariker  
(2) Kiran Rao  
(3) Anusha Rizvi  
(4) Seema Chisti
23. The point at which solid, liquid and gaseous forms of a substance co-exist is called  
(1) sublimation (2) distillation point  
(3) triple point (4) melting point
24. The limit beyond which the stars suffer internal collapse is called the  
(1) Raman Effect (2) Chandrashekhar limit  
(3) Aurora Borealis (4) Quasar Zone
25. UNDP reports publishes every year the Human Development Index. Which of the following is not a criteria used to measure the Human Development Index?  
(1) Health (2) Education  
(3) Living Standards (4) Human Rights
26. The software company I - flex Solutions was originally a division of which famous financial services company?  
(1) Citicorp (2) ICICI  
(3) HSBC (4) ABN Amro Bank
27. Which of the following is not a member of SAARC?  
(1) Bhutan (2) Bangladesh  
(3) Burma (4) Maldives
28. Which article of the Indian constitution recognizes Hindi in Devanagari Script as the official language of India?  
(1) Art 345 (2) Art 343  
(3) Art 348 (4) Art 334
29. India has finally woken up to the needs of the country's elderly. With the number of people in the 60 - plus age group in India expected to increase to 100 million in 2013 and to 198 million in 2030, the health ministry is all set to roll out the  
(1) National Programme for Health care of the Elderly  
(2) National Programme for Senior Citizens  
(3) National Programme for Old Aged  
(4) Rashtriya Vriddha Swasthya Yojana

30. Which of the following statements is/are correct?
1. Non – resident Indians (NRIs) can now cast votes in their home constituencies in India.
  2. The NRI can cast his vote by postal balloting.
- (1) 1 only                      (2) 2 only  
(3) Both 1 and 2              (4) Neither 1 nor 2
31. In a landmark move, which of these State governments has set up a Savarna Aayog, a commission to identify the deprived and underprivileged families among upper castes?
- (1) Uttar Pradesh    (2) Bihar  
(3) Madhya Pradesh (4) Rajasthan
32. Which of these countries has announced one billion US dollar aid for the reconstruction of Nalanda University?
- (1) Japan                      (2) Singapore  
(3) Malaysia                (4) China
33. What is the name of the in - house magazine to be published by the Indian Railways, to be distributed to the passengers on high end trains?
- (1) Rail Vishwa              (2) Rail Bandhu  
(3) Rail Mail                (4) Rail Patra
34. The government, in February 2011, set up a task force to create a way to provide direct subsidies to the ultimate beneficiaries on petroleum working gas and fertilizers. The task force will be headed by -
- (1) Nandan Nilekani (2) Apoorva Sinha  
(3) Sangam Chitra    (4) All of these
35. Which of these countries has been added in the 'BRIC' (Brazil – Russia – India – China) groupin of emerging economies?
- (1) South Korea              (2) Venezuela  
(3) South Africa              (4) Malaysia
36. Which of the following countries was the host of First Asian Yoga Championship held recently?
- (1) Thailand                      (2) Cambodia  
(3) Vietnam                      (4) Laos
37. Who among the following has been defeated by Saina Nehwal, who has won the Swiss Open Grand Prix Gold title recently, becoming the First Indian to do so?
- (1) Ji Hyun Sung  
(2) Wang Lin  
(3) Kamilla Rytter Juhl  
(4) Shinta Mulia Sari
38. On March 6, 2011, the Supreme Court held that has ample powers to enact legislation with respect to extra – territorial aspects for the security of India?
- (1) President                      (2) Prime Minister  
(3) Supreme Court    (4) Parliament
39. Which country has appointed Brigadier General Ravinder Singh as its next Army chief, the first Sikh in nearly 30 years to be given the force's batton
- (1) Thailand                      (2) Singapore  
(3) Malaysia                      (4) Indonesia
40. Anant Pai, better known as 'Uncle Pai', who recently died was the creator of which among the following comic series?
- (1) Chacha Chaudhary  
(2) Chandamama  
(3) Indrajaaal  
(4) Amar Chitra Katha

## Section II – Analytical & Logical Reasoning

**For all questions in this section, correct answers carry 2 mark each.**

**Directions for questions 41 and 42:** Each question consists of a set of numbered statements. Assume that each one of these statements is individually true. Each of the four choices consists of a subset of these statements. Choose the subset as your answer where the statements therein are logically consistent among themselves:

**41.**

- A. Only if the water level in the coastal areas rises, then the people change their lifestyle.
- B. People change their lifestyle only if they are rewarded.
- C. If people are rewarded, then they will not change their lifestyle.
- D. If the temperature rises, then the water level in the coastal areas rises.
- E. Whenever the water level in the coastal area rises, then the temperature rises.
- F. Unless the people change their lifestyle, temperature rises.
- G. People are rewarded.
- H. Water level in the coastal areas does not rise.

- (1) C, D, F, G and H    (2) G, F, D, B and H  
 (3) E, F, G, H and B    (4) None of the above

**42.**

- A. If Kumar sings, then the audiences sleep.
- B. If Kumar sings, then the audiences dance.
- C. Unless audience do not dance, the concert will be successful.
- D. Only if the audience dance, the concert will be successful.
- E. If Vina dances, then Kumar sings.
- F. Kumar sings only if Vina dances.
- G. Vina dances
- H. The concert is successful.

- (1) C, F, G, B and H    (2) A, C, F, G and H  
 (3) E, C, G, B and H    (4) Both (2) and (3)

**Directions for questions 43 to 45:** These questions are based on the data given below.

There are only four members of a family viz., A, B, C and D and there is only one couple among them. When asked about their relationships, following were their replies:

- a. A: B is my son. D is my mother.
- b. B: C is my wife. Dis my father.
- c. C: D is my mother – in – law. A is my daughter.
- d. D: A is my grand – daughter. B is my daughter – in – law.

**43.** Who always speaks the truth?

- (1) A                      (2) B                      (3) C                      (4) D

**44.** How is B related to C?

- (1) Father                      (2) Mother  
 (3) Wife                      (4) Husband

**45.** Which of the following statements must be true?

- (1) A's grandmother alternates between the truth and lie.
- (2) C's wife always speaks the truth.
- (3) A's grandfather always speaks the truth.
- (4) B's daughter always tells lies.

**Directions for questions 46 to 48:** These questions are based on the following information.

A cube of 7cm × 7cm × 7cm is kept in the corner of a room and painted in three different colours, each face in one colour. The cube is cut into 343 smaller but identical cubes.

**46.** How many smaller cubes do not have any face painted?

- (1) 125                      (2) 180  
 (3) 144                      (4) 216

47. How many smaller cubes have exactly one colour on them?

- (1) 108      (2) 72      (3) 36      (4) 24

48. How many smaller cubes have at the most two faces painted?

- (1) 343      (2) 342  
(3) 256      (4) 282

**Directions for questions 49 and 50:**

Amit was driving in New Town, where all roads either north – south or east – west forming a grid. Roads were at a distance of 1 km from each other in parallel.

49. Amit started at the intersection of streets no. 7 and 8. He drove 3 km north, 3 km west and 4 km south. Which further route could bring him back to his starting point?

- I. 3 km east, then 2 km south  
II. 1 km north, then 3 km east  
III. 1 km north, then 2 km west

- (1) I only      (2) II only  
(3) I and II only      (4) II and III only

50. After driving as stated in question no. 49 above, Amit did not return to his starting point, but instead drove 4 km east and 1 km north. How far is he from his starting point?

- (1) 5 km      (2) 4 km      (3) 1 km      (4) 7 km

**Directions for questions 51 to 55:** Refer to the following data and answer the questions that follow:

A numerical machine accepts two values X and Y. Then it updates these values as  $X = XY$  and  $Y = Y + 1$  in every step. The machine stops at  $X \geq N$ .

51. For  $X = 3$ ,  $Y = 2$  and  $N = 100$ , how many steps are performed before the machine stops?

- (1) 2      (2) 3      (3) 4      (4) 5

52. In the above question (51), what is the final value of X?

- (1) 6      (2) 20      (3) 72      (4) 360

53. In the above question (51), what is the final value of Y?

- (1) 4      (2) 5      (3) 6      (4) 20

54. If the value of N is changed to 500, what would be the final value of X?

- (1) 360      (2) 500  
(3) 560      (4) 2160

55. If  $X = 2$  and  $Y = 3$ , what should be the minimum value of N such that final value of Y is 7?

- (1) 300      (2) 360  
(3) 720      (4) 860

**Directions for questions 56 to 60:** Refer to the following statements and answer the questions:

Seven students Priya, Ankit, Raman, Sunil, Tony, Deepak and Vicky take a series of tests. No two students get similar marks. Vicky always scores more than Priya. Priya always scores more than Ankit. Each time either Raman scores the highest and Tony gets the least, or alternatively Sunil scores the highest and Deepak or Ankit scores the least.

56. If Sunil is ranked sixth and Ankit is ranked fifth, which of the following can be true?

- (1) Vicky is ranked first or fourth  
(2) Raman is ranked second or third  
(3) Tony is ranked fourth or fifth  
(4) Deepak is ranked third or fourth

57. If Raman gets the highest, Vicky should be ranked not lower than:

- (1) Second      (2) Third  
(3) Fourth      (4) Fifth

58. If Raman is ranked second and Ankit is ranked first, which of the following must be true?

- (1) Sunil is ranked third  
(2) Tony is ranked third  
(3) Priya is ranked sixth  
(4) None of these.



59. If Sunil is ranked second, which of the following can be true?

- (1) Deepak gets more than Vicky
- (2) Vicky gets more than Sunil
- (3) Priya gets more than Raman
- (4) Priya gets more than Vicky

60. If Vicky is ranked fifth, which of the following must be true?

- (1) Sunil scores the highest
- (2) Raman is ranked second
- (3) Tony is ranked third
- (4) Ankit is ranked second

61. In 2002, according to a news poll, 36% of the voters had leaning towards party "Y". In 2004, this figure rose to 46%. But in another survey the percentage was down to 40%. Therefore, the party "Z" is likely to win the next election. Which of the following, if true, would seriously weaken the above conclusion?

- (1) People tend to switch their votes at the last minute.
- (2) It has been showed that 85% of the voters belonging to the party "Y" vote in an election as compared to 80% of the voters belonging to party "Z".
- (3) 35% of people favour party "Z".
- (4) No one can predict how people will vote.

62. Inflation rose by 5% over the second quarter, by 4% during the first quarter and higher than 3% recorded during the same time last year. However, the higher price index did not seem to alarm National stock Index as stock prices remain steady.

Which of the following, if true, could explain the reaction of National stock Index?

- (1) RBI announced that it will take necessary corrective measures
- (2) Stock prices were steady because of a fear that inflation would continue.

(3) Economists warned that inflation would continue.

(4) Much of the quarterly increase in the price level was due to a summer drought effect on food price.

**Direction for question 63:** Pick up the appropriate analogy.

63. Birth : Dirge

- (1) Sunset : sunrise
- (2) security check : arrival
- (3) marriage : alimony
- (4) welcome address : vote of thanks

64. Beautiful beaches attract people, no doubt about it. Just look at this city's beautiful beaches, which are among the most overcrowded beaches in the state.

Which of the following exhibits a pattern of reasoning most similar to the one exhibited in the argument above?

- (1) Moose and bear usually appear at the same drinking hole at the same time of day. Therefore, moose and bear must grow thirsty at about the same time.
- (2) Children who are scolded severely tend to misbehave more often than other children. Hence if a child is not scolded severely that child is less likely to misbehave.
- (3) This software programme helps increase the work efficiency of its users. As a result, these users have more free time for other activities.
- (4) During weather my dog suffers from fleas more than during cooler weather. Therefore, fleas must thrive in a warm environment.

65. No national productivity measures are available for underground industries that may exist but remain unreported. On the other hand, at least some industries that are run entirely by self – employed industrialists are included in national productivity measures.

From the information given above, it can be validly concluded that

- (1) there are at least some industries run entirely by self – employed industrialists that are underground industries
- (2) no industries that are run entirely by self – employed industrialists operate underground.
- (3) there are at least some industries other than those run entirely by self – employed industrialists that are underground industries.
- (4) there are at least some industries run entirely by self – employed industrialists that are not underground industries

- 66.** Nilu has never received a violation from the Federal Aviation Administration during her 16 – year flying career. Nilu must be a great pilot.

Which of the following can be said about the reasoning above?

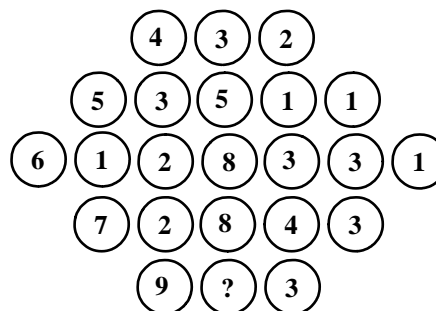
- (1) The definitions of the terms create ambiguity
- (2) The argument uses circular reasoning
- (3) The argument is built upon hidden assumptions
- (4) The argument works by analogy

- 67.** Many people argue that the death penalty deters murder. However, the notorious killer Tom Hanks deliberately moved to a state that imposes the death penalty just before embarking on a series of ferocious murders. Thus, it seems clear that the existence of the death penalty does not serve as a deterrent to murder.

The argument above may best be characterized as:

- (1) an appeal to emotion.
- (2) a flawed analogy.
- (3) a general conclusion based on a specific example.
- (4) circular reasoning.

- 68.** What number should replace the question mark?



- (1) 1                      (2) 4                      (3) 12                      (4) 6

- 69.** The fewer restrictions there are on the advertising of legal services, the more lawyers there are who advertise their services, and the lawyers who advertise a specific service usually charge less for that service than lawyers who do not advertise. Therefore if the state removes any of its current restrictions, such as the one against advertisements that do not specify fee arrangements, overall consumer legal costs will be lower than if the state retains its current restrictions.

If the statements above are true, which of the following must be true?

- (1) Some lawyers who now advertise will charge more for specific services if they do not have to specify fee arrangements in the advertisements.
- (2) More consumers will use legal services if there are fewer restrictions on the advertising of legal services.
- (3) If the restrictions against advertisements that do not specify fee arrangements is removed, more lawyers will advertise their services.
- (4) If more lawyers advertise lower prices for specific services, some lawyers who do not advertise will also charge less than they currently charge for those services.

70. Which of the following, if true, would most seriously weaken the argument concerning overall consumer legal costs?

- (1) The state is unlikely to remove all of the restrictions that apply solely to the advertising of legal services.
- (2) Lawyers who do not advertise generally provide legal services of the same quality as those provided by lawyers who do advertise.
- (3) Most lawyers who now specify fee arrangements in their advertisements would continue to do so even in the specification were not required.
- (4) Most lawyers who advertise specific services do not lower their fees for those services when they begin to advertise.

### Section III - Quantitative

**For all questions in this section, correct answers carry 1 mark each.**

71. A train travelling at 36 kmph crosses a platform in 20 seconds and a man standing on the platform in 10 seconds. What is the length of the platform in meters?
- (1) 240 meters      (2) 100 meters  
(3) 200 meters      (4) 300 meters
72. By walking at  $\frac{4}{5}$ th of his usual speed, a man reaches office 10 minutes later than usual. What is his usual time?
- (1) 20 min              (2) 40 min  
(3) 30 min              (4) 50 min
73. A man and a woman 81 miles apart from each other, start travelling towards each other at the same time. If the man covers 5 miles per hour to the women's 4 mile per hour, how far will the woman have travelled when they meet?
- (1) 27                      (2) 36  
(3) 45                      (4) None of these
74. Two people were walking in opposite directions. Both of them walked 6 miles forward then took right and walked 8 miles. How far is each from starting positions?
- (1) 14 miles and 14 miles  
(2) 10 miles and 10 miles  
(3) 6 miles and 6 miles  
(4) 12 miles and 12 miles
75. Four men and three women can do a job in 6 days. When 5 men and 6 women work on the same job, the work gets completed in 4 days. How long will 2 women and 3 men take to do the job?
- (1) 18              (2) 10              (3) 8.3              (4) 12
76. Ram completes 60% of a task in 15 days and then takes the help of Rahim and Rachel. Rahim is 50% as efficient as Ram is and Rachel is 50% as efficient as Rahim is. In how many more days will they complete the work?
- (1)  $\frac{121}{3}$               (2)  $\frac{51}{7}$               (3)  $\frac{40}{7}$               (4)  $\frac{65}{7}$
77. A and B can do a piece of work in 21 and 24 days respectively. They start the work together and after some days A leaves the work and B completes the remaining work in 9 days. After how many days did A leave?
- (1) 5                      (2) 7                      (3) 8                      (4) 6
78. A trader makes a profit equal to the selling price of 75 articles when he sold 100 of the articles. What % profit did he make in the transaction?
- (1) 33.33%              (2) 75%  
(3) 300%                      (4) 150%
79. In a 100 M race, if A gives B a start of 20 meters, then A wins the race by 5 seconds. Alternatively, if A gives B a start of 40 meters the race ends in a dead heat. How long does A take to run 200 M?
- (1) 10 seconds              (2) 20 seconds  
(3) 30 seconds              (4) 40 seconds
80. A 4 cm cube is cut into 1cm cubes. What is the percentage increase in the surface area after such cutting?
- (1) 4%                      (2) 300%  
(3) 75%                      (4) 400%
81. A number G236G0 can be divided by 36 if G is:
- (1) 8  
(2) 6  
(3) 1  
(4) More than one values are possible.

**82.** Amit can do a work in 12 days and Sagar in 15 days. If they work on it together for 4 days, then the fraction of the work that is left is:

- (1)  $\frac{3}{20}$                       (2)  $\frac{3}{5}$   
 (3)  $\frac{2}{5}$                          (4)  $\frac{2}{20}$

**83.** A rectangular park 60 m long and 40 m wide has two concrete crossroads running in the middle of the park and rest of the park has been used as a lawn. If the area of the lawn is 2109 sq. m, then what is the width of the road?

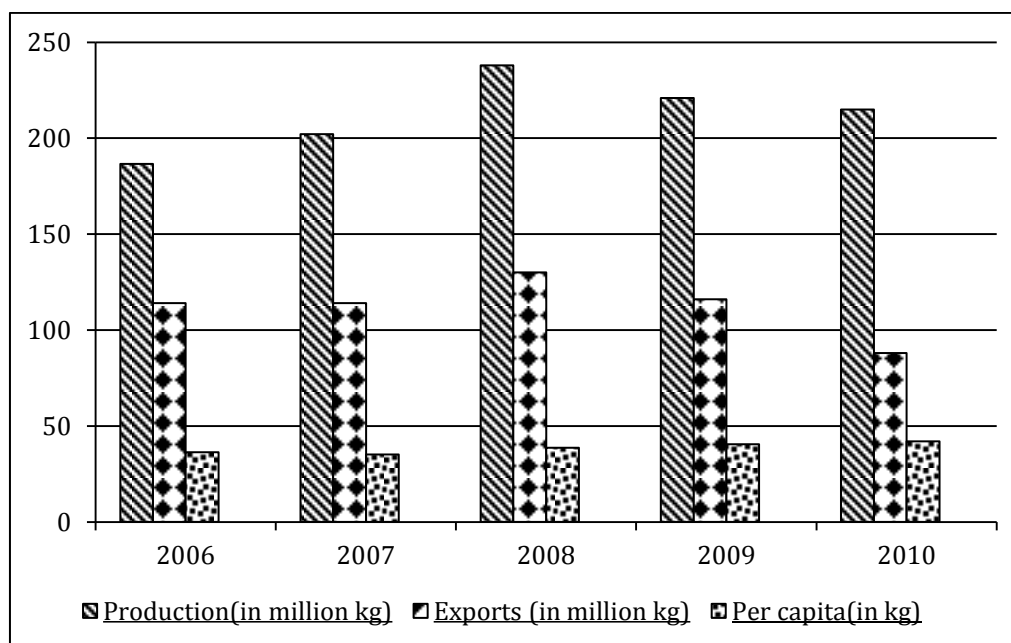
- (1) 2.91 m                      (2) 3 m  
 (3) 5.82 m                      (4) None of these

**84.** A bag contains 5 white and 3 black balls; another bag contains 4 white and 5 black balls. From any one of these bags a single draw of two balls is made. Find the probability that one of them would be white and other black ball.

- (1)  $\frac{275}{504}$                       (2)  $\frac{5}{18}$   
 (3)  $\frac{5}{9}$                             (4) None of these

**Directions for questions 85 to 88:** Answer the questions on the basis of the information given below.

The following bar graph gives the production, exports and per capita consumption of rice in country A, for the five years from 2006 to 2010.



Consumption = Production - Exports

Per Capita Consumption = (Consumption) ÷ (Population)

**85.** In which year was the percentage increase in the consumption of rice over the previous year, the highest?

- (1) 2007                         (2) 2008  
 (3) 2009                         (4) 2010

**86.** What is the population of country A in the year 2008 (in million)?

- (1) 2.64 million                (2) 2.72 million  
 (3) 2.79 million                (4) 2.85 million

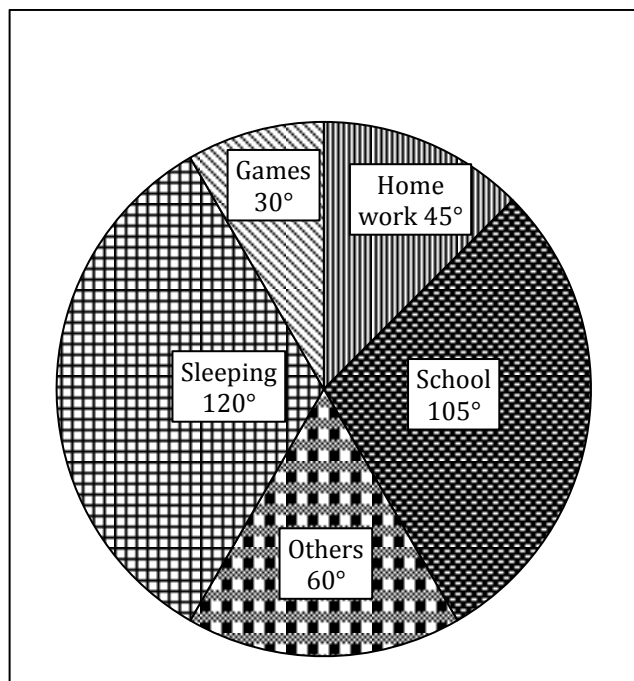
87. The ratio of exports to consumption in the given period was the highest in the year

- (1) 2006                      (2) 2007  
(3) 2008                      (4) 2009

88. In which of the given years was the population of country A, the highest?

- (1) 2007                      (2) 2008  
(3) 2009                      (4) 2010

**Directions for questions 89 to 93:** The following pie chart shows the hourly distribution (in degrees) of all the major activities of a student.



89. The percentage of time which he spends in school is:

- (1) 38%                      (2) 30%  
(3) 40%                      (4) 25%

90. How much time (in per cent) does he spend in games in comparison to sleeping?

- (1) 30%                      (2) 40%  
(3) 25%                      (4) None of these

91. If he spends the time in games equal to the home work and remains constant in other activities, then the percentage decrease in time of sleeping:

- (1) 15%                      (2) 12.5%  
(3) 20%                      (4) None of these

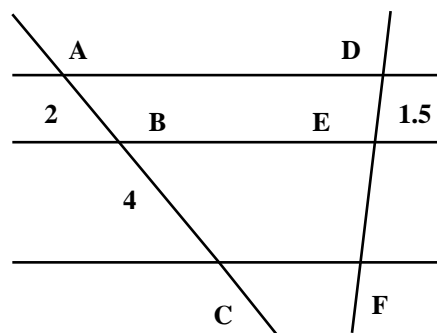
92. What is the difference in time (in hours) spent in school and in home work?

- (1) 2                      (2) 3                      (3) 4                      (4) 8

93. If he spends  $1/3^{\text{rd}}$  time of homework in Mathematics then the number of hours he spends in rest of the subjects in home work:

- (1) 1                      (2) 2                      (3) 3                      (4) 4

94. Three parallel lines are cut by two transversals as shown in the given figure. If  $AB = 2$  cm,  $BC = 4$  cm and  $DE = 1.5$  cm, then the length of  $EF$  is:



- (1) 2 cm                      (2) 3 cm  
(3) 3.5 cm                      (4) 4 cm

95.  $\log_{10} 10 + \log_{10} 10^2 + \dots + \log_{10} 10^n$

- (1)  $n^2 + 1$   
(2)  $n^2 - 1$   
(3)  $\frac{(n^2 + n)}{2} \cdot \frac{n(n + 1)}{3}$   
(4)  $\frac{n^2 + n}{2}$

96. The sum of a number and its reciprocal is thrice the difference of the number and its reciprocal. The number is:

(1)  $\pm \sqrt{2}$                       (2)  $\pm \frac{1}{\sqrt{2}}$

(3)  $\pm \frac{1}{\sqrt{3}}$                       (4)  $\pm \sqrt{3}$

97. The total number of Natural numbers that lie between 10 and 300 and are divisible by 9 is

- (1) 32                      (2) 30                      (3) 33                      (4) 34

98. If  ${}^nC_x = 56$  and  ${}^nP_x = 336$ , find  $n$  and  $x$ .

- (1) 7, 3                      (2) 8, 4
- 
- (3) 8, 3                      (4) 9, 6

99. One side of an equilateral triangle is 24 cm. The midpoints of its sides are joined to form another triangle whose midpoints are in turn joined to form still another triangle. This process continues indefinitely. Find the sum of the perimeters of all the triangles.

- (1) 144 cm                      (2) 72 cm
- 
- (3) 536 cm                      (4) 676 cm

100. The probability that a leap year selected at random contains either 53 Sundays or 53 Mondays, is:

- (1)
- $17/53$
- (2)
- $1/53$
- 
- (3)
- $3/7$
- (4) None of these

101. Find the intercepts made by the line  $3x + 4y - 12 = 0$  on the axes:

- (1) 2 and 3                      (2) 4 and 3
- 
- (3) 3 and 5                      (4) None of these

102. The average of 4 distinct prime numbers  $a, b, c, d$  is 35, where  $a < b < c < d$ .  $a$  and  $d$  are equidistant from 36 and  $b$  and  $c$  are equidistant from 34 and  $a, b$  are equidistant from 30 and  $c$  and  $d$  are equidistant from 40. The difference between  $a$  and  $d$  is:

- (1) 30                      (2) 14
- 
- (3) 21                      (4) Cannot be determined

103. Ramsukh bhai sells rasgulla (a favourite Indian sweets) at Rs. 15 per kg. A rasgulla is made up of flour and sugar in the ratio 5 : 3. The ratio of price of sugar and flour is 7 : 3 (per kg). Thus he earns 66  $\frac{2}{3}$  profit. What is the cost price of sugar?

- (1) Rs. 10/kg                      (2) Rs. 9/kg
- 
- (3) Rs. 18/kg                      (4) Rs. 14/kg

104. A reduction of 20% in the price of sugar enables a person to purchase 6 kg more for Rs. 240. What is the original price per kg of sugar?

- (1) Rs. 10/kg                      (2) Rs. 8/kg
- 
- (3) Rs. 6/kg                      (4) Rs. 5/kg

105. A solid sphere is melted and recast into a right circular cone with a base radius equal to the radius of the sphere. What is the ratio of the height and radius of the cone so formed?

- (1) 4 : 3                      (2) 2 : 3
- 
- (3) 3 : 4                      (4) None of these

106. The speed of scooter, car and train are in the ratio of 1 : 4 : 16. If all of them cover equal distance then the ratio of time taken/velocity for each of the vehicle is:

- (1) 256 : 16 : 1                      (2) 1 : 4 : 16
- 
- (3) 16 : 4 : 1                      (4) 16 : 1 : 4

107. B is twice efficient as A and A can do a piece of work in 15 days. A started the work and after a few days B joined him. They completed the work in 11 days, from the starting. For how many days did they work together?

- (1) 1 day                      (2) 2 days
- 
- (3) 6 days                      (4) 5 days

108. A, B, C and D purchased a restaurant for Rs. 56 lakhs. The contribution of B, C and D together is 460% that of A, alone. The contribution of A, C and D together is 366.66% that of B's contribution and the contribution of C is 40% that of A, B and D together. The amount contributed by D is:

- (1) 10 lakhs            (2) 12 lakhs  
(3) 16 lakhs            (4) 18 lakhs

**109.** The salary of Raju and Ram is 20% and 30% less than the salary of Saroj respectively. By what percent is the salary of Raju more than the salary of Ram?

- (1) 33.33%            (2) 50%  
(3) 15.18%            (4) 14.28%

**110.** The radius of a wire is decreased to one - third and its volume remains the same. The new length is how many times the original length?

- (1) 2 times            (2) 4 times  
(3) 5 times            (4) 9 times



## Section IV – General English

**For all questions in this section, correct answers carry 1 mark each.**

**Directions for questions 111 to 116:** Read the following passage and answer the questions that follow.

**D. H. Lawrence - 1885 - 1930: The Supreme Triumph**

For man, the vast marvel is to be alive. For man as for flower and beast and bird, the supreme triumph is to be most vividly, most perfectly alive. Whatever the unborn and the dead may know, they cannot know the beauty, the marvel of being alive in the flesh. The dead may look after the afterwards. But the magnificent here and now of life in the flesh is ours, and ours alone, and ours only for a time. We ought to dance with rapture, that we should be alive and in the flesh, and part of the living, incarnate cosmos. I am part of the sun as my eye is the part of me. That I am part of the earth my feet below know the perfectly, and my blood is part of the sea. My soul knows that I am a part of the human race, my soul is an inorganic part of the great human soul, as my spirit is a part of my nation. In my own very self, I am part of my family. There is nothing of me that is alone and absolute except my mind, and we shall find that the mind has no existence by itself, it is only the glitter of the sun on the surface of the waters. – Apocalypse, 1931.

**111.** By *triumph* the author means -

- (1) sin                      (2) loss  
(3) sorrow                (4) victory

**112.** When the dead look after the afterwards the living should look at life

- (1) forever  
(2) for some months  
(3) for only a short while  
(4) in the past

**113.** By *rapture* the author means an emotion involving great

- (1) trepidation            (2) thrill  
(3) fear                    (4) joy

**114.** By the last line “It .....waters”, the author means that the mind is only

- (1) a mirage                (2) an illusion  
(3) magic                   (4) a reflection

**115.** The tone of this passage is

- (1) social                    (2) moral  
(3) reflective              (4) philosophical

**116.** The most suitable title for this passage would be -

- (1) The Surface of the Waters  
(2) My Mind  
(3) The Human Race  
(4) Alive and Kicking

**Directions for questions 117 to 119:** Choose the correct option.

**117.** The repetition of messages or the use of superfluous expressions is called .....

- (1) redundancy            (2) hyperbole  
(3) alliteration             (4) allegory

**118.** Ink : pen : paper

- (1) watch : dial : strap  
(2) book : paper : words  
(3) farmer : plough : field  
(4) colour : brush : canvas

**119.** realia

- (1) theoretical constructs  
(2) fabricated examples  
(3) objects from real life  
(4) based on reality

**Directions for questions 120 to 125:** Choose the grammatically correct option from the following.

**120.**

- (1) 'Are these gloves belonging to you?' she asked.
- (2) 'Does this gloves belong to you?' she asked.
- (3) 'Do these gloves belongs to you?' she asked.
- (4) 'Do these gloves belong to you?' she asked.

**121.**

- (1) I live in a house in a street in the countryside. The street is called "Bear Street" and the house is old – more than 100 years old!
- (2) I live in the house in the street countryside. The street is called "Bear Street" and the house is old – more than 100 years old!
- (3) I live in a house in the street in the countryside. The street is called "Bear Street" and the house is old – more than 100 years old!
- (4) I live in a house in a street in the countryside. The street is called "Bear Street" and a house is old – more than 100 years old!

**122.**

- (1) The teachers will be able to visit our schools and compare our teaching methods to their own.
- (2) The teachers will be able to pay a visit to our schools and compare teaching methods for their own.
- (3) The teachers will be able to visit our schools and compare our teaching methods with their own.
- (4) The teachers will be able to visit our school and compare their teaching method with their own.

**123.**

- (1) Could you give me the amount that you filled out in the check which was sent?
- (2) Could you give me the amount what you filled out in the check you sent?

- (3) Could you give me the amount for which you filled out in the check you sent?
- (4) Could you give me the amount wherein you filled out in the check you sent?

**124.** (1) I have completed the work yesterday.

- (2) I did completed the work yesterday.
- (3) I have had completed the work yesterday.
- (4) I completed the work yesterday.

**125.**

- (1) The train couldn't stop in time and crashed with the truck.
- (2) The train couldn't stop in time and crashed into the truck.
- (3) The train couldn't stop in time and crashed against the truck.
- (4) The train couldn't stop in time and crashed before the truck.

**Directions for questions 126 to 130:** Choose the correct synonymous word or description for each italicized word.

The Jan Lokpal Bill, also *referred to* (126) as the citizens' ombudsman bill, is a proposed *independent* (127) anti – corruption law in India. Anti – corruption social activists proposed it as a more effective improvement on the original Lokpal Bill, which is currently being proposed by the government of India. The Jan Lokpal Bill aims to effectively *deter* (128) corruption, redress *grievances* (129) of citizens, and protect whistle – blowers. If made into law, the bill would create an independent *ombudsman* (130) body called the Lokpal. It would be empowered to register and investigate complaints of corruption against politicians and bureaucrats without prior government approval. (Source: Wikipedia)

**126.** (1) described as (2) included in  
(3) supported for (4) reformed as

**127.** (1) self – centered (2) impartial  
(3) self – seeking (4) self - possessed

**128.** (1) swell (2) prevent  
(3) propel (4) lucubrate

129. (1) complaints (2) dishonesty  
(3) committees (4) opinions

- (1) security guards (2) forward  
(3) objectionable (4) no error

130.

- (1) a government appointee who investigates complaints by private persons against bureaucrats and/or politicians.  
(2) a government appointee who investigates complaints by government against common citizens.  
(3) a government appointee who investigates complaints by citizens against citizens.  
(4) a government appointee who investigates complaints by government against government officials.

**Directions for questions 131 to 134:** In the following sentences, one word or a phrase is used wrongly. Choose the word that must be changed or modified or deleted to make the sentence correct. There are sentences without any errors too.

131. The committee **came to** a decision **to discuss** in detail **about** assorted problems that people have been facing for **a long time**.

- (1) came to (2) to discuss  
(3) about (4) a long time

132. I know you must not **see eye to eye** with the philosophy of Ramkrishna but you must admit that he **had had** tremendous **influence over** a great many followers.

- (1) see eye to eye (2) had had  
(3) influence over (4) no error

133. The Principal **inquired with** the students if they would like their teacher **to repeat** the lesson **again**.

- (1) inquired with (2) to repeat  
(3) again (4) no error

134. One of the **security guards** rushed **forward**; unlocked the gate and asked whether I had anything **objectionable**.

**Directions for questions 135 and 136:** Rearrange the following sentence fragment (P, Q, R and S) to make meaningful sentences.

135. I always told them ..... and consideration for me.

- P. How for me she  
Q. Always exuded warmth  
R. Was like a family's  
S. Elder and how she has

- (1) PRSQ (2) PQSR  
(3) PRQS (4) SQPR

136. A year or ..... foreign languages

- P. I picked up a liking for learning  
Q. the largest urban area and primary  
R. so after leaving Bangkok  
S. city of Thailand and a place of unique beauty

- (1) RPQS (2) RQSP  
(3) RSPQ (4) SPQR

**Directions for questions 137 to 139:** Choose the correct option.

137. This book ..... five sections

- (1) comprises of (2) comprises  
(3) consists (4) comprises to

138. My grandfather left most of his money to an NGO; the rest went directly to my daughter and .....

- (1) I (2) me  
(3) myself (4) myself too

139. Parts of a country behind the coast or a river's banks

- (1) Isthmus (2) Archipelago  
(3) Hinterland (4) Swamps

**Directions for questions 140 and 141:** In the questions below, the sentences have been given in Active/Passive voice. From the given alternatives, choose the one which best expresses the given sentence in Passive /Active voice

**140.** Who is creating this mess?

- (1) Who has been created this mess?
- (2) By whom has this mess been created?
- (3) By whom this mess is being created?
- (4) By whom is this mess being created?

**141.** You should open the wine about three hours before you use it.

- (1) Wine should be opened about three hours before use.
- (2) Wine should be opened by you three hours before use.
- (3) Wine should be opened about three hours before you use it.
- (4) Wine should be opened about three hours before it is used.

**Direction for question 142:** In the questions below, the passage consist of six sentences. The first and the sixth sentences are given. (S1, S6) The middle four sentences in each have been removed and jumbled up. These are labeled as P, Q, R and S. Find out the proper order for the four sentences.

S1: Metals are today being replaced by polymers in many applications.

P: Above all, they are cheaper and easier to process making them a viable alternative to metals.

Q: Polymers are essentially a long chains of hydrocarbons molecules.

R: Today polymers as strong as metals have been developed.

S: These have replaced the traditional chromium – plated metallic bumpers in cars.

S6: Many Indian Institutes of Science and Technology run special programmes on polymer science.

The proper sequence should be:

- 142.** (1) QRSP                      (2) RSQP  
(3) RQSP                      (4) QRPS

**Directions for questions 143 and 144:** Choose the word which best expresses the meaning of the given word.

**143.** FRUGALITY

- (1) Foolishness              (2) Extremity  
(3) Enthusiasm              (4) Economy

**144.** HARBINGER

- (1) Messenger              (2) Steward  
(3) Forerunner              (4) Pilot

**Directions for questions 145 and 146:** Choose the word which is the exact OPPOSITE of the given words.

**145.** EXODUS

- (1) Influx                      (2) Home - coming  
(3) Return                      (4) Restoration

**146.** EQUANIMITY

- (1) Resentment              (2) Dubiousness  
(3) Duplicity                      (4) Excitement

**Direction for question 147:** Find the Odd one out from the group of words.

- 147.** (1) Bludgeon              (2) Dragon  
(3) Black Jack              (4) Order

**Direction for question 148:** Each pair of capitalized words given is followed by four pair of words. Select the pair that DOES NOT expresses a relationship similar to that expressed by the capitalized pair.

- 148.** KERNAL                      :              SHELL  
(1) Caterpillar                      :              Pupa  
(2) Larva                              :              Cocoon  
(3) Lassitude                      :              Syncope  
(4) Passenger                      :              Car

149. Both of them ..... since their childhood.

- (1) are working here
- (2) work here
- (3) have been working
- (4) are liking to work

150. Although initial investigations pointed towards him .....

- (1) the preceding events corroborated his involvement in the crime.
- (2) the additional information confirmed his guilt
- (3) the subsequent events established that he was guilty
- (4) the subsequent events proved that he was innocent

## ANSWER KEY

Q.	Ans.	Q.	Ans.	Q.	Ans.	Q.	Ans.	Q.	Ans.	Q.	Ans.
1	4	26	1	51	3	76	3	101	2	126	1
2	1	27	3	52	4	77	2	102	2	127	2
3	4	28	2	53	3	78	3	103	4	128	2
4	2	29	1	54	4	79	3	104	1	129	1
5	2	30	1	55	1	80	2	105	4	130	1
6	2	31	2	56	4	81	1	106	1	131	3
7	1	32	4	57	3	82	3	107	2	132	2
8	1	33	2	58	4	83	2	108	4	133	3
9	1	34	1	59	1	84	1	109	4	134	4
10	4	35	3	60	1	85	2	110	4	135	1
11	3	36	1	61	3	86	3	111	4	136	2
12	4	37	1	62	4	87	1	112	3	137	2
13	1	38	4	63	3	88	4	113	4	138	2
14	1	39	2	64	4	89	2	114	4	139	3
15	4	40	4	65	4	90	3	115	4	140	4
16	4	41	3	66	3	91	2	116	4	141	4
17	4	42	3	67	3	92	3	117	1	142	1
18	2	43	4	68	4	93	2	118	4	143	4
19	1	44	3	69	3	94	2	119	3	144	3
20	1	45	4	70	4	95	4	120	4	145	1
21	3	46	4	71	2	96	1	121	1	146	4
22	3	47	1	72	2	97	1	122	3	147	4
23	3	48	2	73	2	98	3	123	1	148	4
24	2	49	2	74	2	99	1	124	4	149	3
25	4	50	3	75	3	100	3	125	2	150	4