

Test-I English Language

Directions (Q. 1-9): Read the passage carefully and answer the questions given below it.

The state-wise child sex ratio (number of females per 1000 males in 0-6 years age group) in India during 2001-11 declined except in Himachal Pradesh, Punjab, Haryana, Mizoram, Gujarat and Tamil Nadu. Interestingly, these are the same states that had recorded a significant fall in child sex ratio during 1991-2001.

Adverse child sex ratio can have many implications. First, in a growing economy, the need for a labour force would be a requirement. Females, like capital goods, not only directly provide the force but also bear children who are the future labour force. Second, 'missing women' imply that the proportion of single men, say above 50 years, would increase which according to United Nations Fund for Population Activities UNFPA(2012), would rise from 1.1 per cent in 2010 to 10 per cent in 2060. There are costs involved with prolonged bachelorhood. There is also a fear that scarcity of brides may generate new waves of female migration from neighbouring countries with different cultures and customs and even such migration may not be able to meet the need. In the absence of such migration, cases of human trafficking, kidnaping, forced marriages and other related crimes can increase. All these would imply cost to the state and society.

Adverse child sex ratio could be a transitory phase in a growing economy like China, India or Korea, as evidenced by empirical studies in view of technological advancement in pre-natal sex selection tests, which are painless and affordable, prompting couples to tailor-make the composition of their families. The trend could have a geographical pattern too and the preference for sons could be higher in rural areas because of the sway of traditional institutions as well as in some other regions which are rooted in longstanding local institutions, according to UNFPA (2012). Gender discrimination has a strong economic reasoning and reflects the generally held perception that girl constitutes impoverishment and boy constitutes enrichment. It is with reference to costs and benefits, including the institution of marriage and dowry, that daughters appear so expensive.

Sekher and Hatti (2010), undertaking an empirical study in Karnataka, discuss the origin of dowry in their village of study and argue that the rapid decline of fertility unaccompanied by changes in cultural values has resulted in a deliberate attempt to get 'rid of girls' - "a conclusion that can be applicable across India." Research shows that improvements in educational attainment generally lead to a reduced preference for sons. But that could be a slower process.

Central and select State governments have been making concerted efforts since 1996, seemingly to no avail, mainly through conditional cash transfer (CCT), to stem the trend of adverse sex ratio through schemes like Dhanlaxmi, Bhagya Laxmi, Beti Anmol, Ladli, Nanhi Chhaan, and so on. The main criticism against these schemes is that the amount provided by the Government is far less than what is required to sustain and marry off a female child.

So, is the situation hopeless now? Not as yet but given that this epidemic is prevalent across the States, and the trend unabated, the Indian girl child should be considered a near-endangered species both inside and outside the womb and treated as 'our national asset' from the time of conception. Agencies and individuals who terminate female life before and after birth should attract severe punishment for damaging the national asset.

To change the mindset towards the female child, including the menace of dowry and expansive marriages, there may be need for active involvement of Panchayati Raj institutions; local social, religious and political leaders; media and the entertainment industry; and medical professionals and associations.

In addition, until the mindset changes, there may be need to collectively address the issue of cost that an individual family cannot face and results in adverse child sex ratio.

The setting up of the National Girl Child Investment Fund (NGCIF) financed by long-term Government bonds, venture capital, agencies and tax-deductible donations, would be justified. The NGCIF could extend substantial financial support to the family of the girl child from option to cradle and then to college, and even to meet marriage expenses.

Hopefully, with such a liberal funding arrangement, the number of females in the country will increase, get educated and contribute to NGCIF as well as the economy.

1. **What has been the effect of the conditional cash transfer schemes launched to stem the trend of adverse sex ratio?**

- The scheme proved a great success and the child sex ratio improved significantly in the States where this scheme was launched.
- The Central and State govt have made serious efforts through the schemes, but to no avail.
- Nothing specific about the trend of child sex ratio has been mentioned in the given passage.
- The major part of the fund provided by the govt is siphoned off by the middlemen leaving the scheme a failure.
- None of these

2. **What would be the expected Implication of adverse child sex ratio?**
- It would result into reduced supply of future labour force.
 - The number of single men above fifty years would increase significantly.
 - There would be immigration of females from neighbouring countries with different cultures
 - The case of human trafficking, forced marriages and other related crimes would increase.
 - All the above
3. **Find the correct statement(s) on the basis of the given passage.**
- (A) The sex ratio is the number of females per thousand males in 0-6 years age group.
 (B) There are only six states in India which have recorded a significant fall in child sex ratio during 2001-11.
 (C) Haryana has recorded an improvement in child sex ratio as per the latest census,
- Only (A)
 - Only (B)
 - Only (C)
 - Only (A) and (B)
 - Only (B) and (C)
4. **How can the general mind set towards the female child be changed?**
- (A) By providing extra job opportunity in govt services
 (B) By educating people about the adverse effects of the reduced number of female children
 (C) By giving extra love and affection to female children
- Only (A)
 - Only (B)
 - Only (C)
 - All (A), (B) and (C)
 - Only (A) and (B)
5. **What suggestion(s) has/have been made by the author to improve the overall condition of female child in India?**
- The media and the entertainment industry should come forward to bring about radical change in the mind set towards girl child.
 - The issue of cost that an individual family cannot face should be addressed collectively.
 - To meet the future expenses such as marriage, cost of higher education etc, the National Girl Child Investment Fund (NGCIF) should be set up
 - The NGCIF should be financed by long-term govt bonds, venture capital etc.
 - All the above
6. **What is/are the reason(s) of gender discrimination? Give your answer in the context of the given passage.**
- Only boys can earn money for the "family."
 - Boys remain with their parents all along their lives.
 - It is a generally held perception that girls constitute impoverishment.
 - Girls are of no use for the family.
 - All the above
7. **What, according to UNFPA (201(b), is/are correct?**
- (A) People prefer son to daughter in rural areas because of longstanding traditional institutions.
 (B) The proportion of single men, say above fifty years, would increase up to ten per cent in coming" fifty years.
 (C) Punjab, Haryana and such other states where child sex ratio has improved, have quit pre-natal sex selection tests.
- Only (A) and (C)
 - Only (B) and (C)
 - Only (C)
 - Only (A) and (B)
 - All (A), (B) and (C)
8. **What is the impact of improvement in educational attainment as far as preference for sons is concerned? Give your answer in the context of the passage.**
- Educated people also discriminate between boys and girls.
 - Educational attainment leads to reduced preference for son, albeit at a slower pace.
 - Educational attainment is no guarantee of change' mind set towards son.
 - Educational attainment is related to govt jobs. It has nothing to do with the preference for boys or girls
 - None of these
9. **What has/have been suggested by the author to improve the declining trend of child sex ratio?**
- (A) The agencies or individuals responsible for the termination of female life before and after birth should attract severe punishment for damaging the national asset.
 (B) The girl child should be treated as our national asset from the time of conception.
 (C) The Indian girl child should be considered a near endangered species both inside and outside: .. womb.
- Only (A) and (B)
 - Only (B) and (C)
 - All (A), (B) and (C)
 - Only (A)
 - Only (B)
- Directions (Q. 10-16): In each sentence below four words that the printed in bold have been lettered (a), (b), (c), (d) and (e). One of them may be wrongly spelt or inappropriate the context of the sentence. Find out the word, which wrongly spelt or inappropriate if there is any. The letter that word is the answer. If all the words, which are printed bold, are correctly spelt and appropriate in the context of the sentence, mark (e) as the answer ie All correct.**
10. **We plan to complete the exhaustive (a)/ performance (b)/ review (c)/ undertook (d)/ by us by next week. All correct (e)**

11. Home loan borrowers (a)/will be definitely (b)/ affected (c)/ since banks have raised their lending (d)/ rates of interest. All correct (e)
12. The Finance Minister has impressed (a)/ satisfaction (b)/ over the progress (c)/ made by regional (d)/ rural banks. All correct (e)
13. If they want to maintain (a)/their current rate of expansion (b)/ they have to consider (c)/ these parameters (d)/. All correct (e)
14. India's overall (a)/trade defect (b)/ continues (c)/ to be a major source of concern for analysts (d)/All correct (e)
15. After several (a)/ rounds of discussions (b)/ the Manager assented (c)/ to our proposal (d)/ All correct (e)

Directions (Q. 16-20): In each of the following questions four words are given of which two are most nearly the same or opposite in meaning. Find the two words which are most nearly the same or opposite in meaning and find the number of the correct letter combination.

16. (A) Vocal (B) Benign
(C) Unpleasant (D) Drastic
(a) A-B (b) B-C (c) C-D (d) A-C
(e) A-D
17. (A) Abysmal (B) Diligence
(C) Zenith (D) Nadir
(a) A-B (b) B-D (c) C-D (d) B-C
(e) A-C
18. (A) Elude (B) Avoid
(C) Harness (D) Hatch
(a) A-B (b) A-C (c) A-D (d) B-C
(e) B-D
19. (A) Languid (B) Gorgeous
(C) Knack (D) Ability
(a) A-B (b) A-D (c) B-C (d) C-D
(e) B-D
20. (A) Gregarious (B) Quixotic
(C) Sociable (D) Discernible
(a) A-B (b) B-C (c) C-D (d) A-C
(e) B-D

Directions (Q. 21-30): In the following passage, some of the words have been left out, each of which is indicated by a number. Find the suitable word from the options given against each number and fill up the blanks with appropriate words to make the paragraph meaningful.

Purists in Delhi, of course, will never stop grumbling. Their analytical clarity is uncluttered by the larger political and economic imperatives facing India's foreign policy. Pragmatists, the few that there are in the capital, must adopt a different course.

For one, they must concede publicly that (21) solutions to the problems of cross-border (22) with Pakistan are not on the (23). Until we get there, the pragmatics must affirm, India must responsibly (24) to reduce violence on the disputed borders and prevent the (25) of every military incident into a major bilateral crisis.

Although the confidence-building measures can't immediately address the "root causes" of the (26) with Pakistan and China, they expand the (27) between the Indian armed forces and those of Pakistan and China, create a measure of trust, and make it easier (28) a period of time 'to resolve the underlying conflicts.

Having embarked on a substantive negotiation of military CBMs with Pakistan and China, the UPA government has some work to do at home. It needs to get the armed forces, the ministry of defense, the ministry of home and the foreign office to (29) the interconnected nature of India's diplomatic objectives, military strategy and border management and ensure effective (30) between the different stakeholders.

21. (a) adequate (b) efficient
(c) dilute (d) effective
(e) impressive
22. (a) terrorism (b) complication
(c) lawlessness (d) agitation
(e) anarchism
23. (a) boundary (b) border
(c) horizon (d) sphere
(e) prospect
24. (a) seek (b) question
(c) inquire (d) follow
(e) browse
25. (a) wane (b) growing
(c) happening (d) escalation
(e) decline
26. (a) rigidity (b) tensions
(c) balance (d) fight
(e) brawl
27. (a) combination (b) divide
(c) affinity (d) association
(e) interface
28. (a) across (b) over
(c) for (d) in
(e) above
29. (a) recognize (b) diagnose
(c) nail (d) tag
(e) remark
30. (a) allotment (b) disposal
(c) grouping (d) grading
(e) coordination

Test-II Reasoning Ability

31. In the following number sequence, how many such even numbers are there which are exactly divisible by its immediate preceding number but not exactly divisible by its immediate following number?

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- (a) None (b) One (c) Two (d) Three
(e) None of these

Directions (Q. 32-37): Study the following information carefully: and answer the given questions.

A, N, M, R, J, V, S and D are eight friends sitting around a circular table. Two of them are not facing the centre. All of them like watches of different brands, viz Maxima, Puma, HMT, Titan, Fastrack, Rado, Quartz/ and Omega, but not necessarily in the same order.

R and M are sitting third and second to the left of A respectively. R and S are neighbours of N, who likes Fastrack. The one who likes Titan sits on the immediate right of N. S is sitting third to the right of A and likes Maxima. D is third to the right of J and likes Quartz. A and D are not the neighbour of that person who likes Rado. V does not like HMT and Titan. The person who likes Omega is sitting opposite J.

32. The person who is sitting second to the left of A likes which of the following watches?
(a) Maxima (b) Puma (c) Rado (d) Omega
(e) None of these
33. Who among the following likes Rado?
(a) N (b) M (c) R (d) D
(e) None of these
34. What is the position of V with respect to A?
(a) Immediate left of A (b) Second to the right of A
(c) Immediate right of A (d) Can't be determined
(e) None of these
35. If S is on the immediate right of N then by the same logic who among the following sits third to the right of N?
(a) M (b) J (c) D (d) V
(e) None of these
36. How many persons sit between the person who like Maxima and the one who likes HMT (count in clockwise direction starting from HMT)?
(a) Two (b) None (c) One (d) Three
(e) None of these
37. Which of the following statements is true?
(a) M is the neighbour of R and N.
(b) A likes HMT and faces outside the centre.
(c) S likes Maxima and does not face the centre.
(d) All are true
(e) None is true

Directions (Q. 38-40): Each of the questions below consists of a question and two statements numbered I and II

given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and give answer

- (a) if the data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question.
(b) if the data in statement II alone are sufficient to answer the question, while the data in statement I alone are not sufficient to answer the question.
(c) if the data either in statement I alone or in statement II alone are sufficient to answer the question.
(d) if the data in both the statements I and II together are not sufficient to answer the question.
(e) if the data in both the statements I and II together are necessary to answer the question.
38. There are five persons A, B, C, D and E. Then B is in which direction with respect to E?
I. A is to the west of D and to the north of B, and C is to the south of E.
II. D is to the north of A and east of E. B is to the west of C and south-east of D.
39. What is the angle between the two hands of a clock?
I. One hour ago the angle between the two hands was 75 degrees and the minute hand was ahead of the hour hand.
II. The hour hand is between 9 and 10.
40. Among T, F, L, M and B, is M uncle of F?
I. F is son of T, who is brother of M. L is sister-in-law of M.
II. L is mother of F and wife of T, who is son of B, who is father of M and has only two sons.

Directions (Q. 41-45): Study the following information carefully and answer the given questions.

There are six family members L, M, N, O, P and Q. Each member has a different choice of ice cream, viz Vanilla, Chocolate, Strawberry, Mango, Kesar-Pista and Peanut butter but not necessarily in the same order. There are two married couples in the family. No female member likes either Vanilla or Kesar-Pista.

L is daughter-in-law of Q and likes Strawberry. N is brother of O and son of M, and likes Peanut butter. P is grandmother of O, who does not like Mango. The husband has a choice for Vanilla and his wife likes Chocolate ice cream.

41. How many male members are there in the family?
(a) Two (b) Three (c) Four
(d) Can't be determined (e) None of these
42. Which of the following is true about O?
(a) Daughter of M (b) Son of L
(c) Brother of Q

- (d) Either brother or sister of P
(e) None of these
43. **How is M related to Q?**
(a) M is sister of Q (b) M is son of Q
(c) M is grandson of Q (d) Can't be determined
(e) None of these
44. **Which of the following combinations of ice cream does one of the couples like?**
(a) Vanilla-Mango
(b) Kesar-Pista - Peanut butter
(c) Strawberry - Mango
(d) Peanut butter - Mango
(e) None of these
45. **Which of the following ice creams does P like?**
(a) Vanilla (b) Mango
(c) Chocolate (d) Kesar-Pista
(e) None of these

Directions (Q. 46-50): Study the following information carefully and answer the given questions.

Q, R, S, T, U, V, W and X are eight group captains of different games, viz, Badminton, Volleyball, Cricket, Table Tennis, Football, Hockey, Kho-Kho and Lawn Tennis, but not necessarily in the same order. There are three female members in the group and four captains are holding PhD degrees.

- X has a PhD degree and is the captain of Volleyball.
H Q is the captain of Cricket. R is the captain of Hockey.
H The one who is the captain of Table Tennis does not have a PhD degree.
H No female is captain of either Football or Lawn Tennis.
H The captain of Lawn Tennis does not have a PhD degree.
H W and S are not the captains of either Football or Hockey.
H S is the captain of a ladies' team and U and S have PhD degrees.
H R and V are lady captains and are not PhD degree holders. T has a PhD degree and is the captain of the Kho-Kho team.
46. **Who is the captain of the Hockey team?**
(a) Q (b) R (c) S (d) T
(e) None of these
47. **Which captain is a female and a PhD degree holder?**
(a) R (b) T (c) S (d) V
(e) None of these
48. **Which of the following groups represent the male group of captains who have PhD degrees?**
(a) QTU (b) SUX (c) UTS (d) TUX
(e) Can't be determined
49. **S is the captain of which of the following games?**
(a) Cricket (b) Hockey
(c) Badminton (d) Kho-Kho
(e) None of these

50. **Which of the following combinations is true?**
(a) R-Male-Hockey-PhD
(b) S - Female - Badminton - PhD
(c) T - Male - Cricket - PhD
(d) W - Male - Lawn Tennis - PhD
(e) None of these
51. **Existing 3G plans will apply to users who will be migrated to 4G for no extra cost. However, they will have to get a SIM card replacement. Which of the following occasions is most likely to have elicited this statement from the company?**
(a) Voice networks will continue to run on 2G and, 3G net.
(b) The company has launched 4G recently.
(c) The company is launching 4G services for smartphones.
(d) 4G network users will be able to download 10 standard movies within 30 minutes,
(e) None of these
52. **How many of us know that televisions, computers and other electronic items contain hazardous material like lead, mercury and cadmium and that they pose serious threat to the environment if buried in a landfill? Which of the following can be concluded from the above statement?**
(a) People should not use televisions and computers.
(b) Electronic items should be made without using hazardous materials.
(c) The environment has been endangered from e-waste and is on the verge of crashing.
(d) There should be proper disposal of electronic items.
(e) None of these
53. **The biggest mistake people make is buying a life insurance policy every year to save taxes. Which of the following can be the best reason for the assertion made in the above statement?**
(a) Such people do not have adequate insurance cover.
(b) The annual premium becomes huge over a period of time.
(c) There is a mad rush to make investments to save taxes in the last three months of the financial year.
(d) A salaried individual can invest up to Rs. 1 lakh and claim tax deduction under Section 80 C of the I-T Act.
(e) None of these
54. **Do tax-free bonds qualify for tax deduction under Section 80C? Well, according to stories doing the rounds, somebody thought they do and bought them. Needless to say, the poor soul realised that tax-free bonds were not meant to save tax under Section 80C; they only offer tax-free interest. Similarly, many bank customers are not aware that the bond they just bought to save tax is actually an insurance**

policy. Some taxpayers also don't know that a PPF is a 15-year account.

Which of the following inferences can be made in the above situation?

- (a) Investors are unaware of the nitty-gritty of tax-saving instruments.
 (b) Investment consultants often take their clients for a ride.
 (c) There are no bonds that save your taxes in their year of investment.
 (d) PPF allows tax benefits after a period of 15 years.
 (e) None of these
55. **Raising tariffs won't be an easy option since the market is still very competitive and all operators do not have the same high costs of spectrum.**
Which of the following assumptions is implicit in the above statement? (An assumption is something supposed or taken for granted.)
- (a) Phone call rates are not likely to go up.
 (b) There are not too many players in the telecom market.
 (c) It costs a lot to buy spectrum
 (d) Raising telecom tariffs involves prior approval from TRAI.
 (e) None of these

Directions (Q. 56-57): Study the following arrangement carefully and answer the given questions:

A 8 B 6 7 H U % 3 \$ F V R 2 I @ 1 4 1 W E 9 L 5

56. **If all the numbers are dropped from the above arrangement which of the following will be eighth from the right end?**
- (a) @ (b) F (c) \$ (d) V
 (e) None of these
57. **Which of the following is ninth to the left of the sixteenth from the right end?**
- (a) 3 (b) I (c) # (d) 5
 (e) None of these
58. **How many such pairs of letters are there in the word DAUGHTER each of which has as many letters between them in the word as in the English alphabetical series?**
- (a) None (b) Two (c) Three (d) Four
 (e) More than four

Directions (Q. 59-60): Study the following information carefully and answer the given questions.

Raman does five works P, Q, R, S and T. He starts working at 9 am in the morning. P is the first work and it takes two hours. Q can be done after P. Q takes 1 hour. Work R, which takes 1 hour, can be started only when P

and Q are completed. Raman can do work S along with Q and R and would take 3 hours for it. T takes only one hour and can be started only after Q, R and S.

59. **What is the time by which Raman completes all the tasks?**
- (a) 2 pm (b) 3 pm (c) 4 pm
 (d) Can't be determined (e) None of these
60. **What is the time by which Raman completes the work R?**
- (a) 12 pm (b) 2 pm (c) 1 pm (d) 11 pm
 (e) None of these

Directions (Q. 61-65): In each question below are given three statements followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance with commonly known facts and then decide which of the given conclusions logically follows from the given statements, disregarding commonly known facts. Give answer

- (a) if only conclusion I follows.
 (b) if only conclusion II follows.
 (c) if either conclusion I or II follows.
 (d) if neither conclusion I nor II follows.
 (e) if both conclusions 1 and II follow.
61. **Statements: Some students are members.**
 No member is a teacher.
 All teachers are players.
Conclusions: I. Some students are not teachers.
 II. Some members are not players.
- (62-65) :**
Statements : All novels are books.
 All books are stories.
 Some stories are songs.
62. **Conclusions:** I. All novels being songs is a possibility.
 II. At least some stories are novels.
63. **Conclusions:** I. Some songs are not books.
 II. All songs being books possibility.
- (64-65):**
Statements : No writer is a teacher.
 No reader is a teacher.
 Some readers are poets.
64. **Conclusions:** I. No reader is a writer.
 II. No poet is a writer.
65. **Conclusions :** I. Some poets are not teachers.
 II. Some poets are not teachers.

Test-III Quantitative Aptitude

66. A 456-litre mixture of milk and water contains milk and water in the ratio of 7 : 5. How much milk is to be added to the mixture to get a new mixture of milk and water in the ratio of 9 : 5?
 (a) 80 litres (b) 86 litres
 (c) 76 litres (d) 75 litres
 (e) 77 litres
67. An amount of Rs. 9800 is lent at a certain rate of interest. After 66 months, an additional amount of Rs. 5700 is lent at a rate 3.5 times higher than the former. At the end of nine years Rs. 11061.75 is earned as interest on both the loans. What was the original rate of interest?
 (a) 65% (b) 7% (c) 7.5% (d) 8% (e) 14%
68. Two stations A and B are 462 km apart. A train leaves Station A for Station B and at the same time another train leaves Station B for Station A. Both trains meet 5.5 hours after they start moving. If the train that starts from Station A is 28 km/hr faster than the other one, what is the ratio of the speeds of both the trains?
 (a) 3 : 2 (b) 2 : 5 (c) 2 : 1 (d) 4 : 3 (e) 5 : 3
69. A sum was put at a certain rate of interest for five years. Had it been put at a rate of interest 5% higher than the previous rate of interest it would have fetched Rs. 72.5 more. What is the sum?
 (a) Rs. 290 (b) Rs. 280 (c) Rs. 295 (d) Rs. 390
 (e) Rs. 380
70. Rajeev and Rakesh can do a piece of work in 28 days. Rajeev is $\frac{7}{4}$ times as efficient as Rakesh. In how many days can Rajeev alone finish the work?
 (a) 77 (b) 55 (c) 33 (d) 40 (e) 44
71. The area of a square is 1764 square metres. The breadth of a rectangle is one-fourth the side of the square and the length of the rectangle is five times its breadth. What is the difference between the area of the square and that of the rectangle?
 (a) 1283.6875 sq metres (b) 1383.6575 sq metres
 (c) 1273.75 sq metres (d) 1293.25 sq metres
 (e) 1212.75 sq metres
72. The fare of a bus is Rs. y for the first seven kilometres and Rs. 17 per kilometre thereafter. If a passenger pays Rs. 3311 for a journey of 199 kilometres, what is the value of y ?
 (a) Rs. 43 (b) Rs. 45 (c) Rs. 47 (d) Rs. 46
 (e) None of these
73. Govind scored 94 marks in Subject X. He scored 76% marks in Subject Y and M marks in Subject Z. The maximum marks in each subject was 175. The overall percentage marks obtained by

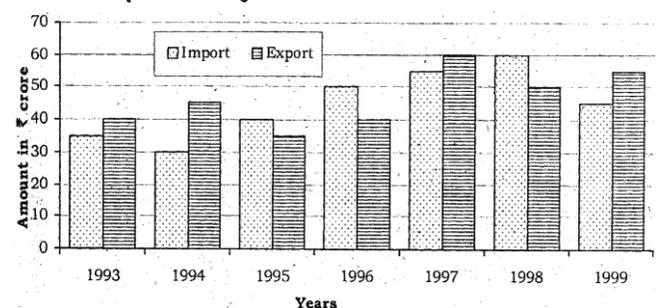
Govind in all three subjects together was 56%. How many marks did he score in Subject Z?

- (a) 66 (b) 68 (c) 69 (d) 71 (e) 67
74. A person can row 13 kmph in still water. If he takes thrice as much time to row upstream as to row downstream in a river, what is the speed of the stream?
 (a) 4 kmph (b) 5 kmph (c) 6 kmph (d) 6.5 kmph
 (e) 7.5 kmph
75. A shopkeeper sells an item at a profit of 17%. If he reduces the price of the item by Rs. 210, he makes a loss of 13%. What is the cost price of the item?
 (a) Rs. 700 (b) Rs. 720 (c) Rs. 710 (d) Rs. 790
 (e) Rs. 600

Directions (Q. 76-80): What will come in place of question mark (?) in the following questions?

76. $(16)^{7.2} (4096)^{1.6} (65536)^{1.2} (1048576)^1 (16)^?$
 (a) 2.4 (b) 2.8 (c) 3 (d) 2.6 (e) 3.2
77. $45.5\% \text{ of } 1160 + 13.5\% \text{ of } 720 = ?\% \text{ of } 6000$
 (a) 6 (b) 9.32 (c) 10.42 (d) 5 (e) 12
78. $(77777 \ 700) + (6455 \ 250) + (3991 \ 26) = ?$
 (a) 290.43 (b) 390.41 (c) 295.33 (d) 288.42
 (e) None of these
79. $\{6^{3.6} (36)^{4.2}\}^{1/4} \sqrt{?}$
 (a) 41616 (b) 43264 (c) 44944 (d) 46656
 (e) 47524
80. $23564 \times 275 - 430100 = ? \times 605$
 (a) 10^3 (b) 101000 (c) 10000 (d) 10^6
 (e) 102000

Directions (81-85): Study the following graph carefully to answer the questions given below it:



81. During which year the percentage rise/fall in imports from the previous year is the lowest?
 (a) 1994 (b) 1998
 (c) 1997 (d) 1995
 (e) None of these
82. What is the ratio of total imports to total exports for all the given years together?
 (a) 31 : 55 (b) 35 : 31
 (c) 65 : 63 (d) 63 : 65
 (e) None of these

83. In which of the following pairs of years the total import is equal to total export in the same pair of years ?

- (a) 1996-1997 (b) 1993-1998
(c) 1998-1999 (d) 1995-1996
(e) None of these

84. The total exports in the years 1995, 1996 and 1999 together are what percent of the total import during the same period ? (up to two decimal places).

- (a) 107.41 (b) 107.41 (c) 99.33 (d) 93.67
(e) None of these

85. Which of the following pairs of years and the percent in the export over the previous year is correctly matched ?

- (a) 1996 - 14.29% (b) 1997 - 10%
(c) 1995 - 33.33% (d) 1994 - 11.111%
(e) None of these

Directions (Q. 86-90): In each of these questions a number series is given. In each series only one number is wrong. Find out the wrong number.

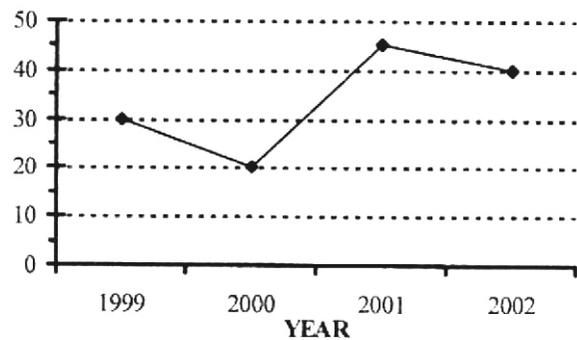
86. 17 20 46 147 599 3015 18108
(a) 20 (b) 46 (c) 599 (d) 147
(e) 3015
87. 9 14 40 129 536 2705 16260
(a) 14 (b) 40 (c) 536 (d) 9 (e) 129
88. 8 18 64 272 1395 8424 59045
(a) 18 (b) 64 (c) 272 (d) 1395
(e) 8424
89. 90 135 286 750 2160 6405 19155
(a) 90 (b) 750 (c) 6405 (d) 286
(e) 2160
90. 17 36 132 635 3500 21750 153762
(a) 635 (b) 700 (c) 132 (d) 3500 (e) 36

Directions (Q. 91-95): In the following questions two equations numbered I and II are given. You have to solve both equations and give answer

- (a) if $x > y$
(b) If $x < y$
(c) If $x = y$
(d) $x = y$
(e) If $x > y$ or the relationship cannot be established
91. I. $x^2 - 7x + 10 = 0$ II. $y^2 - 11y + 10 = 0$
92. I. $x^2 - 28x + 192 = 0$ II. $y^2 - 16y + 48 = 0$
93. I. $2x + 3y = 3.5$ II. $3x + 2y = 6.5$
94. I. $x^2 - 8x + 15 = 0$ II. $y^2 - 11y + 30 = 0$
95. I. $x = \sqrt{3136}$ II. $y^2 = 3136$

Directions (Q. 96-100): Study the information given in each of these questions to answer the questions.

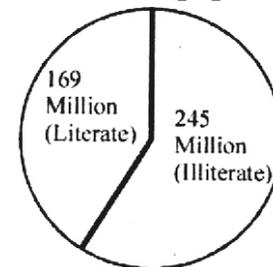
96. Per cent profit earned by a company over the years:



In which year is the profit amount the highest?

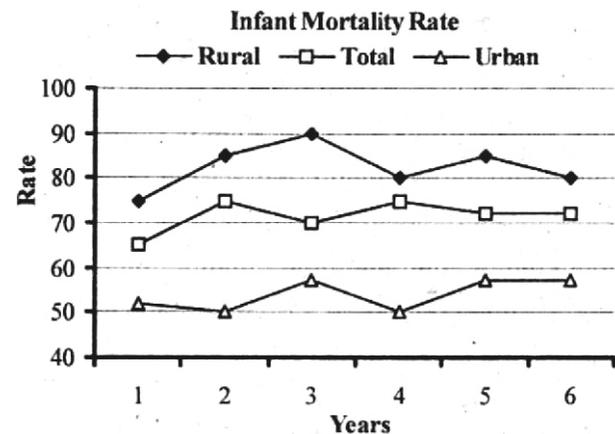
- (a) 2001 (b) 2000
(c) 2002 (d) Cannot be determined
(e) None of these

97. What is the approximate percentage of the literate out of the total population?



- (a) 69 (b) 76
(c) 41 (d) 22
(e) 34

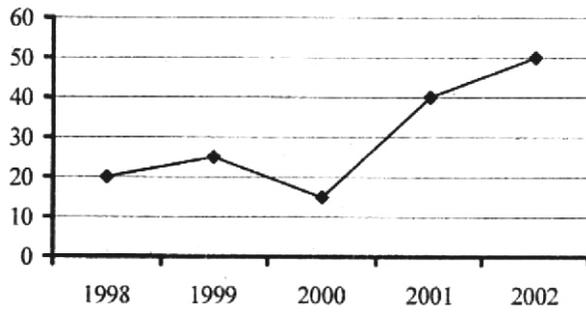
98.



Which of the following is NOT true?

- (a) The rate for rural area was always more than that for urban.
(b) The total (aggregate for rural and urban) was less than that of the rural.
(c) There is a wide gap between the Infant Mortality Rates of rural and urban areas.
(d) The trend of Infant Mortality Rate in terms of increase or decrease remained the same for urban and rural areas
(e) There were ups and downs in Infant Mortality Rates over the years.

99. Production of a company over the years (in lakh units)

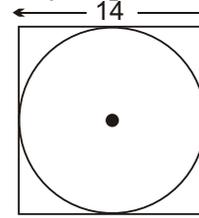


What is the highest percent increase over the previous year?

- (a) $266\frac{2}{3}$ (b) 150 (c) $166\frac{2}{3}$ (d) 250

(e) none of these

100. Population of two states shown by a square and circle respectively (Equal to area in lakh units)



What is the difference between the populations of the two states?

- (a) 2800000 (b) 4200000
 (c) 28000000 (d) 9800000
 (e) none of these

- answer key

- | | | | | | | | | | |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|
| 1. (b) | 2. (e) | 3. (c) | 4. (b) | 5. (e) | 6. (c) | 7. (e) | 8. (b) | 9. (c) | 10. (d) |
| 11. (e) | 12. (a) | 13. (d) | 14. (b) | 15. (a) | 16. (b) | 17. (c) | 18. (a) | 19. (d) | 20. (d) |
| 21. (d) | 22. (a) | 23. (c) | 24. (a) | 25. (d) | 26. (b) | 27. (e) | 28. (b) | 29. (a) | 30. (e) |
| 31. (d) | 32. (d) | 33. (e) | 34. (c) | 35. (d) | 36. (a) | 37. (b) | 38. (b) | 39. (a) | 40. (b) |
| 41. (c) | 42. (b) | 43. (b) | 44. (c) | 45. (c) | 46. (b) | 47. (c) | 48. (d) | 49. (c) | 50. (b) |
| 51. (b) | 52. (d) | 53. (b) | 54. (a) | 55. (a) | 56. (b) | 57. (c) | 58. (d) | 59. (b) | 60. (c) |
| 61. (a) | 62. (e) | 63. (b) | 64. (d) | 65. (a) | 66. (c) | 67. (b) | 68. (c) | 69. (a) | 70. (e) |
| 71. (d) | 72. (c) | 73. (e) | 74. (d) | 75. (a) | 76. (d) | 77. (c) | 78. (a) | 79. (d) | 80. (c) |
| 81. (b) | 82. (d) | 83. (c) | 84. (e) | 85. (a) | 86. (c) | 87. (b) | 88. (b) | 89. (d) | 90. (a) |
| 91. (a) | 92. (a) | 93. (c) | 94. (b) | 95. (b) | 96. (d) | 97. (c) | 98. (d) | 99. (c) | 100. (b) |

Hint & Solutions

(41-45) :

(Chocolate) (-) P Q () (Vanilla)

(Mango) () M L () (Strawberry)

(Peanut butter) (+) N — O (+) (Kesar-Pista)

51. This seems to be the most obvious choice. Choice 3 is ruled out because it goes specifically into “smartphones”.
52. Choices 1 and 2 may stand logical scrutiny but they go too much by the letter of the statement and not by its spirit. Choice 3 is rather alarmist.
53. The premiums go on accumulating.
54. The passage paints a scenario of ignorance among those who invest in tax-saving instruments.
55. That is why it is projected as no; an “easy option”.
56. After dropping all the numbers from the given arrangement the new arrangement will be # A B H U % \$ F V R I @ W E L.
Thus, eighth from the right end is F.
57. Ninth to the left of sixteenth from the right end is (16 + 9 =) 25th from the right, ie #.

(59-60) :

- P 9 to 11 am
Q 11 to 12 noon
R 12 to 1 pm
S 11 to 2 pm
T 2 to 3 pm

61. Some students are members (I) + No member is a teacher (E) = I + E = O = Some students are not teachers. Hence conclusion I follows. Again, No member is a teacher (E) + All teachers are players (A) E A O* Some players are not memebrrs. Hence conclusion II does not follows.
62. There is no negative statement. Thus, the possibility in I exists. Hence conclusion I follows. Again, All novels are books (A) + All books are stories (A) = A + A = A= All novels are

stories conversion some stories are novels. Hence conclusion II follows.

63. All books are stories (A) + Some stories are songs (I) = A + I = No conclusion. Here conclusion I does not follow but the possibility in II exists because there is no negative statement. Hence conclusion II follows.
64. No write is a teacher (E) + (No reader is a teacher conversion) NO teacher is a reader = E + E + = No conclusion. Hence, conclusion I does not follow. And conclusioni II does not follow from first, second and third statements.
65. No reader is a teacher (E) conversion NO teacher is a reader (E) + Some readers are poets (I) = E + I = O* = Some poets are not teachers. Hence, conclusion I follows, but II does not follow.
66. Initially, milk in the mixture $\frac{456}{7} \times 7 = 266$ litres and water $\frac{456}{12} \times 5 = 190$ litres
Now, let the extra milk to be added be x litres.
Then, $\frac{266 + x}{190} = \frac{9}{5}$
or $5x + 190 = 9 \times 266$
 $5x = 1710 - 190 = 1520$
 $x = \frac{1520}{5} = 304$ litres
67. Let the original rate of interest be $r\%$ per annum. Given, 2nd amount lent after 66 months (= 5.5 yrs)
2nd amount is lent for (9 - 5.5) = 3.5 yrs
Now, $\frac{9800}{100} \times r \times 9 = \frac{5700}{100} \times 3.5 \times 3.5r = 11061.75$
or, $885r = 698.25r + 11061.75$
or, $1580.25r = 11061.75$
 $r = \frac{11061.75}{1580.25} = 7\%$
68. Let the speed of the first train be x and that of the second train be y .

Now, $x \ y \ 28 \dots(i)$
 $x \ y \ \frac{462}{5.5} \ 84 \dots(ii)$

Adding these two equations,
 $2x \ 28 \ 84 \ 112$
 $x \ 56, y \ 28$
 Required ratio $\frac{56}{28} \ \frac{2}{1} \ 2 : 1$

69. **Let the sum be x and the rate of interest be $r\%$ pa. Then**
 $\frac{x}{100} \ 5 \ (r \ 5) \ \frac{x}{100} \ 5 \ r \ 72.5$
 or, $5xr \ 25x \ 5xr \ \frac{7250}{25} \ Rs. \ 290$

70. **Let Rajeev's one day's work be $7x$ and Rakesh's one day's work be $4x$.**
 (Rajeev Rakesh)'s one day's work $\frac{1}{28}$
 or, $7x \ 4x \ \frac{1}{28}$
 or, $11x \ \frac{1}{28}$
 $x \ \frac{1}{28 \ 11}$
 Rajeev's one day's work $7 \ \frac{1}{28 \ 11} \ \frac{1}{44}$
 Hence, Rajeev alone can finish the work in 44 days.

71. **Let the side of the square be a .**
 Then, area of the square a^2
 Now, $a^2 \ 1764$
 $a \ 42 \text{ m}$
 Now, breadth of rectangle $42 \ \frac{1}{4} \ 10.5 \text{ m}$
 Length of rectangle $5 \ 10.5 \ 52.25 \text{ m}$
 Area of rectangle $52.25 \ 10.5 \ 551.25 \text{ sq m}$
 Difference $1764 \ 551.25 \ 1212.75 \text{ sq m}$

72. **Total journey 199 km**
 Now, $(199 \ 7) \ 192 \text{ km}$
 The rate for this 192 km $Rs. \ 17 \text{ per km}$
 Passenger pays $192 \ 17 \ Rs. \ 3264$
 But the passenger pays $Rs. \ 3311$
 As the passenger pays $Rs. \ y$, for the first seven kilometres.

73. **Total marks 525**
 Total marks scored by Govind $525 \ \frac{56}{100} \ 294$
 Marked scored by Govind in Subject Z
 $294 \ 94 \ 133 \ 67$
 $M \ 67$

74. **Let the speed of the stream be x kmph and the distance covered by him downstream and upstream be D .**

Then, $\frac{3 \ D}{13 \ x} \ \frac{D}{(13 \ x)}$
 or, $39 \ 3x \ 13 \ x$
 or, $4x \ 26$
 $x \ 6.5 \text{ kmph}$

75. **Let the cost price be $Rs. \ x$**
 Selling price at a profit of 17%
 $x \ x \ \frac{17}{100} \ Rs. \ \frac{17x}{100}$
 Selling price at 13% loss $x \ \frac{13x}{100} \ \frac{87x}{100}$
 Now, $\frac{117x}{100} \ \frac{87x}{100} \ 210$
 or, $30x \ \frac{210 \ 100}{210 \ 100} \ Rs. \ 700$
 $x \ 30$

76. $(16)^? \ (16)^{7.2} \ (16^3)^{1.6} \ (16^4)^{1.2} \ (16^5)^1$
 $(16)^{7.2} \ 16^{4.8} \ 16^{4.8} \ 16^5$
 $(16)^{7.2 \ 4.8 \ 4.8 \ 5} \ (16)^{(12.2 \ 9.6)}$
 $16^{2.6}$
 $? \ 2.6$

77. $\frac{6000 \ ?}{100} \ 45.5 \ 11.6 \ 13.5 \ 7.2$
 $? \ \frac{527.8 \ 97.2 \ 625}{625 \ 100} \ 10.42\%$
 $? \ 6000$

78. $? \ \frac{77777}{700} \ \frac{6455}{250} \ \frac{3991}{26}$
 $\frac{11111}{100} \ \frac{1291}{50} \ \frac{307}{2}$
 $\frac{11111}{100} \ \frac{2582}{100} \ \frac{15350}{100}$
 $\frac{29043}{100} \ 290.43$

79. $\sqrt{?} \ \{6^{3.6} \ (6^2)^{4.2}\}^{1/4}$
 $\{6^{3.6} \ 6^{8.4}\}^{1/4} \ \{6^{3.6 \ 8.4}\}^{1/4}$
 $\{16^{12}\}^{1/4} \ 6^3 \ 216$
 $? \ (216 \ 216) \ 46656$

80. $? \ \frac{23564 \ 275 \ 430100}{605}$
 $\frac{6480100 \ 430100}{605}$
 $\frac{6050000}{605} \ 10000 \ 10^4$

86. **The number should be 600 in place of 599. The series is 1 3, 2 6, 3 9...**

87. **The number should be 38 in place of 40. the series is 1 5, 2 10, 3 15 ...**

88. **The number should be 63 in place of 64. The series is (8 1) 2, (18 3) 3, (63 5) 4 ...**

89. **The number should be 285 in place of 286. The series is (90 45) 3, (135 40) 3, (285 35) 3,...**

90. The number should be 636 in place of 635. The series is $(17 \cdot 1^3) \cdot 2, (36 \cdot 2^3) \cdot 3, (132 \cdot 3^3) \cdot 4, (636 \cdot 4^3) \cdot 5, \dots$

91. I. $(x - 5)(x - 2) = 0$ $x = 2, 5$

II. $(y - 10)(y - 1) = 0$ $y = 1, 10$

Therefore $x = y$.

92. I. $(x - 12)(x - 16) = 0$

$x = 12, 16$

II. $(y - 4)(y - 12) = 0$

$y = 4, 12$

Therefore $y = x$.

93. Solving (I) & (II), we get

$x = 2.5$ and

$y = 0.5$

$y = x$

94. I. $(x - 3)(x - 5) = 0$ $x = 3, 5$

II. $(y - 5)(y - 6) = 0$ $y = 5, 6$

Therefore $x = y$.

95. I. $x = \sqrt{3136} = 56$

II. $y = \sqrt{3136} = 56, 56$

Therefore $x = y$.

96. We can't get the absolute amount of profit with the help of the graph given.

97. Required percentage $\frac{169}{(169 - 245) \cdot 100}$
40.82% 41%

99. The highest percentage increase is witnessed in the year 2001 with respect to the year 2000. See the rise in the line from the year 2000 to the year 2001.

Now, the required percentage increase

$$\frac{40 - 15}{15} \cdot 100$$

$$\frac{25}{15} \cdot 100 = 166\frac{2}{3}\%$$

100. The required difference (in lakh units)

$$14 - 14 \cdot \frac{22}{7} = 7 - 7$$

$$14 - 3 = 42 \text{ lakh}$$

$$4200000$$