Day : Monday

Date : 6/6/2022

S-13283-2022

Time : 10:00 AM-01:00 PM

Max. Marks : 100

N.B.:

1)	All questions are **COMPULSORY**.	
2)	Figures to the right indicate **FULL** marks.	
3)	Use of non-programmable **CALCULATOR** is allowed.	
4)	Draw neat and labeled diagrams **WHEREVER** necessary.	
5)	Answers to both the sections should be written in **SAME** answer book.	
6)	Assume suitable data if necessary.	

SECTION – I
Aptitude (Maths, Logical Reasoning)

Q.1 Solve the following questions: **[10]**

a) A man on tour travels first 160 at 64 km /hr and the next 160 km at 80 km/hr. What is the average speed for the first 320 km of the tour?

b) The ratio between the speeds of two trains is 7:8. If the second train runs 400 km in 4 hours, then what is the speed of the first train?

c) A and B can together finish a work in 30 days. They worked together for 20 days and then B left. After another 20 days, A finished the remaining work. In how many days A alone can finish the work?

d) 4 men and 6 women can complete a work in 8 days, while 3 men and 7 women can complete it in 10 days. In how many days will 10 women complete it?

e) At what rate of compound interest per annum will a sum of ₹ 1200 become ₹ 1348.32 in 2 years?

Q.2 Solve the following questions: **[10]**

a) There is a 60% increase in an amount in 6 years at simple interest. What will be the compound interest on ₹ 12,000 after 3 years at the same rate?

b) A sum of ₹ 12,500 amounts to ₹ 15,500 in 4 years at the rate of simple interest. What is the rate of interest?

c) Ajay and Vijay undertake to do a piece of work for ₹ 480. Ajay alone can do it in 75 days while Vijay alone can do it in 40 days. With the help of Pradeep, they finish the work in 25 days. How much should Pradeep get for his work?

d) A, B, and C can do a piece of work in 8 days. B and C together do it in 24 days, B alone can do it in 40 days. In what time will it be done by C working alone?

e) A train travels 225 km in 3.5 hours and 370 km in 5 hours. Find the average speed of the train.

Q.3 Solve the following questions: **[10]**

Expenditures of a Company (in Percentage) per Anunm over the given years. (only questions a, b)

Year	Item of Expenditure				
	Salary	Fuel and Transport	Bonus	Interest on loans	Taxes
1998	288	98	3.00	23.4	83
1999	342	112	2.52	32.5	108
2000	324	101	3.84	41.6	74
2001	336	133	3.68	36.4	88
2002	420	142	3.96	49.4	98

P.T.O.

a) What is the average amount of interest per year which the company had to pay during this period?

b) The total amount of bonus paid by the company during the given period is approximately what percent of the total amount of salary paid during this period?

c) In a class of 100 students, 35 like science and 45 like math. 10 like both. How many like either of them and how many like neither?

d) Among a group of people, 40% like red, 30% like blue and 30% like green. 7% like both red and green, 5% like both red and blue, 10% like both green and blue. If 86% of them like at least one colour, what percentage of people like all three?

e) In a class 40% of the students enrolled for Math and 70% enrolled for Economics. If 15% of the students enrolled for both Math and Economics, what percentage of the students of the class did not enroll for either of the two subjects?

Q.4   Choose the statement which is sufficient to answer the question: **[10]**

a) **Question:**   How is X related to Y?
   Statements: i)   Y says, "I have only one brother".
          ii)   X says, "I have only one sister".
   1)   I alone is sufficient while II alone is not sufficient.
   2)   II alone is sufficient while I alone is not sufficient.
   3)   Either I or II is sufficient.
   4)   Neither I nor II is sufficient.
   5)   Both are sufficient

b) **Questions:**   B is the brother of A. How is A related to
   Statements: i)   A is the sister of C.
          ii)   E is the husband of A.
   1)   I alone is sufficient while II alone is not sufficient.
   2)   II alone is sufficient while I alone is not sufficient.
   3)   Either I or II is sufficient.
   4)   Neither I nor II is sufficient.
   5)   Both are sufficient

c) **Questions:**   How many children does M have?
   Statements: i)   H is the only daughter of X who is the wife of M.
          ii)   K and J are brothers of M.
   1)   I alone is sufficient while II alone is not sufficient.
   2)   II alone is sufficient while I alone is not sufficient.
   3)   Either I or II is sufficient.
   4)   Neither I nor II is sufficient.
   5)   Both are sufficient

d) Of the 200 candidates who were interviewed for a position at a call center, 100 had a two-wheeler, 70 had a credit card and 140 had a mobile phone. 40 of them had both, a two-wheeler and a credit card, 30 had both, a credit card and a mobile phone and 10 had all three. How many candidates had none of the three?

e) A farmer travelled a distance of 61 km in 9 hours. He travelled partly on foot at 4km/hr. and partly on bicycle at 9 km/hr. What is the distance travelled on foot?

Q.5 Solve the following questions: [10]

a) What is the effective annual rate of interest corresponding to a nominal rate of 6% per annum payable half-yearly?

b) What will be the ratio of simple interest earned by a certain amount at the same rate of interest for 6 years and that for 9 years?

c) A and B can do a piece of work in 40 days, B and C can do it in 120 days. If B alone can do it in 180 days, in how many days will A and C do it together?

d) Rohan and Tanish can do a piece of work in 70 and 60 days respectively. They began the work together, but Rohan leaves after some days and Tanish finished the remaining work in 47 days. After how many days did Rohan leave?

e) A train passes through a telegraph post in 9 seconds moving with a speed of 54 km per hour. What is the length of the train?

SECTION – II
(Verbal Ability)

Q.6 **A)** Do as directed: [05]

Choose synonyms:

a) Abandon: **i)** Discontinue   **ii)** Condense   **iii)** Magnify   **iv)** Pursue

b) What is the word for the one
Who hates mankind?
  i) Neurotic   **iii)** Philanthrophist
  ii) Misanthrophist   **iv)** Catlous

c) What is the word for the one who believes easily?
  i) Sedulous   **iii)** Credulous
  ii) Credible   **iv)** Assiduous

d) He was ashamed _____ his conduct at the meeting. (choose the preposition)
  i) for   **ii)** over   **iii)** about   **iv)** of

e) He hacks _____ money. (choose the preposition)
  i) over   **ii)** for   **iii)** after   **iv)** about

B) Choose Synonyms: [05]

a) Complement
  i) Aggregate   **ii)** Praise   **iii)** Greetings   **iv)** Command

b) Decision
  i) Ambiguity   **ii)** Judgement   **iii)** Resolve   **iv)** Result

c) Bold
  i) Sharp   **ii)** cold   **iii)** Timid   **iv)** Dauntless

d) She is tall _____ her age. (choose the preposition)
  i) of   **ii)** for   **iii)** at   **iv)** over

e) I saw a _____ of sheep. (choose the preposition)
  i) group   **ii)** herd   **iii)** bulk   **iv)** pack

P.T.O.

SECTION – III
(English Communication)

Q.7 a) Why is Group Discussion a part of the selection process? Which skills are necessary for a candidate to pass in Group Discussion? **[10]**

b) How do you solve problems? Give an example of a problem you have faced in the past either as a part of a team or as an individual. How did you solve the problem? Which problem solving steps had you taken in the situation? **[10]**

SECTION – IV
(Soft Skills)

Q.8 a) The ability to manage your work impacts your productivity. Justify the statement with explaining the principles of time management. How do you prepare yourself before starting on a big project? **[10]**

b) The success of a meeting depends on how participants follow their etiquettes. List important meeting etiquettes and elaborate their impacts on the meeting. **[10]**

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