

MODEL QUESTION PAPER - 2

SECTION I - ANALYSES OF BUSINESS SITUATIONS

Directions: There are two passages in this Section. Read also the directions for answering questions under the passage before answering.

FIRST PASSAGE

A large departmental stores chain decided to organise a New Year sales in all its 14 branches in the City. The M.D. set the goals for the sales.

High volume low margins should be the major thrust.

New customer base has to be created through the sales and at the same time sustaining the existing customer has to be ensured. He asked the Sales staff to select good quality products carefully and work out the discounts ensuring customer attraction. There should be no stock-outs during the sales and hence, agreements should be made with the suppliers to ensure the availability of the products for New Year sales.

Separate teams were formed for selection of products, advertising including product displays, selection and training of temporary staff, liaison with suppliers / Credit Card agencies and Customer Relations. Elaborate arrangements were customer convenience – queueing, catering - services, etc. It was decided to ask for police bandobust. Special uniforms were made for the sales staff. It was decided to have a VIP to inaugurate the sales at each centre. Prizes / additional incentives were worked out on volume of purchases without violating statutory regulation. The staff worked hard to ensure, the success of the sales. Manager of each branch was made the Coordinator, who was allowed to mobilise all the resources needed and take appropriate decisions. M.D. had also assigned the total responsibility to his GM(Pur). He was asked to lay down all the activities both at the Corporate / branch levels and assign them to various people. Delegation was the key aspect and control was to be discrete and minimal. Sales people were to be motivated through Performance Awards, Commissions, etc.

M.D. sent a circular to all the staff, soliciting their cooperation in making the D day a success – paving the way for further growth of the Company.

Directions: The questions that follow relate to the preceding passage. Evaluate, in terms of the passage, each of the item given. Then select your answer from one of the following classifications.

- 1) A Major Objective in making the decision: one of the goals sought by the decision.
- 2) A Major Factor in making the decision : an aspect of the problem, specifically mentioned in the passage, that fundamentally affects and/or determines the decision.
- 3) A Minor Factor in making the decision: a less important element bearing on/or affecting a Major factor, rather than a Major objective directly.
- 4) A Major Assumption in making the decision: a projection or supposition arrived at by the decision maker before considering the factors and alternatives.
- 5) An Unimportant issue in making the decision: an item Sacking significant impact on, or relationship to, the decision.

Questions:

1. M.D. Assigning the total control to GM (Pur).
2. Suppliers are to be approached to ensure availability of goods.

3. Discounts for each product to be worked out to attract customers.
4. A V.I.P. to inaugurate the sales at each branch.
5. Recruitment and Training of temporary staff.
6. Police bandobust to be arranged.
7. Formation of teams for each activity to ensure planning and co-ordination.
8. Objectives for sales clearly defined and communicated.
9. Advertising, product displays etc. to ensure a good response for the sales.
10. Delegation at every level would ensure effectiveness.

Data Application Questions:

11. Which of the following activities were planned to ensure the success of New Year Sales?
 - I. Having a VIP to inaugurate the sales
 - II. Availability of the products included in the sales
 - III. One person in total control of all activities for each branch1) I only 2) II only 3) I and II only 4) III only 5) II and III only
12. Each activity was carefully planned
 - I. Through formation of a separate team to look into each area
 - II. Placing a Senior Executive to be overall in charge
 - III. By direct involvement and active interest of M.D.1) I only 2) II only 3) III only 4) I and II only 5) I and III only
13. Sales staff were motivated to put in their maximum efforts
 - I. Through product discounts, prizes, etc. to customers
 - II. Through direct approach my MD, by writing to each of the staff
 - III. Through proper training and providing a distinct uniform1) II only 2) III only 3) I only 4) II and III only 5) I and III only
14. The goals set for the sales by MD
 - I. To create public awareness through advertising
 - II. To motivate the staff to do better and effectively
 - III. To create new customer base1) III only 2) I and II only 3) II only 4) I, II and III 5) I and III only
15. The customer satisfaction was ensured through
 - I. Providing facilities during the sales such as catering services
 - II. Making sure availability of good quality products at discounts throughout the sales
 - III. Providing adequate staff through employment of temporary staff1) II and I 2) All 3) None 4) I only 5) II only

SECOND PASSAGE

Coirfoam, a small company producing foam rubber mattresses was in financial trouble, and its owners wanted to sell it. The company has been established some twenty years ago, but its market share had steadily declined over the last five years. Since Mr. krishnan had no previous experience in the mattress business, he requested his friend to tell him what he could do about it.

His friend analysed the company's resources. Its best resources was its product and brand name. However, synthetics are much cheaper than foam rubber mattresses. . Latex mattresses are known for their orthopaedic and anti-allergic qualities, among others. The coirfoam brand name had very nearly become a genetic term for all types of rubber mattresses. Coirfoam, however was the only latex mattress produced locally.

Apart from a superior product, the company had few resources. Its equipment; though satisfactory, was old. It operated in leased premises on a year-to-year basis, although the landlord was willing to conclude a long-term agreement on favourable terms. On the other hand, the company's labour force was experienced and dedicated and its production manager had more than ten years' experience in latex manufacturing.

The Chairman of the company, was seventy years old and wanted to retire. Apart from the Sales Manager, no one else shared responsibility for marketing or administration. He told Krishnan's friend that if the company were sold, he had no intention of remaining in service; he had eighteen years of experience in the mattress industry. If the sales manager left the company Krishnan might not find a suitable replacement. This was another issue that Krishnan's friend had to study.

Coirfoam's financial position was precarious. The company was heavily in debt and its line of credit fully extended. There was some question as to whether the company would be able to purchase enough latex to keep production going, but the manager assured, that the company had a bank letter of credit to purchase an additional three month's supply.

In spite of the Chairman's optimism, the fact was that his company had steadily lost market share. Once the dominant mattress manufacturers with fifty percent of the local market, its market share has declined to less than ten percent. The Chairman attributed this decline to popularity gained by spring mattress manufacturers, who had only begun production five years ago. Spring mattress now accounted for seventy percent of the total market, another company ten percent, with the remaining twenty percent shared by a number of small plants producing synthetic rubber mattresses. Spring mattresses had some attributes similar to those of foam rubber, such as orthopaedic qualities. They were less costly to manufacture but sold to the customer at about the same price as coirfoam mattresses.

Because of coirfoam financial difficulties, it ceased advertising in newspaper and on radio for over the past five years. As a result, retailers were reluctant to handle the product. In contrast to it, two spring mattress manufacturers had advertised heavily in the mass media. One of those manufacturer's products was sold exclusively by the largest furniture chain in the country. During his study of the mattress market, a number of retailers had expressed the opinion to Krishnan's friend that a whole generation of young people largely unaware of coirfoam product because of the lack of advertising. One retailer was quoted as saying "It is true that older people remember coirfoam but these mattresses last for almost twenty years". The big market is not the replacement market, but sales generated by family formation. Thousands of young couples get married every year and every marriage means another mattress sale. But these young couples only see advertisements for spring mattresses. It is obviously easier for any salesman to sell a mattress which his customers have seen in countless advertisement than one which is relatively unknown.

Krishnan's friend was aware of the fact that if con-foam was ever to regain some of its lost market share, it would have to launch a major advertising programme to educate young adults about the important attributes found in its product. A major question that needed an immediate answer was : "To what extent are people aware of coirfoam mattresses and their attributes?" Other question involved the attitudes of people toward foam rubber mattresses in general and how these attitudes compared to those toward spring mattresses. Krishnan's friend ordered a market research survey to obtain answers to his questions. In brief, the study of coirfoam mattresses showed that customers

over twenty-five years of age who were aware of coirfoam mattresses had favourable attitudes towards their attributes. About three quarters of these people expressed a preference for foam rubber mattresses for their children (by contrast with other mattresses for their own use). Awareness among younger segments of the population of the attributes of foam rubber mattress in general, and of coirfoam in particular was very low. Few people expressed an intention to buy foam rubber mattresses. On the basis of the preliminary research Krishnan was optimistic that he could turn the company around, in support of his belief, he cited the recognition of the company among a significant portion of the population and that fact that they would buy a coirfoam for their children. He believed that once retailers became aware that new management had taken over the company, they would be willing to stock the product, Krishnan was aware that the research findings were not always in agreement with his conclusions. However, the findings that young people were relatively unaware of coirfoam did not seem to worry him. He felt that a well-designed advertising program would convince many people to buy a foam rubber mattresses, rather than any competing type. Moreover the introduction of the new management team would instil confidence among coirfoam bankers, credit lines would be increased thereby improving the company's financial position. However, before making a final decision as to whether to purchase coirfoam, Mr. Krishnan waited for his friend's final report and recommendations.

DATA EVALUATION QUESTIONS

Directions: The questions that follow relate to the preceding passage. Evaluate, in terms of the passage, each of the items given. Then select your answer from one of the following classifications and blacken the corresponding space on the answer sheet.

- 1) A Major Objective in making the decision: one of the goals sought by the decision maker.
- 2) A Major Factor in making the decision: an aspect of the problem, specifically mentioned in the passage, that fundamentally affects and/or determines the decision.
- 3) A Minor Factor in making the decision: a less important element bearing on/or effecting a Major factor, rather than a Major objective directly.
- 4) A Major Assumption in making the decision: a projection or supposition arrived at by the decision maker before considering the factors and alternatives.
- 5) An Unimportant issue in making the decision: an item lacking significant impact on, or relationship to, the decision.

Questions:

16. Public awareness of the high quality of coirfoam mattresses.
17. The anti-allergic qualities of coirfoam mattresses.
18. Attitude of older consumer towards coirfoam mattresses.
19. Willingness of retailers to stock coirfoam products in the future.
20. Need to import latex rubber.
21. Coir-foam's present market share.
22. Krishnan's friend's recommendations.
23. Coirfoam leased its premises.
24. Orthopaedic qualities of coirfoam mattresses.
25. Age of manufacturing equipment.

SECTION II - READING COMPREHENSION

Directions: This Section contains three passages. You have to read each carefully. Each passage is followed by questions based on its contents. After reading each passage choose the best answer to each question. The questions are based on what is stated or implied in each passage.

FIRST PASSAGE

Ocean water plays an indispensable role in supporting life. The great ocean basins hold about 300 million cubic miles of water. From this vast amount, about 80,000 cubic miles of water are sucked into the atmosphere each year by evaporation and returned by precipitation and drainage to the ocean. More than 24,000 cubic miles of rain descend annually upon the continents. This vast amount is required to replenish the lakes and streams, springs and water tables on which all flora and fauna are dependent. Thus, the hydrosphere permits organic existence.

The hydrosphere has strange characteristics because water has properties unlike those of any other liquid. One anomaly is that water upon freezing expands by about 9 percent, whereas most liquids contract on cooling. For this reason, ice floats on water bodies instead of sinking to the bottom. If the ice sank, the hydrosphere would soon be frozen solidly, except for a thin layer of surface melt water during summer season. Thus, all aquatic life would be destroyed and the interchange of warm and cold currents, which moderates climate would be notably absent.

Another outstanding characteristic of water is that water has a heat capacity which is the highest of all liquids and solids except ammonia. This characteristic enables the oceans to absorb and store vast quantities of heat, thereby often preventing climatic extremes. In addition, water dissolves more substances than any other liquid.

It is this characteristic which helps make oceans a great storehouse for minerals which have been washed down from the continents. In several areas of the world, these minerals are being commercially exploited. Solar evaporation of salt is widely practiced. Potash is extracted from the Dead Sea and Magnesium is produced from sea water along the American Gulf Coast.

Questions:

26. The author's main purpose in this passage is to

- 1) Describe the properties and uses of water
- 2) Illustrate the importance of conserving water
- 3) Explain how water is used in commerce and industry
- 4) Reveal the extent of the earth's ocean masses
- 5) Compare water with other liquids

27. According to the passage, fish can survive in the ocean because

- 1) They do not need oxygen
- 2) Ice floats
- 3) Evaporation and conduction create a water cycle
- 4) There are currents in the ocean
- 5) Water absorbs heat

28. Which of the following characteristics of water does the author mention in the passage?

I. Water expands when it is frozen

II. Water is a good solvent **III. Water can absorb heat**

- 1) I only
- 2) II only
- 3) I and II only
- 4) II and III only
- 5) I, II and III

29. According to the passage, the hydrosphere is not

- 1) Responsible for all forms of life
- 2) Able to modify weather
- 3) A source of natural resources
- 4) In danger of freezing over
- 5) The part of the earth covered by water

same way that earnings in industrial undertakings are reduced by the tariff reduction program embodied in the treaty with European Community.

There is no point in dismissing 15,000 industrial workers from their present jobs during the coming ten years if all the gain in productivity is wasted by costly harbour, transport, financial, administrative and other services. The free trade treaty is their concern as well. Surplus staff should be removed if need be, from all workplaces, not just from the factories. Efficiency is everybody's business.

Questions:

33. The attitude of the report as described in the passage may best be expressed as

- 1) Harshly condemnatory because industry is not more responsive to the business climate
- 2) Optimistic that Government will induce industry to make needed changes
- 3) Critical of labour unions
- 4) Pessimistic that anything can be done to reduce the trade gap
- 5) Objective in assessing the influence of free trade on employment

34. What is the meaning of free trade?

- 1) Unlimited sale of goods in Europe
- 2) Trade on barter basis
- 3) The elimination of tariffs
- 4) Sale of price - discounted goods to European Countries
- 5) Trade with only the so - called "free countries", i.e., Western Europe

35. It can be inferred that the term adjustment assistance refers mainly to

- 1) Unemployment compensation
- 2) Some sort of financial assistance to manufacturers hurt by free - trade
- 3) Help in relocating plants to Europe
- 4) Aid in reducing work stoppages
- 5) Subsidy payments to increase exports

36. The author's central recommendation seems to be that

- 1) Unemployment should be avoided at all costs
- 2) Redundant labour should be removed in all sectors
- 3) Government should control the service sector
- 4) Tariffs should not be lowered
- 5) Workers should be retrained

37. Which of the following titles describes the context of the passage?

- 1) The prospects of Free Trade
- 2) Government Intervention in World Trade
- 3) Trade with the common market
- 4) What lies Ahead?
- 5) Unemployment and adjustment assistance

38. Which of the following will occur because of duty free imports?

I. 600 billion rupees of capital will be idled.

II. Thirty-five thousand workers will be unemployed

III. Fifteen thousand firms will face bankruptcy

- 1) I only
- 2) II only
- 3) I and II only
- 4) II and III only
- 5) I, II and III

39. According to the passage, the Government is responsible for

- 1) Increasing tariffs
- 2) Subsidizing exports
- 3) Not explaining its position
- 4) Adjustment assistance
- 5) Over manned ships

40. Tariffs will be reduced on

- 1) All manufactured goods
- 2) Manufactured and agricultural goods
- 3) All goods
- 4) Industrial goods
- 5) Industrial and consumer goods

41. Which industries will be affected by tariff reductions?

- I. Services** **II. Manufacturing** **III. Extracting**
1) I only 2) II only 3) I and II only 4) II and III only 5) I, II and III

THIRD PASSAGE

Observe the dilemma of the fungus; it is a plant, but it possesses no Chlorophyll. While all other plants put the sun's energy to work for them combining the nutrients of ground and air into the body structure, the chlorophyllous fungus must look elsewhere for an energy supply. It finds it in those other plants which, having received their energy free from the sun, relinquish it at some point in their cycle either to other animals (like us humans) or to fungi.

In this search for energy the fungus has become the earth's major source of rot and decay. Wherever you see mold forming on a piece of bread, or a pile of leaves turning to compost, or a blown - down tree becoming pulp on the ground, you are watching a fungus eating. Without fungus action the earth would be piled high with the dead plant life of past centuries. In fact, certain plants which contain resins that are toxic to fungi will last indefinitely; specimens of the redwood, for instance can still be found resting on the forest floor centuries after having been blown down.

Questions:

42. Which of the following words best describes the fungus as depicted in the passage?

- 1) unevolved 2) Sporadic 3) Enigmatic 4) Parasitic 5) Toxic

43. The passage states all the following about fungi EXCEPT:

- 1) They are responsible for the decomposition of much plants life
2) They cannot live completely apart from other plants
3) They are vastly different from other plants
4) They are poisonous to resin - producing plants
5) They cannot produce their own store of energy

44. The author's statement that "you are is best watching a fungus eating" described as

- 1) Figurative 2) Ironical 3) Parenthetical 4) Erroneous 5) Contradictory

45. The author is primarily concerned with

- 1) Warning people of the dangers of fungi 2) Writing a humorous essay on fungi
3) Relating how most plants use solar energy 4) Describing the actions of fungi
5) Explaining the long life of some redwoods

SECTION III - PROBLEM SOLVING

Directions: For each of the following questions, select the choice which best answers the question.

46. Find without actual division, the remainder if $4x^5 - 7x^3 - x^2 + 8$ is divided by $2x + 3$

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

47. Simplify $(\sqrt{5} - \sqrt{3}) / (\sqrt{5} + \sqrt{3})$

- 1) $3 - \sqrt{13}$ 2) $4 - \sqrt{15}$ 3) $7 - \sqrt{17}$ 4) $2 - \sqrt{15}$ 5) None of these

48. A corporation declares an annual dividend of 6%. Ram owns 325 shares (par value Rs.

75). How much dividend does he receive?

- 1) Rs. 1,462.50 2) Rs. 562.50 3) Rs. 872 4) Rs. 670 5) None of these

49. The sum of the squares of three numbers which are in the ratio of 2 : 3 : 4 is 725. The three numbers are

- 1) 11, 14, 19 2) 9, 16, 21 3) 10, 15, 20 4) 8, 12, 25 5) None of these

50. Ten years ago a father was seven times as old as his son, two years hence twice his age will be equal to five times his son's age. What are their present ages?
1) 38, 14 2) 40, 20 3) 52, 26 4) 50, 25 5) None of these
51. The material of a cone is converted into the shape of a cylinder. Radii of both are equal. Find the height of the cone if that of the cylinder is 5 cm
1) 10 cm 2) 15 cm 3) 20 cm 4) 22 cm 5) None of these
52. Find the greatest number less than 10000 which is divisible by 48, 60 and 64
1) 8500 2) 9600 3) 7600 4) 9400 5) None of these
53. In an examination, the average was found to be 50 marks. After deducting computerization errors the marks of the 100 candidates had to be changed from 90 to 60 each and the average came down to 45 marks. The total number of candidates who took the examination were
1) 300 2) 200 3) 600 4) 400 5) None of these
54. Two places A and B are 200 km apart. A person from A travels by car in the direction of B at a speed of 60 km per hour. A person from B starts at the same time and travels by motor cycle at a speed of 40 km per hour towards A. After how much time will they meet?
1) 4 hours 2) 3 hours 3) 2 hours 4) 1.75 hours 5) None of these
55. A shopkeeper gives a discount of 10% on the marked price of an item but still he makes a profit of 10%. If the marked price of the item is Rs. 330, then the cost price is
1) Rs. 300 2) Rs. 270 3) Rs. 480 4) Rs. 290 5) None of these
56. If x is 25% more than y then what percent is y less than x?
1) 10% 2) 12% 3) 15% 4) 20% 5) None of these
57. If the shares bought at prices Rs. 300 to Rs. 450 are sold at prices ranging from Rs. 400 to Rs. 525, the maximum possible profit for selling a specified number of shares is Rs. 2,250. The number of shares sold is
1) 10 2) 15 3) 20 4) 25 5) None of these
58. A sum of money borrowed at compound interest amounts to Rs. 672 in 2 years and Rs. 714 in 3 years. The rate of interest is
1) 6.25% 2) 5% 3) 3.5% 4) 8.50% 5) None of these
59. From the top of a hill 400 metres high, the angle of depression of the top and the bottom of a tower are 30° and 45° . The height of the tower is
1) $[400(\sqrt{3} - 1)] / \sqrt{3}$ m 2) $(400\sqrt{3}) / (\sqrt{3} - 1)$ m
3) $200(\sqrt{3} - 1) / \sqrt{3}$ m 4) $200(\sqrt{3}) / (\sqrt{3} - 1)$ m
5) None of these
60. A (4, 1), B (2, 1) and C (0, 1) are the vertices of a triangle. The centroid of the triangle is
1) (0, 1) 2) (2, 1) 3) (2, 0) 4) (0, 0) 5) None of these
61. If $x - y = 3$ and $x + 2y = 6$ are the diameters of a circle then the centre of the circle is at the point
1) (0, 0) 2) (1, 2) 3) (1, -1) 4) (4, 1) 5) None of these
62. Jyothi invested Rs. 400 at the beginning of every month in a bank paying 8% on recurring deposits. How much would she get at the end of 3 years?
1) Rs. 15,126 2) Rs. 15,750 3) Rs. 16,075 4) Rs. 16,176 5) None of these
63. Volume of a right circular cone of height 12 cm and radius 8 cm is how many times the volume of a sphere of radius 4 cm?
1) 4 2) 2 3) 3 4) 5 5) None of these
64. If $a + b + c = 0$, then value of $(a^3 + b^3 + c^3) / abc$ is
1) -1 2) 1 3) -3 4) 3 5) None of these

65. If $\log_{27} x + \log_9 x + \log_3 x = 11$, the value of x is
 1) 625 2) 700 3) 729 4) 825 5) None of these
66. $\int_0^{\pi/2} \sin^2 x \cdot \cos x dx$ is
 1) 1/14 2) 1/13 3) 2/13 4) 1/12 5) None of these
67. $\int_1^{\infty} \frac{dx}{x^2 + x^4}$ is
 1) $2 - (\pi/4)$ 2) $1 - (\pi/4)$ 3) $3 - (\pi/4)$ 4) $\pi/4$ 5) None of these
68. One number is selected from 1 to 10. The probability that it is divisible by 2 or 3 is
 1) 7/10 2) 5/10 3) 3/10 4) 9/10 5) None of these
69. What is the probability of getting a total of 7 or 11 when two dices are thrown up?
 1) 2/9 2) 3/9 3) 4/9 4) 5/9 5) None of these
70. The median of the following is
 x: 8 5 6 10 9 4 7
 y: 6 4 5 8 9 6 4
 1) 6 2) 9 3) 7 4) 8 5) None of these

SECTION IV - DATA SUFFICIENCY

Directions: Each question below is followed by two labelled facts [labelled as (a) and (b)]. You are to determine whether the data given in the statement are sufficient for answering the questions. Use the data given, plus your knowledge of Mathematics and every day facts, to choose amongst possible answer from (1) to (5),

- 1) If you can get the answer from (a) alone but not from (b) alone.
- 2) If you can get the answer from (b) alone but not from (a) alone.
- 3) If you can get the answer from both (a) and (b) but not from (a) alone or (b) alone.
- 4) If either statement (a) or (b) is sufficient to answer the question asked.
- 5) If you cannot get the answer from statement (a) and (b) together, but need even more data.

Questions :

71. Is the number $N/3$ an odd integer? (You may assume that $N/3$ is an integer)
 a) $N = 3K$, where K is an integer
 b) $N = 6J + 3$, where J is an integer
72. What was the value of sales of ABC Company in 1980?
 a) The sales of ABC Company increased by Rs. 1,00,000 each year from 1970 to 1980.
 b) The value of the sales of ABC Company doubled between 1970 and 1980.
73. If $x^6 - y^6 = 0$, what is the value of $x^3 - y^3$?
 a) x is positive
 b) y is greater than 1
74. If a and b are the both positive numbers, then which is larger, 2^a or 3^b ?
 a) a is greater than $2b$
 b) a is greater than or equal to $b + 3$
75. How far is it from town A to town B? Town C is 12 km east of town A
 a) Town C is South of town B
 b) It is 9 km from town B to town C

76. Is x greater than y ?
- $xy = 5$
 - $x/y = 2$
77. Which of the four numbers w , x , y and z is the largest?
- The average of w , x , y and z is 25
 - The numbers w , x and y are each less than 24
78. How much does Susan weigh?
- Susan and John together weight 100 kg.
 - John weighs twice as much as Susan
79. Find $x + y$
- $x - y = 6$
 - $-2x + 2y = -12$
80. What percentage of families in a state have annual income over Rs. 2,25,000 and own a car?
- 28% of the families in the state have an annual income over Rs. 2,25,000
 - 40% of the families in the state with an annual income over Rs. 2,25,000 own a car
81. Does every bird fly?
- Tigers do not fly
 - Ostriches do not fly
82. A piece of wood 5 feet long is cut into three smaller pieces. How long is the longest of the three pieces?
- One piece is 2 feet 7 inches long
 - One piece is 7 inches longer than another piece and the remaining piece is 5 inches long
83. How much is John's weekly salary?
- John's weekly salary is twice as much as Fred's weekly salary.
 - Fred's weekly salary is 40% of the total of Chuck's weekly salary and John's weekly salary
84. If a group of 5 craftsmen take 3 hours to finish a job, how long will it take a group of 4 apprentices to do the same job?
- An apprentice works at $2/3$ the rate of craftsman.
 - The 5 craftsmen and the 4 apprentices together will take $1(22/23)$ hours to finish the job
85. A sequence of numbers a_1, a_2, a_3, \dots is given by the rule $a_n = a_{n+1}$. Does 3 appear in the sequence?
- $a_1 = 2$
 - $a_3 = 16$

SECTION V - ENGLISH USAGE

Directions: In each of the sentences below, four words or phrases have been underlined. Select the underlined part which contains an error in usage, grammar or punctuation. If there is no error, indicate 5 as the answer

Questions:

86. The husband and wife were fond of one another.
1 2 3 4
87. They used to laugh whatever their teacher spoke.
1 2 3 4 5

88. Even after hearing the leader for a long time
1 2
the followers could not make out which he was talking about.
3 4
89. While going to the market he accompanied by his friends.
1 2 3 4
90. When he awoke he asked where 1 am.
1 2 3 4
91. The examinations act as an incentives for diligence.
1 2 3 4
92. Kingsley is one of the sincere student in our college.
1 2 3 4
93. The occurrence of this phenomenon is occasionally observed
1 2 3
by the scientists.
4
94. The roots help a plant to soak water.
1 2 3 4
95. Had he not left the school before the final examination
1 2 3
he would stand first.
4
96. Would you please tell me where can I get copies
1 2 3
of this application form
4
97. He had gone to the theatre last night.
1 2 3 4
98. Everyone of the man present has given some money
1 2 3
as their contribution to the fund
4
99. In old age there is nothing more miserable than poverty.
1 2 3 4
100. Hard work and perseverance is indispensable to success in life.
1 2 3 4