SAMPLE QUESTIONS (CET MAHARASHTRA)

1. Ajit can complete a piece of work in 60 days whereas Kailash and Shailendra working together can complete it in 15 days. When Ajit and Shailendra alternately works for a day each, the work gets completed in 40 days. Then the number of days in which Kailash will complete twice the work is

    (a) 30 (b) 40 (c) 52 (d) 60 (e) None of these

2. A and B run a 1560 m race ending in a dead heat. At first, the speed of A and B are in the ratio of 7 : 5. B then quickens his pace and for the remainder of the race runs 40 percent faster than A. How many metres A run before B quickens his pace?

    (a) 650 (b) 780 (c) 910 (d) 900 (e) None of these

3. In a triangle ABC, AB = 3 cm, AC = 4cm and the length of the median AD to the side BC is 3.5cm, then the side BC is equal to

    (a) 1 (b) 3.25 (c) 5

    (d) cannot be determined (e) None of these

4. The cost price of an article is Rs.16. The percentage of profit when calculated on the selling price is numerically equal to the selling price. Then the selling price of the article is

    (a) 20 (b) 40 (c) 80

    (d) Both (a) and (c) (e) None of these

5. In the given figure, PT is the tangent to the circle, $\angle BTP = 56^{o}$, then $\angle BAT$ = -----, where A is any point on the minor arc BT.

    (a) 56° (b) 124°

    (c) 304° (d) 100°

    (e) None of these
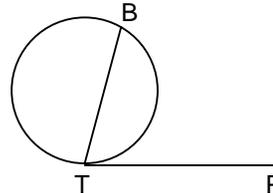
Direction for questions 6 – 12: The passage below is followed by questions based on its content. Answer the questions on the basis of what is stated or implied in the passage.

Early in the careers of most, novelists, the critics nag and carp; later, the cold eye of reassessment is cast over their life's work at the peak of a writing career, which is where Doris Lessing now stands, the years of solid achievement command maximum respect.

A survey of critical responses to Lessing's books might reveal curious strata of social history. It is hard to remember now that she was once considered very daring and very militant (she insisted that relations between the sexes were difficult and unequal). She has been accused of being a feminist, and then accused by feminists of not being a feminist enough. She has been a communist, but then moved on from a belief in simplistic political solutions to interest in deeper psychological change, touching on themes of madness and of mystical and extrasensory states of consciousness.

Lessing has written clearly into all her work the conviction that we are moving blindly and inevitably toward global catastrophe. Her message seems to be our complete moral and social bankruptcy, particularly in the relations between men and women. Hers is not an angry feminism, though her men are rather poor creatures compared to her bruised but gritty women. Anger may imply a hope that things could be better if only some sense could be knocked into somebody's head, a hope for a time "after the revolution." One does not feel that Lessing sees any hope, only perpetual deadlock.

Certainly Lessing has earned the respect accorded to a writer 'of her stature and productivity. Doggedly she has been writing into her fiction signposts and warnings that we need desperately to be reminded of and writing in a way that has been more persuasive and imaginative than if she had been a pure polemicist. But the critic has the problem of distinguishing between what an author says and the way, she says it. The moralist in Lessing, struggling with the very skilled writer, at times has made her writing prolix, clogged, slow-though in her latest novels she has successfully introduced a leavening of fantasy. The fact is that there are writers who in an economical page or two can make us feel our dilemmas more piercingly than she does in a leisurely fictional experience. Missing from her work is that sense of time and space gathered up for a moment between the hands, that sudden shift from understanding to seeing directly, that we expect at rare moments from our storytellers.

6. According to the passage, Lessing's feminism *is* characterized by which of the following?

    I. A lack of concern for the well-being of males.

    II. A special emphasis upon the problems of women in professional life.

    III. A belief that antagonism between the sexes is inevitable.

    (a) I only   (b) III only   (c) I and II only   (d) I and III only   (e) II and III only

7. The aspect of Lessing's work most extensively discussed in the passage is its

    (a) pungent humor   (b) disarming candidness

    (c) scrupulous scholarship   (d) unrelenting moralism

    (e) feminine bias

8. According to the passage, which of the following can be attributed to Lessing's concern with warning society of its deterioration?

    (a) Recurrence of the same situations in her various writings.

    (b) A readership whose interest in her writing is more political than literary.

    (c) Concentration of the critics on her craftsmanship rather than her "message."

    (d) A tendency for her prose to be labored and verbose.

    (e) Her social and political activism.

9.   The passage suggests that the author admires writers

   (a) whose fiction is less militant than Lessing's.

   (b) who express greater optimism and hope than Lessing does.

   (c) whose insights are succinctly and trenchantly developed.

   (d) whose writings have been characterized by stylistic innovation.

   (e) who are less dogmatic.

10.   The passage implies that the author views communism as an ideology that

   (a) fails to accommodate the complexities of society.   (b) is hostile to artistic creativity.

   (c) fosters an acute awareness of social injustice.   (d) is congenial to feminist concerns.

   (e) has outlived its utility.

11.   The author's attitude toward Lessing can best be described as one of

   (a) serious reservation   (b) grudging respect

   (c) enthusiastic endorsement   (d) qualified admiration

   (e) unabashed admiration.

12.   The passage suggests that one reason why opinion regarding Lessing's feminism has changed is that

   (a) the focus of her literature has changed from social issues to psychological states.

   (b) she has gradually adopted a more conservative position on the roles and rights, of women.

   (c) feminists today find her work irrelevant to their concerns.

   (d) her views no longer seem as revolutionary as they once did.

   (e) She remains involved with peripheral issues.

DIRECTIONS: Look at the figure given below for questions 13 – 14, and answer the questions
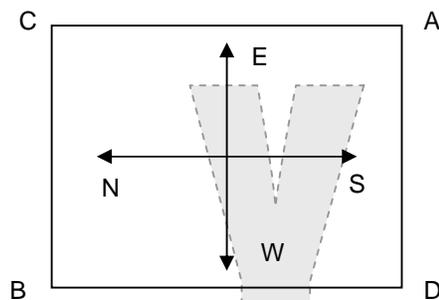
13.   A starts crossing the field diagonally. After walking half the distance, he turns right, walks some distance and turns left, which direction is A facing now?

   (a) North-East   (b) North-West   (c) South-East   (d) South-West   (e) North

14. From the positions in the figure, A and C move diagonally to opposite corners and then one side each clockwise and anti-clockwise respectively. D and B move two sides each clockwise and anti clockwise respectively. Where is A now.

(a) At the North-West corner.　　　　　　　(b) At the North-East corner.

(c) At the South-East corner.　　　　　　　(d) At the South-West corner.

(e) Mid way between original position of B and D.

Direction for questions 15 – 17 : choose the correct alternative.

15. If 22 + 1 = 30, 　　43 + 4 = 75　Then 59 + 5 =?

(a) 64　　　　(b) 72　　　　(c) 86　　　　(d) 99　　　　(e) None of these

16. If $2 \times 2 = 8$　　$3 \times 3 = 18$　Then $4 \times 4 = ?$

(a) 32　　　　(b) 64　　　　(c) 16　　　　(d) 8　　　　(e) None of these

17. Which pair of numbers is different from the, rest?

(a) (5, 15)　　(b) (6, 24)　　(c) (7, 49)　　(d) (9, 63)　　(e) None of these

Direction for questions 18 – 22: Prem stores sells the diversified items. One of the items sold by the store is shoes. The following graph gives the number of airs of shoes sold in the eight months ladies, gents and children in the year 2001. The pie-diagram shows the distribution of formal, casual and sports shoes. Refer to this to answer the questions that follow.
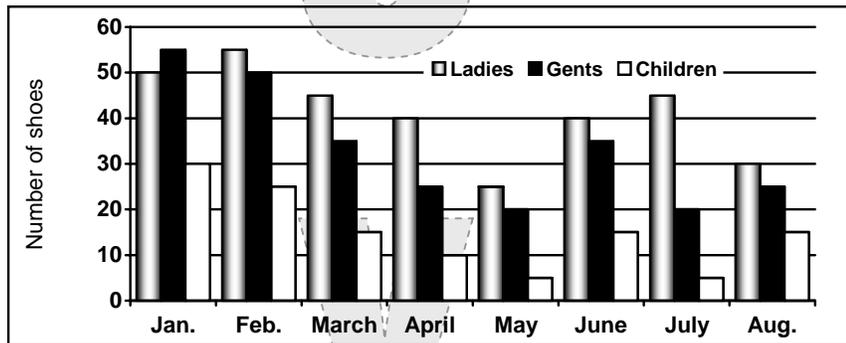
Distribution of Different Cateogries of Shoes in 2000
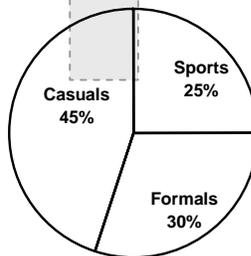
18.   In the month of May, average price of pair of show was Rs. 430. If the average price of ladies, gents and children's shoes were in the ratio of 4 : 5 : 3, then what was the average price of a pair of ladies shoes ?

(a) Rs. 100   (b) Rs. 400   (c) Rs. 300   (d) Rs. 500   (e) None of these

19.   If the Rs. sales were equal in April and May, then how much was the percentage increase in average price per shoe in May as compared to that in April ?

(a) 55%   (b) 50%   (c) $33\frac{1}{3}$%   (d) Rs. $66\frac{2}{3}$%   (e) None of these

20.   If in the month of Jan, 24% ladies bought sports show and in May 80% ladies bought casuals, then what was the percentage difference between the sports show purchased by ladies in Jan Than the casuals by ladies in May ?

(a) 10%   (b) 67%   (c) 40%   (d) 33%   (e) None of these

21.   What was the difference in the number between the gents who bought sports shoes and ladies who bought formals for the above given period ?

(a) 33   (b) 65   (c) 16   (d) 20   (e) None of these

22.   In how many months did the number of pair of formal shoes for children and ladies decreased or remained same than the number of pair of casual shoes for gents? (Considering the number of pairs of shoes in integers)

(a) 2   (b) 3   (c) 1   (d) 4   (e) None of these

Direction for questions 23 – 27: Sentences are given with blanks to be filled in with an appropriate word. Five alternatives are suggested for each question. Choose the correct alternative.

23.   A poor man _____ I knew nursed the orphan.

(a) what   (b) that   (c) who   (d) which   (e) whom

24.   My father can't _____ very well as he's slightly deaf.

(a) listen   (b) grasp   (c) recall   (d) understand   (e) hear

25.   Many _____ of wildlife are becoming instinct.

(a) specimens   (b) species   (c) examples   (d) brands   (e) makes

26.   Being an opportunist of the first order, he is still sitting on the fence and is trying to weigh the _____ of the various political parties.

(a) proposals   (b) prospects   (c) perspectives   (d) possibilities   (e) purpose

27.   To say that science is either good or bad is irrelevant because science is in the mind of man, and it
       does not have any _____ apart from the mind of man.
       (a) relevance   (b) existence   (c) meaning   (d) essence   (e) none of these

Direction for questions 28 – 34: In each of the following questions, there is a set of four figures labelled A,
B, C and D called the Problem Set followed by a set of five other figures labelled a, b, c, d and e called the
Answer Set. Fig. (C) Contains a question-mark. Select a suitable figure from the Answer set which will
substitute this question-mark so that a series is formed by the figures A, B, C and D taken in order. The
number of the selected figure is the answer.

PROBLEM FIGURES   **ANSWER FIGURES**
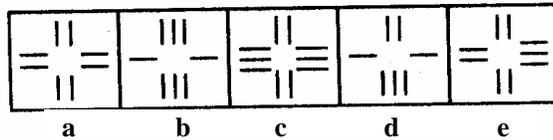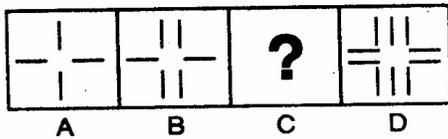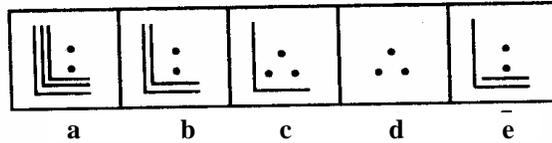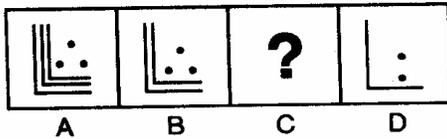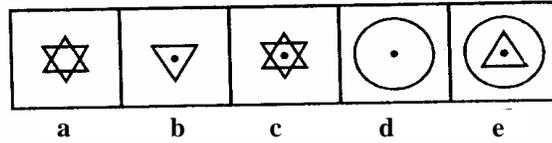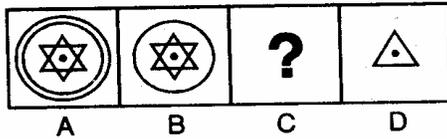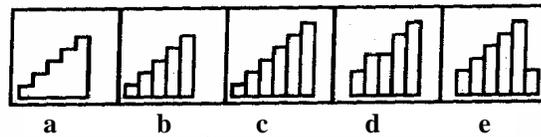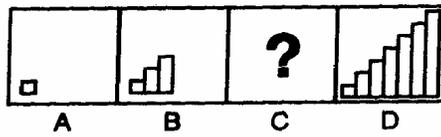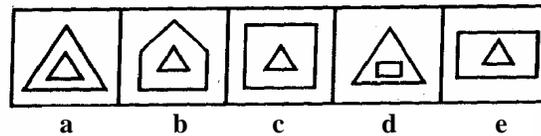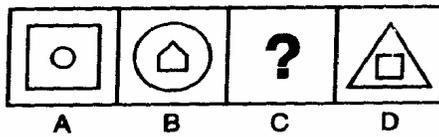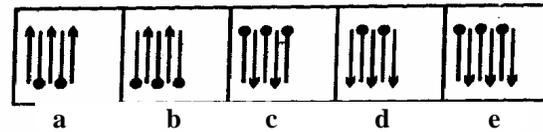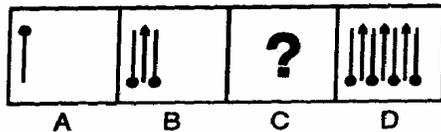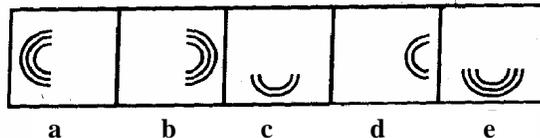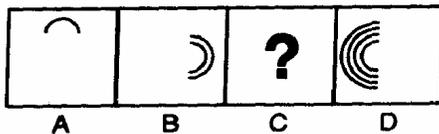
35. The value of when x = 2 and y = – 2 is
    (a) – 18   (b) – 14   (c) 14   (d) 18   (e) None of these

36. The sum of two numbers is 15 and the sum of their squares is 113. The numbers are:
    (a) 4, 11   (b) 5, 10   (c) 6, 9   (d) 7, 8   (e) None of these

37. If in a right angle triangle, three sides are 3, 4, 5, what is the circumradius of the triangle?
    (a) 5   (b) 2   (c) 9   (d) 2.5   (e) None of these

38. The difference between largest four digit number and smallest four digit number is
    (a).8999   (b) 9998   (c) 8899   (d) 8888   (e) None of these

39. Two numbers are in the ratio 1: 5. If 5 is added to each number, their ratio becomes 1 : 4. State the number of the choice which gives correct pair of numbers.
    (a) 16, 80   (b) 20, 100   (c) 15, 75   (d) 10, 5   (e) None of these

40. Seema weighs 5/9 of her weight plus 20 kg. What is the actual weight of seema?
    (a) 36 kg   (b) 72 kg   (c) 27 kg   (d) 45 kg   (e) 30kg

41. A is 5 year younger than B who is 3 times as old as C. If C was 10 years old 4 years back. How old will A be after 6 years?
    (a) 35 years   (b) 43 years   (c) 40 years   (d) 30 years   (e) 38 years

42. A student was asked to multiply a certain number by 4 and add 3 to it. Instead he divided it by 4 and subtracted 3 from it. If he got the answer 1, what should have been the correct answer?
    (a) 65   (b) 67   (c) 62   (d) 60   (e) 66

Directions for Questions 43 – 52: In the following passage, there are blanks, each of which has been numbered. These numbers are printed below the passage and against each, five words are suggested, one of which fits the blank appropriately. Find out the appropriate word in each case.

Schools in India have (43_____) turned into institutions where the emphasis is more on (44_____) the pockets of guardians than on enlightening the students. Tuition fees have (45_____), but the sky does not seem to be the limit. Apart from the general hikes in fees, (46_____) payments are demanded for development projects which are not (47_____) spent for the avowed purpose. Middle class families, (48_____) to put their wards in good 'English Medium' Schools, find themselves in an (49_____) situation after a few years, when the hike in school fees far (50_____) the growth in income. The (51_____) of school – going for the young was, however, killed long ago when our policy – makers decided that the number of educated unemployed could be controlled by loading the syllabi in a way so as to (52_____) the majority from reaching the white – collar job market.

43.	(a) recently	(b) lately	(c) definitely	(d) surprisingly	(e) surely
44.	(a) burdening	(b) loading	(c) lightening	(d) overloading	(e) reducing
45.	(a) increased	(b) decreased	(c) reduced	(d) skyrocketed	(e) augmented
46.	(a) additional	(b) particular	(c) unusual	(d) special	(e) usual
47.	(a) always	(b) only	(c) often	(d) frequently	(e) repeatedly
48.	(a) worried	(b) anxious	(c) ready	(d) careful	(e) concerned
49.	(a) difficult	(b) odd	(c) embarrassing	(d) unenviable	(e) arduous
50.	(a) outdoes	(b) excels	(c) outstrips	(d) outnumbers	(e) surpasses
51.	(a) sorrow	(b) happiness	(c) mood	(d) pleasure	(e) joy
52.	(a) encourage	(b) prohibit	(c) disallow	(d) preclude	(e) check

Directions for questions 53 – 55: The following Venn diagram represents the five categories of people S,D, .., T with the number for each category, for the age : 10 years and above. The pie chart shows the age group distributions for C and T, which also holds true for all the regions linked to wither C or T or both. All fractions can be rounded off to the nearest natural number. Refer to the diagram and pie chart to answer the questions that follow.

S → People who smoke

D → People who drink

G → People who play golf

C → People who play cards

T → People who chew tobacco

11, 12, 13, 14 etc. are the number of people that belong to that region.
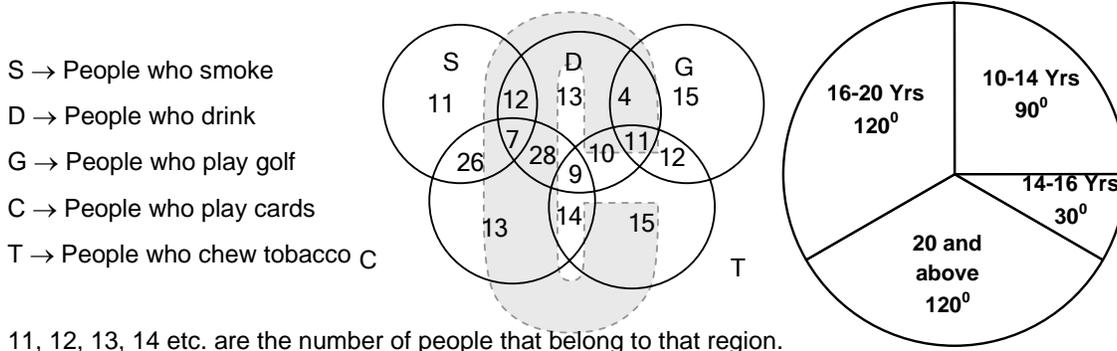
53. How many people who play Cards only and play Golf only belong to age group 16 – 20 years?

(a) 4 (b) 3 (c) 5 (d) Data insufficient (e) None of these

54. How many people who chew Tobacco and play cards, belong to age group 14-16 years?

(a) 2 (b) 4 (c) 8 (d) 7 (e) None of these

55. How many people who play Golf and chew Tobacco, belong to the age group 10 – 14 years?

(a) 4 (b) 6 (c) 2 (d) 7 (e) None of these

Direction for questions 56 – 58: 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 known facts.

56. **Statements:** (I) All drivers are mechanics. (II) All mechanics are cleaners.

    Conclusions: (1) All cleaners are drivers (II) Some drivers are mechanics

    (III) All drivers are cleaners (IV) Some cleaners are mechanics

    (a) All (I), (II), (III) & (IV) follow   (b) Only (II), (III) & (IV) follow

    (c) Only (III) & (IV) follow   (d) Only (II) & (III) follow

    (e) None follows

57. **Statements:** (1) Some doctors are engineers (II) All engineers are lawyers

    Conclusions: (1) Some lawyers are doctors (II) All engineers are doctors

    (III) Some doctors are lawyers (IV) Some engineers are lawyers

    (a) Only (I), (III) & (IV) follow   (b) Only (III) & (IV) follow

    (c) Only (I), (II) & (IV) follow   (d) Only (II), (III) & (IV) follow

    (e) None follows

58. **Statements:** All managers are effective (II) Vikas is effective

    Conclusions: (I) Vikas is a manager (II) Vikas is an executive

         (III) Vikas is a worker (IV) Vikas is not a manager

    (a) Only (1) follows   (b) Either (II) or (III) follow

    (c) Either (1) or (IV) follows   (d) None follows

    (e) Either (I) or (IV) & Either (II) or (III) follow

Direction for questions 59 – 63: Five alternatives are given for the idiom/ phrase underlined in the sentence. Choose the one which best expresses the meaning of the idiom/ phrase underlined.

59. He has fallen out with his wife.

    (a) had an accident   (b) had a quarrel   (c) slipped away

    (d) gone away together   (e) none of these

60. His voice gets on my nerves.

    (a) makes me ill   (b) pierces my eardrums   (c) irritates me

    (d) makes me sad   (e) none of these

61. We should do away with the present examination system.

    (a) abolish   (b) interdict   (c) demolish   (d) prohibit   (e) none of these

62.   The teacher was <u>as good as his word</u>.

(a) incapable of action.   (b) ready to fulfill his promise

(c) better than expected.   (d) highly pretentious   (e) none of these

63.   In life, we have to <u>take the rough with the smooth</u>.

(a) make unpleasant things better.

(b) accept unpleasant as well as pleasant things.

(c) be tough in order to be successful.

(d) use pleasant words to make things smooth.

(e) none of these.

Direction for questions 64 – 68: In each of the questions below, sentences are given which are denoted by (a), (b), (c), (d) and (e). By using all the five sentences, you have to frame a meaningful paragraph. The correct order of the sentences is your answer. Choose from the five alternatives the one having the correct order of sentences and mark it as your answer.

64.   (A)   This seems to be surprising that the cold winter weather comes when it is nearest the Sun and the hot summer when it is farthest away.

(B)   In other words, Earth is nearest to the Sun in winter and farthest from it in summer in the northern hemisphere.

(C)   While in July, it is farthest from the Sun (152,099,000 km.).

(D)   Generally in early December, the Earth in its yearly journey around the Sun comes nearest to the Sun (147,097,000 km.).

(E)   But for those who live in the southern hemisphere, cold weather comes in July and the hot season in December.

(a) BCDAE   (b) EACBD   (c) DBCAE   (d) BDCEA   (e) DCBAE

65.   (A)   Then came the news that a glass or two of red wine was the way to health and happiness – a matter of much rejoicing for the spiritually – deprived.

(B)   The colours that surround you, we were told next, could cast a shade on your psyche.

(C)   A while ago, we were told that screaming and yelling and letting it all hang out was the best way to reduce stress.

(D)   Perhaps this high decibel therapy was too aurally unnerving.

(E)   So keep off red and black and chase away your blues with the colour blue.

(a) ADCBE   (b) BDCEA   (c) BACDE   (d) CDABE   (e) CDEBA

66. (A) The characteristic spectral signatures of the terrestrial bodies are detected by remote sensors aboard satellites and aircraft.

(B) It, therefore, essentially involves measuring the electromagnetic radiation of the Sun that is reflected, scattered or re – emitted by objects from airborne or space platforms on the basis of the reflection of the electromagnetic radiation.

(C) Remote sensing is a method of recording information without actual contact with the object or area being investigated.

(D) Remote sensing can, therefore, provide reliable and timely information on natural resources, both renewable and nonrenewable.

(E) It uses the visual, infrared and microwave portions of the electromagnetic spectrum.

(a) CEAED   (b) EBADC   (c) EADCB   (d) BCDAE   (e) ABCDE

67. (A) Is it just a warm, gooey feeling of sentimental pleasure – which must necessarily give way to the cold, hard facts of pain and hunger and want suffered by vulnerable sections of our society, in an often hostile and alien world?

(B) To be 'unhappy' is to feel at odds with the circumstances in which one finds oneself.

(C) To be 'happy' is to feel at one with 'hap', the happenings that take place in one's experience.

(D) But does this mean that happiness is just a passing state?

(E) We usually think of 'happiness' as a state of mind, which alternates with an opposite state called 'unhappiness'.

(a) BECDA   (b) DBEAC   (c) EBCDA   (d) BEDCA   (e) ACBDE

68. (A) Girls on the other hand are plumped for teaching, veterinary care or child care.

(B) Girls have entered the age of reason while boys are doing just the opposite.

(C) Market researchers now put forward apocalyptic visions of a generation of lost boys engrossed in fantastic future pursuits, while girls are getting down to the nitty gritty of surviving in a competitive world.

(D) The careers that boys choose, too, are somewhat out of sync with reality, - football and flying fighter planes being in the forefront.

(E) Despite these woolly – headed ideas about the ideal career, boys are not displaying any great concern for growing unemployment, while in complete contrast, girls have a much higher grasp on reality.

(a) CBAED   (b) EBADC   (c) EADCB   (d) BCDAE   (e) ABCDE

DIRECTIONS: In question 69 to 73, some relationships have been expressed through symbols, which are explained below

X = greater than

□ = not less than

÷ = not equal to

φ = equal to

+ = not greater than

Δ = less than

In each of the following questions, find the correct answer and write its serial number in the answer sheet.

69.   If a x b Δ c, it follows that

(a) a φ c Δ b   (b) b □ a x c   (c) a □ b + c   (d) c + b □ a   (e) b □ a φ c

70.   If a ÷ b ÷ c it does not imply that

(a) a Δ b x c   (b) b Δ c x a   (c) a x c Δ b   (d) c x b Δ a   (e) b x a φ c

71.   If a Δ b Δ c, it does not imply that

(a) b x a Δ c   (b) c x b x a   (c) a Δ c x b   (d) a x c x b   (e) a + b + c

72.   If a + b + c, it does not imply that

(a) a φ b Δ c   (b) c φ b Δ a   (c) a Δ b Δ c   (d) a Δ b φ c   (e) a φ b φ c

73.   If a □ b x c, it implies that

(a) a x c + b   (b) c x b x a   (c). b x a x c   (d) a Δ b □ c   (e) a □ b φ c

Direction for questions 74 – 78: The first and the last sentences of the passage are numbered 1 & 6. The rest of the passage is split into four parts and named A, B, C, and D. These four parts are not given in their proper order. Read the passage and find out which of the five combinations is correct.

74.   1.   He tried opening the door.   A.   The room was neat and clean.
        B.   Then he stepped into the room.   C.   He waited for a minute or two.
        D.   It opened easily and he peeped in.   6.   He was careful not to touch anything.
        (a) DBAC   (b) CABD   (c) DACB   (d) BDAC   (e) ADCB

75.   1.   "What's the matter, Jimmy, why are you crying?"
        A.   "Well, you shouldn't cry about a thing like that, you know."
        B.   "Dad was carrying a huge stone and it fell on his foot," said Jimmy.
        C.   "Was he badly hurt?"
        D.   "No, I don't think so, but he was very angry."
        6.   "I didn't. That's just the trouble. I laughed"
        (a) ABCD   (b) BACD   (c) BADC   (d) BCDA   (e) BDCA

76. 1. I was awakened in the night by a noise in the house.
    A. I quickly put on my dressing gown and crept downstairs.
    B. In the living room I discovered two burglars breaking into my desk.
    C. As I switched on the light I saw that it was 2 o' clock.
    D. They were both tall; dark men.
    6. As soon as they saw me standing there, they rushed to the window and jumped out.
    (a) ABDC   (b) ADCB   (c) CABD   (d) ABCD   (e) CBAD

77. 1. There has been an alarming increase in the number of vehicles on Delhi roads.
    A. The pedestrian has, however, been the worst sufferer.
    B. There is no place where the pedestrian can move freely without fear of traffic.
    C. Zebra – crossings like the pavements are no longer safe.
    D. This has further aggravated the problem of pollution in the city.
    6. Should the pedestrian's case be allowed to go by default?
    (a) ABCD   (b) DACB   (c) DCAB   (d) DBCA   (e) DCBA

78. 1. Life is hazardous.
    A. And prey have evolved adaptations that reduce the risk of being eaten.
    B. Many animals are killed and eaten by other animals.
    C. And many predators die from starvation because they fail to secure prey.
    D. Predators have continued to evolve adaptations that enable them to locate and kill prey.
    6. Everything points to a special kind of arms race with elaborate counter – strategies for attack and defence.
    (a) BACD   (b) BCAD   (c) DBCA   (d) BCDA   (e) ABCD

79. What is the cost paid by an Eskimo to make an igloo with a sheet of canvas? Base radius of the tent = 7m and cost to canvas = Rs.25/sq.m.
    (a) Rs.8000   (b) Rs.7700   (c) Rs.7000   (d) Rs.5500   (e) None of these

80. If x = √3/2, [√(1 + x) + √(1 − x)] / [√(1 + x) − √(1 − x)] = ?
    (a) √3   (b) √3/2   (c) 3√2   (d) 1/√3   (e) None of these

81. What is the number which when subtracted from its square is 5 times itself?
    (a) 4   (b) 5   (c) 6   (d) 8   (e) None of these

82. 555 is the same as which of the following?
    (a) 55 × 5   (b) 5 × 5 × 5 + 430   (c) 5 × 55 + 275   (d) 55 x 5 + 200   (e) None of these

83. The effective speed of travel of a boat downstream is 20 kmph whereas it is 10 kmph upstream. What is the speed of the current?

    (a) 10 kmph   (b) 8 kmph   (c) 5 kmph   (d) 2.5 kmph   (e) None of these

84. The average age of a group of 15 persons is 29 years. Among them, the age of each of the two persons is 55 years. What is the average age of remaining 13 persons?

    (a) 23 yrs.   (b) 28 yrs.   (c) 26 yrs.   (d) 25 yrs.   (e) None of these

Direction for questions 85 – 89: The following sentences are divided into four parts 'a', 'b', 'c' & 'd'. Mark the part which has an error. If there is no error, mark 'e'.

85. (a) The foreman of 'C' shop   (b) is a known hooligan;

    (c) the workers   (d) tremble at his

86. (a) I wasn't knowing   (b) that I committed

    (c) so many errors.   (d) in speaking and writing English.

87. (a) By and large   (b) our production pattern

    (c) has conformed   (d) to that of the last year.

88. (a) I remember very well that one

    (b) of the first things he used to do

    (c) after entering the class was to ask the boys to

    (d) open their text book on some page or the other.

89. (a) In case if he drops in,   (b) tell him to see me

    (c) in my office   (d) on Monday at 11 o' clock

DIRECTIONS: In questions 90 – 94 digits do not carry their value, but are 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.

90. If $3 \times 4 = 1609$

    $5 \times 6 = 3625$

    $1 \times 2 = 41$

    then $4 \times 7 = ?$

    (a) 1649   (b) 74   (c) 4916   (d) 148   (e) 144

91. if $3 \times 2 \times 9 = 923$

         $4 \times 1 \times 3 = 314$

         $5 \times 3 \times 6 = 635$

    then $4 \times 3 \times 9 = ?$

    (a) 428   (b) 439   (c) 934   (d) 349   (e) 439

92. if $30 + 40 = 1520$

         $36 + 28 = 1814$

         $40 + 20 = 2010$

    then $50 + 22 = ?$

    (a) 1125   (b) 1126   (c) 2511   (d) 1104   (e) 2250
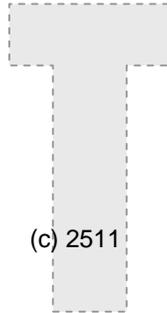
93. If $4 \times 5 = 1625$

         $5 \times 6 = 2536$

         $4 \times 6 = 1636$

    Then $3 \times 2 = ?$

    (a) 162   (b) 94   (c) 1491   (d) 812   (e) 254

94. If $9 - 3 = 12$

         $8 - 3 = 10$

         $7 - 3 = 08$

    then $6 - 5 = ?$

    (a) 1   (b) 2   (c) 3   (d) 4   (e) 5

DIRECTIONS: In questions 95 to 96 terms of various letter series are given with one term missing (?). Find out the missing term from the alternatives given below and write its serial number on the answer sheet against the question number.

95. AH, DK, GN, JQ,   ? , PW

    (a) LV   (b) MW   (c) MT   (d) NX   (e) KT

96.   EYXB, HVUE, LRQI, VHGS, ?

    (a) AZYD   (b) YDEV   (c) SJKP   (d) NPOK   (e) TKPO
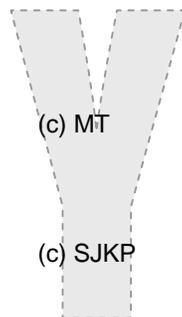
Directions in questions 97 – 101: Three out of the four figures in each question belong to one class or category. Only one figure is different. Mark your answers as (a), (b), (c) or (d). If all figures in each question belong to one class or category then mark (e).

97.

    a   b   c   d

98.

    a   b   c   d

99.

    a   b   c   d

100.

    a   b   c   d

101.

    a   b   c   d
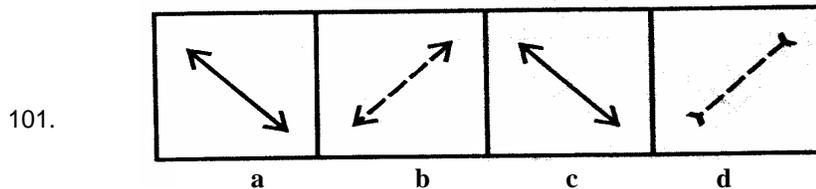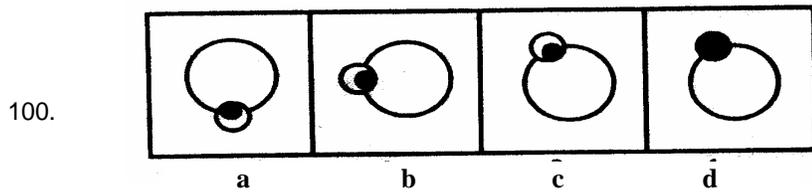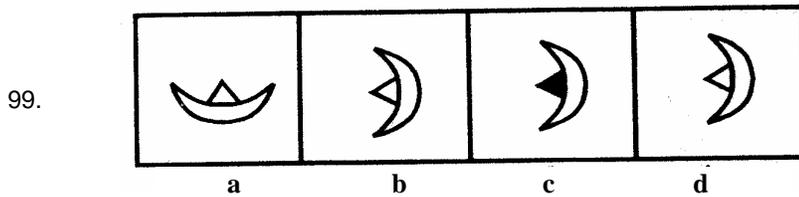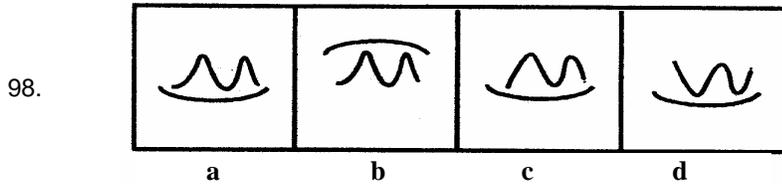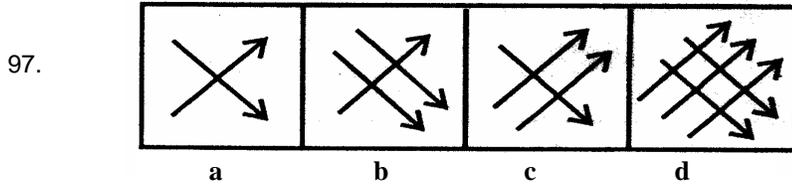
102. The volume of the greatest sphere cut off from a cylindrical wood of base radius 1 cm and height 5 cm is

(a) $\frac{4}{3} \times 5\pi\ cm^3$ (b) $\frac{4}{3} \times \pi\ cm^3$ (c) $5\pi\ cm^3$ (d) 4π (e) None of these

103. In a right angled triangle with sides a, b and hypotenuse c, the altitude drawn on the hypotenuse is x, then

a) $ab = x^2$ (b) $\frac{1}{a} + \frac{1}{b} = \frac{1}{x}$ (c) $a^2 + b^2 = 2x^2$ (d) $\frac{1}{a^2} + \frac{1}{b^2} = \frac{1}{x^2}$ (e) None of these

104. If the volume in m³ and surface area in m² of sphere are numerically equal, then the radius of the sphere is

(a) 4m   (b) 3.5m   (c) 3m   (d) 2m   (e) None of these

Direction for Questions 105 – 109: In each of the following questions, a part of the sentence is printed in bold. Five alternative meanings of the bold part of the sentence are given below the sentence. Mark as your answer the number of that alternative, the meaning of which you think is correct.

105. Maharashtra and Karnataka are **at loggerheads** on the problem of border issue.

(a) agree   (b) disagree   (c) in dispute

(d) discussions under progress   (e) None of these

106. If you ask him to synthesize, he will do it **at the drop of a hat.**

(a) unwillingly   (b) immediately   (c) happily   (d) directly   (e) straightaway

107. Sandhya and Medha are at **daggers drawn** ever since their children fought with each other.

(a) friendly   (b) adverse   (c) had heated arguments

(d) very unfriendly   (e) favourable

108. The information which you gave regarding the examination date is **at variance** with what I received from students.

(a) is same   (b) is different from   (c) is similar

(d) is slightly different   (e) None of these

109. He had made a fortune in business but blew it all away in alcohol, so it was **back to square one** for him.

(a) situation changed.   (b) condition improved.

(c) back to the situation at which he started.   (d) condition worsened.

(e) was pleased.

Direction for questions 110 – 113: In each of the following sentences, there are two blank spaces. Below each sentence, there are five pairs of words denoted by letters (a), (b), (c), (d) and (e). Find out which pair of words can be filled up in the blanks in the sentence in the same sequence to make the sentence meaningfully complete.

110. Students these days are _____, because of which the results have _____ a lot.

(a) honest, lost   (b) idle, flourished   (c) intelligent, suffered

(d) sincere, improved   (e) poor, developed

111. The lecturer's _____ over his subject was seen through his _____ discourse.

    (a) oratory, dull   (b) mastery, fluent   (c) grip, boring

    (d) skill, long   (e) expertise, unpleasant

112. The few other refugees had to _____ since Inder alone _____ all the food.

    (a) leave, prepared   (b) eat, cooked   (c) wait, spoiled

    (d) starve, consumed   (e) cook, wasted

113. The Supreme Court _____ him because he was found _____ on the basis of the evidence.

    (a) acquitted, better   (b) sentenced, innocent   (c) released, innocent

    (d) blessed, involved   (e) promoted, guilty

114. A rectangular container is of size 12 cm (length) x 8 cm (width) and 5 cm (height). How many ice cubes of side 2 cm each can be placed in this container?

    (a) 60   (b) 54   (c) 8   (d) 48   (e) None of these

Directions for questions 115 – 119: Refer to the table given below to answer the questions 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

115. Number of students registered for History for all the three 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%   (e) None of these

116. If the total registration fees collected from the students of I year for Science, History, Maths & Economic is in the ratio 3 : 2 : 3 : 1. If the total registration fees collected is Rs.135000, the what is the registration fees for Economics?

    (a) Rs.350   (b) Rs.300   (c) Rs.250   (d) Rs.287.5   (e) None of these

117. Assuming the data of Q.178, what is the total registration fees for Maths in 1st year?

    (a) Rs.45000   (b) Rs.47500   (c) Rs.50500   (d) Rs.50725   (e) None of these

118. 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   (e) None of these

119. What is the total number of students in the college if the student for other subjects (not given in the table) are in the ratio 2 : 5 with the given?

    (a) 1084   (b) 1640   (c) 1200   (d) 1190   (e) None of these

Direction for questions 120 – 122: In each question below is given a statement followed by several conclusion. You have to assume everything in the statement to be true, then decide which of the conclusions logically follows beyond reasonable doubt from the information given in the statement. Then decide which of the answers (a), (b), (c), (d) or (e) is the correct answer.

120. **Statement:** Anything can be bought with money.

    Conclusions:

    (I) Money has the purchasing power   (II) A definite value exists for everything

    (III) A barter system is non-existent

    (a) Only (II) & (III) follow   (b) Only (I) & (III) follow

    (c) Only (I) follows   (d) Only (I) & (II) follow

    (e) Only (II) follows

121. **Statement:** Business is the best option for making money, still people prefer to go for service.

    Conclusions:

    (I) People do not like money   (II) Business carries a risk factor as well

    (III) Jobs are available.

    (a) Only (1) & (III) follow   (b) Only (II) & (III) follow

    (c) Only (II) follows   (d) Only (III) follows

    (e) All (I), (II) & (III) follow

122 **Statement:** Competitive examinations are conducted by the organisation to select bright candidates.

    Conclusions:

    (I) Organisations need bright candidates

    (II) Bright Candidates cannot be selected through any other tests

    (III) The ratio of the number of applicants to that of vacancies is very high

    (a) Only (I) & (III) follow   (b) Only (III) follows

    (c) Only (1) follows   (d) All (I), (II) & (III) follow

    (e) Only (II) & (III) follow

Directions in questions 123 – 127: The first two figures bear a definite relation to each other. Bearing that relation in mind pickup correct figure from the given in front of each question. Mark your answers as (a), (b), (c) or (d). If none of the figures bears that relation then mark your answer as (e)

123.

124.

125.

126.

127.
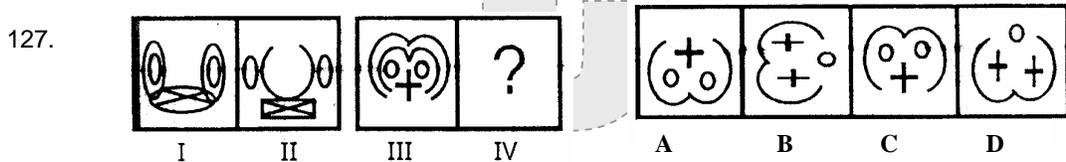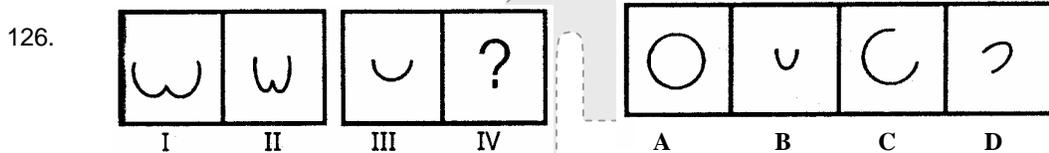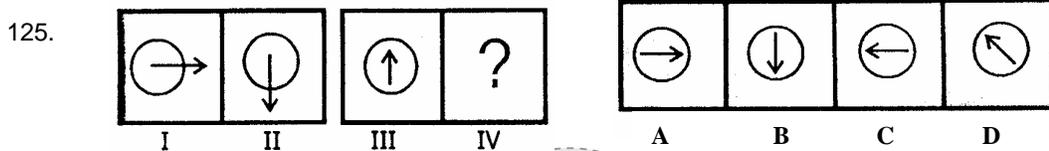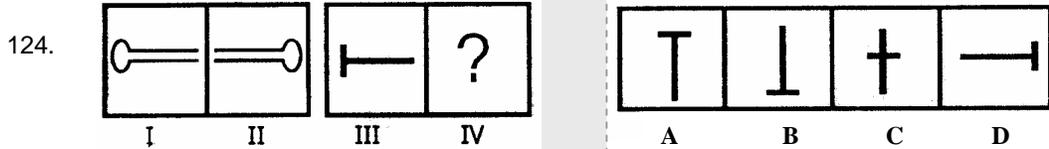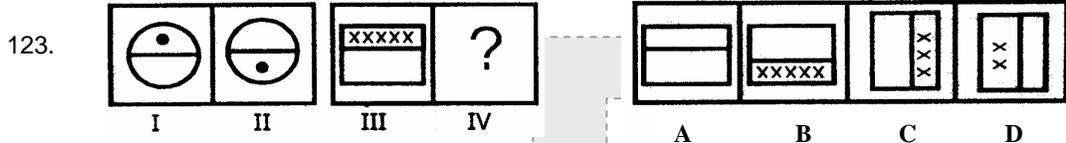
128. If SISTER is coded as 212345 and ARC is 658 then ARREST will be coded as
(a) 655243   (b) 655324   (c) 655423   (d) 677427   (e) 655325

129. If SKY is coded as TTMMXX, then LIFE will be coded as
(a) MMKKDD   (b) NNKKFF   (c) MMLLFF   (d) MNOOCC   (e) None of these

130. A cone and a cylinder of equal heights have equal radii of their bases. The height of the cone is doubled and that of the cylinder is halved. What will be the ratio of their volumes?
(a) 4:3   (b) 3:1   (c) 1:3   (d) 1:12   (e) None of these

SAMPLE QUESTIONS (CET MAHARASHTRA)

ANSWERS

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