

## BBA – CBS : 2010

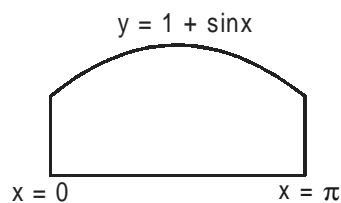
### Answer Key Serial No. 11

Q. No.	Answer key	Q. No.	Answer key	Q. No.	Answer key	Q. No.	Answer key
1	B	31	B	61	C	91	B
2	C	32	B	62	C	92	A
3	C	33	B	63	A	93	D
4	C	34	B	64	D	94	A
5	C	35	C	65	A	95	C
6	D	36	A	66	D	96	B
7	C	37	C	67	C	97	D
8	D	38	A	68	D	98	B
9	B	39	D	69	C	99	D
10	B	40	A	70	C	100	B
11	B	41	D	71	B	101	D
12	D	42	C	72	B	102	A
13	D	43	B	73	B	103	C
14	B	44	C	74	D	104	B
15	D	45	B	75	B	105	C
16	C	46	D	76	D	106	D
17	C	47	A	77	A	107	D
18	B	48	D	78	B	108	C
19	B	49	B	79	A	109	B
20	D	50	D	80	C	110	B
21	D	51	C	81	B	111	A
22	B	52	D	82	A	112	C
23	C	53	B	83	C	113	B
24	C	54	A	84	B	114	B
25	D	55	C	85	D	115	C
26	A	56	C	86	B	116	A
27	C	57	B	87	B	117	C
28	A	58	A	88	A	118	C
29	B	59	D	89	A	119	B
30	C	60	A	90	C	120	A

1. If  $y = \frac{1}{1+x^{n-m} + x^{p-m}} + \frac{1}{1+x^{m-n} + x^{p-n}} + \frac{1}{1+x^{m-p} + x^{n-p}}$ ,  
 $\frac{dy}{dx}$  is  
 (A)  $x^{n-p-1}$  (B) 0 (C)  $x^{n-m-1}$  (D)  $x^{m-p-1}$
2. In an exam, the average was found to be 50 marks. After deducting computational errors the marks of 100 candidates had to be changed from 90 to 60 each & the average came down to 45 marks. The total number of candidates who took the exam were  
 (A) 200 (B) 300 (C) 600 (D) 150
3. The real number  $x$  when added to its inverse gives the minimum value of the sum at  $x$  equal to  
 (A) 1 (B) 2 (C) -2 (D) -1
4. The probability that a boy gets a scholarship is 0.9 and that a girl will get it is 0.8. The probability that at least one of them gets the scholarship is  
 (A) 0.75 (B) 0.50 (C) 0.98 (D) 0.90
5. If  $a, b, c$  are three successive terms of a geometric series of positive real numbers and  $x > 0$ ,  $\log_a x, \log_c x$  are in  
 (A) A.P. (B) G.P. (C) H.P. (D) None of these
6. The value of  $1^3 + 2^3 + 3^3 + \dots + n^3$   
 (A)  $\frac{n(n+1)(2n+1)}{6}$  (B)  $\left[\frac{n(n+1)}{2}\right]^3$   
 (C)  $[1 + 2 + \dots + n]^2$  (D)  $[1^2 + 2^2 + \dots + n^2]^2$
7. The sum of  ${}^n C_0 + {}^n C_1 + {}^n C_2 + \dots + {}^n C_n$  is  
 (A)  $n^n$  (B)  $n!$  (C)  $2^n$  (D)  $2n!$
8. The expression  $5^{2n} - 2^{3n}$  has a factor  
 (A) 3 (B) 7 (C) 10 (D) 17
9. The last digit in the expansion of  $(41)^n - 1$  when  $n$  is any +ve integer is  
 (A) 2 (B) 0 (C) 1 (D) None of these
10. The angle of elevation of the top of a tower from two horizontal points at distances of  $a$  and  $b$  from the tower are  $\alpha$  &  $(90^\circ - \alpha)$  respectively. The height of the tower will be  
 (A)  $ab$  (B)  $\sqrt{ab}$  (C)  $\frac{\sqrt{a}}{b}$  (D)  $\frac{\sqrt{b}}{a}$

11. The point of discontinuity for  $f(x) = \frac{1}{\log|x|}$  are  
 (A) 0,  $\pm 1$  (B) 1, -1 (C) 0, 1 (D) 0, -1
12. If  ${}^n C_{r-1} = 36$ ,  ${}^n C_r = 84$  and  ${}^n C_{r+1} = 126$ , then r is equal to  
 (A) 1 (B) 2 (C) 3 (D) None of these
13. The circumference of the front wheel of a cart is 30 ft long and that of the back wheel is 36 ft long. What is the distance travelled by the cart, when the front wheel has done five more revolutions than the rear wheel?  
 (A) 20 ft (B) 25 ft (C) 750 ft (D) 900 ft
14. If time at this moment is 9 P.M., what will be the time 23999999992 hours later?  
 (A) 1 a.m. (B) 1 p.m. (C) 4 p.m. (D) 2 a.m.
15. A tap can fill the tank in 15 minutes and another can empty it in 8 minutes. If the tank is already half full and both the taps are opened together, the tank will be:  
 (A) Filled in 12 min (B) Emptied in 12 min (C) Filled in 8 min (D) Emptied in 8 min
16. It was calculated that 75 men could complete a piece of work in 20 days. When work was scheduled to commence, it was found necessary to send 25 men to another project. How much longer will it take to complete the work?  
 (A) 10 (B) 20 (C) 30 (D) 40
17. How many even integers n, where  $100 \leq n \leq 200$ , are divisible neither by seven nor by nine?  
 (A) 40 (B) 37 (C) 39 (D) 38
18. Mahesh purchased three calculators and four pen stands for Rs.2,140. He then purchased an additional calculator and five pen stands for Rs.1,355. How much did he spend on purchasing only the calculators?  
 (A) Rs. 1,575 (B) Rs. 1,920 (C) Rs. 1,440 (D) Rs. 1,540
19. ABCD is a square whose side is 2 cm each; taking AB and AD as axes, the equation of the circle circumscribing the square is:  
 (A)  $x^2 + y^2 = (x + y)$  (B)  $x^2 + y^2 = 2(x + y)$  (C)  $x^2 + y^2 = 4$  (D)  $x^2 + y^2 = 16$
20. X and Y are two variable quantities. The corresponding values of X and Y are given below:
- |    |    |    |   |    |    |
|----|----|----|---|----|----|
| X: | 3  | 6  | 9 | 12 | 24 |
| Y: | 24 | 12 | 8 | 6  | 3  |
- Then the relationship between X and Y is given by (where ' $\propto$ ' stands for proportionality.):  
 (A)  $X + Y \propto X - Y$  (B)  $X + Y \propto \frac{1}{X - Y}$  (C)  $X \propto Y$  (D)  $X \propto \frac{1}{Y}$

21. The vectors  $\hat{i} + 2p\hat{j} + 4q\hat{k}$  and  $\hat{i} + 4p\hat{j} + 2q\hat{k}$  are  
 (A) Orthogonal if  $p = q$  (B) Orthogonal if  $p = -q$   
 (C) Orthogonal if  $p^2 = q^2 - 1$  (D) Never Orthogonal
22. The number of values of  $k$  for which the system of equation:  
 $(k + 1)x + 8y = 4k$   
 $kx + (k + 3)y = 3k - 1$   
 has infinitely many solutions, is  
 (A) 0 (B) 1 (C) 2 (D) Infinite
23. A committee of 5 students is to be formed from 6 girls and 4 boys. The probability that the committee has exactly 2 boys is  
 (A)  $5/12$  (B)  $1/7$  (C)  $10/21$  (D)  $11/24$
24. Rohan found that for a function  $f$ ,  $f(x) = 3x - 5$  and  $f(g(x)) = 2x$ , then the function  $g(x) =$   
 (A)  $2x$  (B)  $x + 3$  (C)  $\frac{2x+5}{3}$  (D)  $2$
25. The value of the function  $f(x) = ax^2 + bx + 2$  at 1 is 3 and at 4 is 42, then  $b$  is  
 (A) 4 (B) 3 (C)  $-1$  (D)  $-2$
26. Kunal told Kanika that he has either  $a$  or  $b$  marbles. Further he stated that  $a, b$  satisfy the equation  $x^2 - p(x + 1) + c = 0$ , then  $(a + 1)(b + 1) =$   
 (A)  $1 - c$  (B)  $c - 1$  (C)  $1 + c$  (D)  $c$
27. If  $2^{2^x} = 16^{2^{3x}}$ , then  $x$  is  
 (A) 0 (B) 1 (C)  $-1$  (D)  $-2$
28. A window is in the shape as shown below. If the cost of glass is Rs.20 per sq unit, then the cost of covering the window with the glass is



- (A) Rs.  $(20\pi + 40)$  (B) Rs.  $(20\pi + 20)$  (C) Rs.  $(\pi + 20)$  (D) Rs.  $(2\pi + 40)$
29. The length of shadow of a vertical pole on the horizontal ground  $\sqrt{3}$  times of its height, then the angle of elevation of sun is  
 (A)  $15^\circ$  (B)  $30^\circ$  (C)  $45^\circ$  (D)  $60^\circ$

30. The difference between compound interest and simple interest for 3 years at the rate of 25% p.a. is Rs.143. What is the principal amount?  
 (A) Rs. 700 (B) Rs.706 (C) Rs.704 (D) Rs.709
31. A sum of Rs.2,236 is divided among A, B and C such that A receives 25% more than C and C receives 25% less than B. What is A's share in the amount?  
 (A) Rs.640 (B) Rs.780 (C) Rs.860 (D) Rs.890
32. If  $\log_8 \log_{13} (\sqrt{x+13} + \sqrt{x}) = 0$ , what is the value of x?  
 (A) 16 (B) 36 (C) 23 (D) 26
33. In a class test consisting of Maths and Physics, 80% passed in Mathematics and 50% passed in Physics. 15% failed in both the subjects. If 180 students passed in both the subjects, how many students failed in both the subjects?  
 (A) 80 (B) 60 (C) 90 (D) 50
34. The function  $f(x) = |x|, -1 \leq x \leq 2$  is  
 (A) Neither continuous nor differentiable at origin  
 (B) Continuous but not differentiable at origin  
 (C) Continuous and differentiable at all points on the given interval  
 (D) None of these
35. If  $\begin{vmatrix} x & 2 & 3 \\ -2 & 4 & 5 \\ 1 & 6 & 7 \end{vmatrix} = 8$ . What is the value of x?  
 (A) 9 (B) 8 (C) -9 (D) -8

**Directions for Questions 36-38:** Choose the set of words, that when inserted in the sentence with blanks, best fit the meaning of the sentence as a whole.

36. The teacher \_\_\_\_\_ about the child's \_\_\_\_\_.  
 (A) complained \_\_\_ impudence  
 (B) complaint \_\_\_ impudent  
 (C) impudence \_\_\_ complaint  
 (D) complained \_\_\_ impudent
37. A \_\_\_\_\_ player always gains success in any game if he is \_\_\_\_\_.  
 (A) skilled \_\_\_ bad  
 (B) ambidextrous \_\_\_ efficient  
 (C) skilled \_\_\_ ambidextrous  
 (D) efficient \_\_\_ skilled

38. After the final hearing the judge delivered the \_\_\_\_\_ and it was \_\_\_\_\_ by the jury.  
(A) verdict \_\_\_\_\_ applauded  
(B) verdict \_\_\_\_\_ celebrated  
(C) applause \_\_\_\_\_ judgement  
(D) judgement \_\_\_\_\_ thrown

**Directions for Questions 39-42:** Choose the correct antonym for the following words given in CAPITALS.

39. CLANDESTINE  
(A) Secret (B) Invisible (C) Hidden (D) Overt
40. SORDID  
(A) Clean (B) Squalid (C) Filthy (D) Despair
41. DEARTH  
(A) Life (B) Terror (C) Brightness (D) Abundance
42. ANOMALY  
(A) Radiation (B) Desperation (C) Regularity (D) Registry
43. Tick the correct usage of *DESPITE*  
(A) Despite the train was empty, he came and sat in front of me.  
(B) Despite the train being empty, he came and sat in front of me.  
(C) Despite of the train being empty, he came and sat in front of me.  
(D) The train, despite being empty, he came and sat in from of me.
44. Tick the appropriate use of *EITHER*  
(A) We either can go by bus or by car.  
(B) Either we can go by bus or car.  
(C) We can go either by bus or by car.  
(D) We can either go by bus or by car.
45. Tick the appropriate use of *HERE*  
(A) The weather in here is very cold.  
(B) The weather here is very cold.  
(C) Here the weather is very cold.  
(D) The weather is very cold here.
46. Tick the correct option  
(A) I go for a walk every morning.  
(B) I go for a morning walk every morning.  
(C) I go for a morning walk every day.  
(D) Everyday I go for a walk in the morning.

**Directions for Questions 47-50:** Choose the word closest in meaning to the words given in CAPITALS.

47. FATUOUS  
(A) Brainless (B) Fatal (C) Sensible (D) Tolerable
48. LACONIC  
(A) Milky (B) Wicked (C) Cheerful (D) Precise
49. GROVEL  
(A) Stones (B) Crawl (C) Ghastly (D) Salute
50. NEBULOUS  
(A) Starry (B) Porous (C) Various (D) Vague

**Directions for Questions 51-52:** In each of the questions the voice of the sentence needs to be changed from active to passive and vice versa. Choose the best option.

51. Brutus stabbed Ceasar  
(A) Brutus killed Ceasar.  
(B) Ceasar stabbed Brutus.  
(C) Ceasar was stabbed by Brutus.  
(D) Brutus loved Ceasar.
52. He taught me to read Persian  
(A) I learnt to read Persian.  
(B) He read Persian.  
(C) I read Persian.  
(D) I was taught to read Persian by him.

**Directions for Questions 53-55:** Identify the verb form of the nouns in each of the questions.

53. Success  
(A) Successful (B) Succeed (C) Successfully (D) Succeedingly
54. Enthusiasm  
(A) Enthuse (B) Enthusiastic (C) Enthusiast (D) Enthusiastically
55. Practice  
(A) Practically (B) Practical (C) Practise (D) Practising

**Directions for Questions 56-60:** The four sentences in each question need to be arranged in the proper sequence. Choose the sequence that you think is the correct one.

56. (p) This is often referred to as population explosion  
(q) Until about 800 AD the world's population stayed below 200 million  
(r) A major problem that faces the world today is the rapid growth of population  
(s) Since then it has risen dramatically  
(A) pqrs (B) prqs (C) rpqs (D) spqr

57. (p) It also has a small tail, little eyes and a long nose, called the trunk  
 (q) The elephant is the largest of all animals living and the strongest  
 (r) It is a strange looking animal with its thick legs and large, hanging ears  
 (s) The trunk is the elephant's peculiar feature and it puts it to many uses
- (A) pqrs                      (B) qrps                      (C) rpqs                      (D) spqr
58. (p) I had never seen a house on fire before  
 (q) I joined a large crowd of people who had gathered at the spot  
 (r) So one evening when I heard the fire engine rushing past my house, I ran out  
 (s) We could only see the fire from a distance, the police would not let us near
- (A) prqs                      (B) rqsp                      (C) qspr                      (D) spqr
59. (p) The human race is spread all over the world from the polar regions to the tropics  
 (q) Thus in India, people live chiefly on different kinds of grain and vegetables  
 (r) This depends partly on the climate and partly on the food that their region produces  
 (s) The people of whom it is made eat different kinds of food
- (A) srqp                      (B) rqps                      (C) qpsr                      (D) psrq
60. (p) Flunk one more course and I'm out  
 (q) Fortunately, as the new semester gets under way, my courses begin to interest me  
 (r) The first semester of my junior year at Princeton is a disaster and my grades show it  
 (s) D's and F's predominate and a note from the Dean puts me on academic probation
- (A) rspq                      (B) qpsr                      (C) sprq                      (D) prqs

**Directions for Questions 61-65:** Read the following passage and answer the questions, choosing the correct answer from among the choices given.

A broad consensus has emerged among experts in India that the government's focus should be on the larger concept of economic development rather than on the narrow, quantitative concept of growth. This is also a vindication of the fact that "trickle down" and social responsibility cannot be taken as a natural process within the ambit of free market and the political system in the country should execute a well-designed programme for the redistribution of resources. The mammoth loan-waiver scheme, the seemingly successful NREGS and the huge spending on other social sector programmes are classic examples of the government actively involving itself in a planned process of redistribution.

The impetus has come from the democratic forces acting in the country. The first decade and a half of economic reforms had led to a situation of jobless growth and increasing disparities. The public at large reacted sharply to this lopsided, exclusive model of development and the government was forced to introduce various policies to ensure social justice. People gave the green signal to this renewed interest in social spending and the incumbent government was voted back to power in 2009.

It is to be noted that this new "inclusive model" of development does not reject the objective of achieving high economic growth. In fact, it considers economic growth as one of the most important parameters without compromising the wider goals of social justice and environmental protection. The sustainable

development paradigm that is emerging in India is a result of a long drawn out process of dialectics. Analysing at the macro level, the Nehruvian concept of planned, centralised economic development changed into a developmental model based on economic growth during the post-1991 reform period and, finally, it has synthesised into a model that takes into account both growth and redistribution. The active participation of civil society, the media, NGOs and environmental activists in the developmental process has forced the government to take care of the environment as well.

At the micro level, the dialectical process of development in India is now heading towards another direction. It has been widely agreed among all sections of society that industrialisation is necessary, at least to a limited extent, in ushering in economic development. The larger question that is emerging now is whether it is necessary to deprive the resources of a small group of people in order to bring in development, which may be beneficial to the public at large in the long run. Is development a zero-sum game, at least in the short run? Singur and Nandigram are living examples of this debate.

The people have rejected the zero-sum thesis and the focus has suddenly shifted to rehabilitation. The Central government came up with a comprehensive Rehabilitation and Resettlement (R&R) Policy. But the success of industrialisation of rural India lies in the efficacy of implementing and operationalising this policy. Whether the emotional value an Indian attaches to his land can be compensated materially or not is altogether another debate by itself.

The macro-dynamics of the dialectics of development is at a stage today where a new anti-thesis is emerging to counter the huge social spending of the government. The corporate sector has demanded a drastic reduction in fiscal deficit and the recent budget aims at fiscal consolidation. At the micro-level, the focus should be on evolving innovative ways of rehabilitation, prompt compensation and timely implementation.

61. In a free market economy
  - (A) Trickle down and social responsibility and both natural by products
  - (B) People have equal opportunities to succeed in business
  - (C) Trickle down and social responsibility cannot be taken for granted
  - (D) There is a narrow, quantitative growth
  
62. The two adjectives used in the second paragraph of the article to describe the post-reform model of development, are
  - (A) Democratic and Jobless
  - (B) Jobless and Lopsided
  - (C) Lopsided and exclusive
  - (D) Exclusive and Increasing
  
63. The inclusive model of development is based on
  - (A) The sustainable development paradigm
  - (B) The democratic paradigm
  - (C) The economic growth paradigm
  - (D) The social justice paradigm

64. The author gives the examples of Singur and Nandigram to illustrate  
 (A) The relationship between industrialisation and economic growth  
 (B) The difficulty of determining the price of land  
 (C) The dialectical process of development  
 (D) Development as a zero-sum game in the short run
65. Some of the activities undertaken by the government to ensure social justice are  
 (A) Loan waiver, NREGS and spending on social sector programmes  
 (B) Loan waivers, NREGS and spending on industries  
 (C) NREGS, education and spending on social sector programmes  
 (D) Spending on social sector programmes, environmental protection and job opportunities

**Directions for questions 66-69:** Six scientists A, B, C, D, E and F are to present a paper each at a one-day conference. Three of them will present their papers in the morning session before the lunch break whereas the other three will be presented in the afternoon session. The lectures have to be scheduled in such a way that they comply with the following restrictions:

B should present his paper immediately before C's presentation; their presentations cannot be separated by the lunch break.

D must be either the first or the last scientist to present his paper.

66. In case C is to be the fifth scientist to present his paper, then B must be  
 (A) First (B) Second (C) Third (D) Fourth
67. B could be placed in any of the following places in the order of presents EXCEPT  
 (A) First (B) Second (C) Third (D) Fourth
68. In case F is to present his paper immediately after D presents his paper, C could be scheduled for which of the following places in the order of presenters?  
 (A) Second (B) Third (C) Fourth (D) Fifth
69. In case F and E are the fifth and sixth presenters respectively then which of the following must be true?  
 (A) A is first in the order of presenters.  
 (B) A is third in the order of presenters.  
 (C) A is fourth in the order of presenters.  
 (D) B is first in the order of presenters.
70. A test has 50 questions. A student scores 1 mark for a correct answer,  $-1/3$  for a wrong answer, and  $-1/6$  for not attempting a question. If the net score of a student is 32, the number of questions answered wrongly by that student cannot be less than  
 (A) 6 (B) 12 (C) 3 (D) 9

**Directions for questions 71-72:** Digits do not carry their value, but allotted artificial value. Their artificial values are allotted according to some pattern. Examine the figures and values and write serial number of correct answer on the answer sheet.

71. If  $3 \times 4 = 1609$   
 $5 \times 6 = 3625$   
 $1 \times 2 = 41$   
then  $4 \times 7 = ?$   
(A) 1649 (B) 4916 (C) 148 (D) 144

72. If  $9 - 3 = 12$   
 $8 - 3 = 10$   
 $7 - 3 = 08$   
then  $6 - 5 = ?$   
(A) 1 (B) 2 (C) 4 (D) 5

**Directions for questions 73-77:** Read the following information, and answer the questions given below.  
P, Q, R and S live together in a house.

- I. P lives with his (or her) parents.
- II. Q lives with at least 3 persons younger than him (or her).
- III. S lives with his mother, and is older than at least 2 persons living with him.,
- IV. R lives with his (or her) son and is not older than s.

73. The total number of persons in that house is \_\_\_\_  
(A) 3 (B) 4 (C) 5 (D) 6
74. Q is P's \_\_\_\_  
(A) Father (B) Mother (C) Son (D) Grandmother
75. S is P's \_\_\_\_  
(A) Brother (B) Father (C) Mother (D) Sister
76. R is Q's \_\_\_\_  
(A) Daughter (B) Son (C) Grandson (D) Daughter-in-law
77. R is S's \_\_\_\_  
(A) Wife (B) Husband (C) Son (D) Daughter

**Directions for questions 78-79:** In each question below are given two statements followed by several conclusions. You have to take the two given statements to be true, even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the two given statements, disregarding commonly facts.

78. **Statement:**

- (I) All drivers are mechanics.
- (II) All mechanics are cleaners.

**Conclusions:**

- (I) All cleaners are drivers.
- (II) Some drivers are mechanics.
- (III) All drivers are cleaners
- (IV) Some cleaners are mechanics.

- (A) (I), (II), (III) and (IV) follows
- (C) Only (III) and (IV) follow

- (B) Only (II), (III) and (IV) follow
- (D) Only (II) and (III) follow

79. **Statements:**

- (I) Some doctors are engineers.
- (II) All engineers are lawyers.

**Conclusions:**

- (I) Some lawyers are doctors.
- (II) All engineers are doctors.
- (III) Some doctors are lawyers.
- (IV) Some engineers are lawyers.

- (A) (I), (III) and (IV) follows
- (C) Only (I), (II) and (IV) follow

- (B) Only (III) and (IV) follow
- (D) Only (II), (III) and (IV) follow

**Directions for questions 80-83:** Refer to the table given below to answer the question that follow.

No. of students registered for

Subject	I Year	II Year	III year
Science	20	40	80
History	30	60	120
Maths	40	80	160
Economics	50	70	100

80. Number of students registered for History for all the years is less than the number of students registered for Maths for all the three years by:

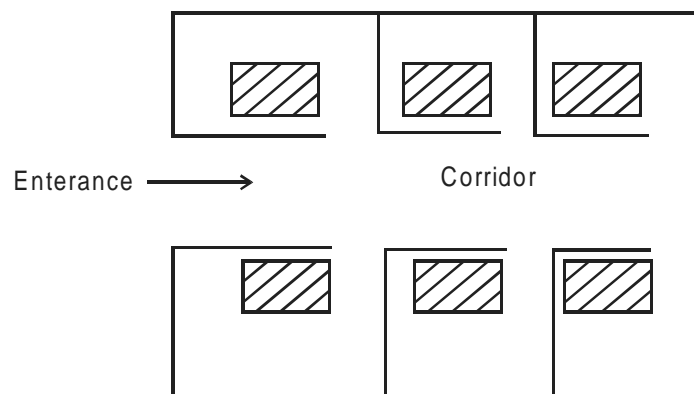
- (A) 12.5%
- (B) 17.5%
- (C) 25%
- (D) 22.5%

81. The total registration fees collected from the students of Ist year for Science, History, Maths and Economics is in the ratio 3 : 2 : 3 : 1. If the total registration fee collected is Rs. 1,35,00, then what is the registration fee for Economics?

- (A) Rs. 350
- (B) Rs. 300
- (C) Rs. 250
- (D) Rs. 287.5

82. Assuming the data of Q. 81, what is the total registration fee collected for Maths in 1st year?  
 (A) Rs. 45000 (B) Rs. 47500 (C) Rs. 50500 (D) Rs. 50725
83. If maximum 40 students can sit in a room then what is the minimum number of classrooms required to run the classes effectively?  
 (A) 25 (B) 24 (C) 22 (D) 23
84. Pointing towards a lady in a photograph, a girl said, "She is the sister of my mother's husband". How is the girl related to the lady?  
 (A) Daughter (B) Niece (C) Sister (D) Daughter or Niece
85. A woman while talking to another said, "The father-in-law of your husband is also the son of my grandfather". How is the latter related to the former woman?  
 (A) Sister (B) Cousin (C) Sister-in-law (D) Sister or cousin
86. A woman while looking at the photograph of a man said, "He is the maternal grandfather of children of my husband's sister". How is the man related to the woman?  
 (A) Father (B) Father-in-law (C) Grandfather (D) Brother-in-law
87. Find the missing term  
 60, 40, 55, 45, 50, ?  
 (A) 45 (B) 50 (C) 55 (D) 60
88. Find the missing alphabet:  
 T, r, O, m, J, ?  
 (A) h (B) i (C) l (D) g
89. The letters of the word TEACHING may be rearranged as CHEATING; if you follow the same code, what will happen to GRADIENT?  
 (A) DIRAGENT (B) RADIGENT (C) DIERATIN (D) RATINGDI

**Directions for questions 90-93:**



The plan above shows an office block for six officers  $O_1, O_2, O_3, O_4, O_5,$  and  $O_6$ . Both  $O_2$  and  $O_2$  occupy offices to the right of corridor and  $O_1$  occupies an office to the left of the corridor.  $O_5$  and  $O_6$  occupy offices on opposite sides of the corridor but their offices do not face each other. The offices of  $O_3$  and  $O_4$  face each other.  $O_5$  does not have a corner office.  $O_6$ 's office is further down the corridor than  $O_1$ 's, but on the same side.

90. Whose office faces  $O_1$ 's office?  
 (A)  $O_3$  (B)  $O_4$  (C)  $O_5$  (D)  $O_6$
91. If  $O_2$  sits in his office, whose office is to his left?  
 (A)  $O_6$  (B)  $O_5$  (C)  $O_4$  (D)  $O_3$
92.  $O_3$  was heard telling someone to go further down the corridor to the last office on the left. To whose room was he trying to direct that person?  
 (A)  $O_6$  (B)  $O_5$  (C)  $O_2$  (D)  $O_1$
93. Who is/are  $O_5$ 's neighbours?  
 (A)  $O_4$  and  $O_6$  (B)  $O_3$  only (C)  $O_1$  only (D)  $O_2$  and  $O_3$

**Directions for questions 94-95:** A is three times older than B. C is half the age of D. B is older than C.

94. Which of the following can be inferred?  
 (A) A is older than D (B) A may be younger than D  
 (C) B is older than D (D) None of the above
95. Which of the following information will be sufficient to estimate A's age?  
 (A) Both B and D are older than C by the same number of years  
 (B) C is 8 year old  
 (C) Both (i) and (ii)  
 (D) None of the above

**Directions for questions 96-100:** Each question is followed by two statements I and II. Answer each question using the following instruction.

- Choose A: If the question can be answered by one of the statements alone and not by the other.  
 Choose B: If the question can be answered by using both the statements together, but cannot be answered by using either statement alone.  
 Choose C: If the question can be answered by using either statement alone.  
 Choose D: If the question cannot be answered even by using both statements together.

96. What are the values of X and Y?  
 I. Y is an even integer, X is an odd integer and X is greater than Y.  
 II. Product of X and Y is 30.
97. Two friends, F1 and F2, bought oranges from wholesale dealer. How many oranges did they buy?  
 I. F1 bought one-half the number of oranges that F2 bought.  
 II. The wholesale dealer had a stock of 500 oranges.

98. What will be the time for downloading software?  
I. Transfer rate is 7 kilobytes per second.  
II. The size of the software is 6.7 megabytes.
99. Is country A's GDP higher than country B's GDP?  
I. GDPs of the countries A and B have grown over the past five years at compounded annual rates of 4% and 7% respectively.  
II. Five years ago, GDP of country A was higher than that of country B.
100. Is  $n$  odd?  
I.  $n$  is divisible by 3, 5, 7 and 9  
II.  $0 < n < 400$
101. The maximum amount of the Total Revenue earned by the Govt. of India comes from  
(A) Income Tax (B) Customs Duty  
(C) Excise Duty (D) Corporate Tax
102. In a company the use of price sensitive corporate information by the Company-people to make gains or cover losses is known as  
(A) Insider trading (B) Future trading  
(C) Foreign trading (D) Stock trading
103. Who amongst the following gave the concept of PURA (Providing Urban facilities in Rural Areas)?  
(A) Rajiv Gandhi (B) Manmohan Singh  
(C) A.P.J. Abdul Kalam (D) Sonia Gnahdi
104. Many times we see in newspapers that some projects are launched by the Govt. Authorities on 'PPP' basis. What is the full form of 'PPP'?  
(A) Preferential Payment Plan (B) Public Private Partnership  
(C) Partial Payment Project (D) Popular Private Project
105. Which of the following best explains 'e-governance'?  
(A) Improving the functioning of government  
(B) Teaching government employees the basics of computing  
(C) Delivery of public services through internet  
(D) Convergence of e-mail and video-conferencing
106. In India Census is done after a gap of every  
(A) Five years (B) Seven years  
(C) Eight years (D) Ten years
107. What does conservation of energy lead to?  
(A) Conservation of resources (B) Less expense  
(C) Less pollution (D) All of these
108. "Change your World" is the adline by  
(A) Louis Philippe (B) Wills Life Style  
(C) Levis (D) Pantaloons

109. Which one of the Cellular Mobile Phone companies has taken up the initiative 'Save our Tigers' recently?  
 (A) Vodafone (B) Aircel  
 (C) Airtel (D) Idea
110. Barak Hussain Obama belongs to which of the following political parties?  
 (A) Republican (B) Democratic  
 (C) Labour (D) American National Congress
111. IMF  
 (A) Provides short term loans to the countries to tide over balance of payment problem  
 (B) Fixes exchange rates of different countries against dollar  
 (C) Gives direction to the central banks on the stock of gold they should hold against money supply.  
 (D) Prints international currency
112. Which is the fastest growing economy of the world?  
 (A) India (B) Russia  
 (C) China (D) Brazil
113. Which of the following countries ranks 1st on the Human Development Index  
 (A) Australia (B) Norway  
 (C) Canada (D) USA
114. Moody is a  
 (A) Software company (B) Rating agency  
 (C) Famous international food chain (D) Career guiding company
115. CII stands for  
 (A) Center for Industrial Investment  
 (B) Central Institute for Investment  
 (C) Confederatio of Indian Industry  
 (D) Conference on Industrial Investment
116. Bt. Brinjal is  
 (A) A genetically modified variety of brinjal  
 (B) A brinjal variety grown in Britain  
 (C) A company that produces brinjal seeds  
 (D) None of the above
117. The term 'Global Melt Down' is used in the context of  
 (A) Collapse of communism (B) Fall of Berlin wall  
 (C) Financial crisis of 2008 (D) Melting of glacier
118. Goldman Sacs is  
 (A) An Investment bank (B) Chairman of world bank  
 (C) A consulting firm (D) The ILO chief

119. Only Indian to have received Noble prize in economics is  
(A) Jagdish Bhagwati (B) A.K. Sen  
(C) Meghnath Desai (D) S. Chakravarty
120. The Great Depression in the capitalist countries began in the year  
(A) 1929 (B) 1890  
(C) 1989 (D) 1964