HOTEL MANAGEMENT

National Council for Hotel Management and Catering Technology

SOLVED PAPER* 2018

Time Allowed : 3 hrs **Max. Marks : 200**

Instructions

- There are five sections in this solved paper.
- For every correct attempt, the student will be awarded 1 mark. For every incorrect attempt, there is provision of negative marking of 0.25 marks.
- All the questions are in MCQs form and each having four options.

Numerical Ability and Analytical Aptitude

DIRECTIONS (Q.Nos. 1-5) *Study the following table carefully and answer the questions given below.*

Population (in lakh) of five states over the years

Year \ State	A	B	C	D	E
2003	15.6	22.6	18.4	16.6	24.2
2004	16.8	20.8	19.2	18.2	23.8
2005	18.8	24.2	19.8	17.8	25.8
2006	18.4	26.4	20.8	19.8	26.4
2007	20.2	28.2	22.6	22.4	28.2

1. What is the average population of state B (in lakh) for all the years together?
(a) 25.24   (b) 24.44
(c) 24.24   (d) 25.44

Sol. (b) Required average = $\dfrac{22.6+20.8+24.2+26.4+28.2}{5}$
$= \dfrac{122.2}{5} = 24.44$

2. What is the ratio of the population of state A in 2003 to the population of state E in 2007?
(a) 27:22   (b) 22:37
(c) 47:26   (d) 26:47

Sol. (d) Required ratio = $\dfrac{\text{Population of State A in 2003}}{\text{Population of State E in 2007}}$
$= \dfrac{15.6}{28.2} = 26:47$

3. Population of state E in 2004 is approximately what per cent of the population of state D in 2006?
(a) 86   (b) 95
(c) 110   (d) 120

Sol. (d) Required percentage = $\dfrac{23.8}{19.8} \times 100\% = 120\%$

4. What is the total population of all the states together (in lakh) in 2005?
(a) 106.4   (b) 98.4
(c) 96.8   (d) 102.8

Sol. (a) Total population = (18.8+24.2+19.8+17.8+25.8) lakh
= 106.4 lakh

*Memory Based

5. Population of state E in 2007 is what per cent of the total population of all the states together in that year? (rounded off to nearest integer).

(a) 26   (b) 25   (c) 23   (d) 21

Sol. (c) Required percentage

$$= \frac{28.2}{20.2+28.2+22.6+22.4+28.2} \times 100\%$$

$$= \frac{28.2}{121.6} \times 100 = 23.19 \approx 23\%$$

6. There are in all 10 balls, some of them are red and the other balls are white. The average cost of all balls is ₹28. If the average cost of red balls is ₹25 and that of white balls is ₹30, then number of white balls is

(a) 3   (b) 5   (c) 6   (d) 7

Sol. (c) Let the number of white balls be x.

Then, number of red balls = $(10-x)$

According to the question,

$$10 \times 28 = x \times 30 + 25(10-x)$$

$$\Rightarrow \quad 280 = 30x + 250 - 25x$$

$$\Rightarrow \quad 5x = 30 \Rightarrow x = 6$$

∴ Number of white balls = 6

7. A, B and C completed a work costing ₹1800. A worked for 6 days, B for 4 days and C for 9 days. If their daily wages are in the ratio of 5:6:4, how much amount will be received by A?

(a) ₹800   (b) ₹600
(c) ₹900   (d) ₹750

Sol. (b) Total money = ₹1800

And, ratio of total wages of A, B and C respectively

$$= 5 \times 6 : 6 \times 4 : 4 \times 9$$

$$= 30 : 24 : 36 = 5 : 4 : 6$$

∴ Amount received by $A = \dfrac{A}{A+B+C} \times$ Total money

$$= \frac{5}{5+4+6} \times 1800$$

$$= \frac{5}{15} \times 1800 = ₹600$$

8. A train 110 m long, is running at a speed of 60 km/h. How many seconds does it take to cross another train. 170 m long standing on parallel track?

(a) 15.6   (b) 16.8   (c) 17.2   (d) 18

Sol. (b) Given, length of first train = 110 and length of second train = 170m

Let the time taken to cross another train be t.

Speed of train = $\dfrac{\text{Sum of lengths of both trains}}{\text{Time taken to cross each other}}$

$$\Rightarrow \frac{60 \times 5}{18} = \frac{110+170}{t} \Rightarrow \frac{60 \times 5}{18} = \frac{280}{t}$$

$$\therefore \quad t = \frac{280 \times 18}{60 \times 5} = 16.8 \text{ sec}$$

9. The numerator of a fraction is 4 less than its denominator. If the numerator is decreased by 2 and the denominator is increased by 1, then the denominator becomes eight times the numerator. Find the fraction.

(a) $\dfrac{3}{7}$ (b) $\dfrac{4}{8}$ (c) $\dfrac{2}{7}$ (d) $\dfrac{3}{8}$

Sol. (a) Let denominator of fraction = x

Then, numerator = $x-4$

∴ Fraction = $\dfrac{x-4}{x}$

Now, according to the question,

$$\frac{(x-4)-2}{x+1} = \frac{1}{8}$$

$$\Rightarrow \quad x-6 = \frac{x+1}{8}$$

$$\Rightarrow \quad 8x-48 = x+1$$

$$\Rightarrow \quad 8x-x = 48+1$$

$$\Rightarrow \quad 7x = 49$$

$$\Rightarrow \quad x = 7$$

∴ Fraction = $\dfrac{7-4}{7} = \dfrac{3}{7}$

10. Three numbers are in the ratio 2:3:4 and their HCF is 12. The LCM of the numbers is

(a) 144   (b) 192   (c) 96   (d) 72

Sol. (a) Let the numbers be $2x$, $3x$ and $4x$ respectively.

∵ HCF = x = 12 (given)

∴ Numbers are $2 \times 12 = 24$, $3 \times 12 = 36$, $4 \times 12 = 48$

2	24, 36, 48
2	12, 18, 24
2	6, 9, 12
2	3, 9, 6
3	3, 9, 3
3	1, 3, 1
	1, 1, 1

LCM $= 2 \times 2 \times 2 \times 2 \times 3 \times 3 = 144$

11. One third of a certain journey is covered at the rate of 25 km/h, one fourth at the rate of 30 km/h and the rest at 50 km/h. The average speed for the whole journey is

(a) 35 km/h   (b) $33\dfrac{1}{3}$ km/h

(c) 30 km/h   (d) $37\dfrac{1}{2}$ km/h

Sol. (b) Let the total distance be x km.

$$\text{Total time} = \frac{\frac{x}{3}}{25} + \frac{\frac{x}{4}}{30} + \frac{\frac{5x}{12}}{50} = \frac{x}{75} + \frac{x}{120} + \frac{x}{120}$$

$$= \frac{x}{75} + \frac{x}{60} = \frac{4x+5x}{300} = \frac{3x}{100} \text{ h}$$

By the formula,

$$\text{Average speed} = \frac{\text{Total distance}}{\text{Time taken}}$$

$$= \frac{x}{\frac{3x}{100}} = \frac{100}{3} = 33\frac{1}{3}\,\text{km/h}$$

12. Thrice the square of a natural number decreased by four times the number is equal to 50 more than the number. The number is

(a) 4   (b) 5   (c) 10   (d) 6

Sol. *(b)* Let the number be x.

According to the question,

$$3 \times x^2 - 4 \times x = x + 50$$

$$\Rightarrow \qquad 3x^2 - 5x - 50 = 0$$

$$\Rightarrow 3x^2 - 15x + 10x - 50 = 0$$

$$\Rightarrow 3x(x-5) + 10(x-5) = 0$$

$$\Rightarrow \qquad (x-5)(3x+10) = 0$$

$$\Rightarrow \qquad x = 5 \text{ or } \frac{-10}{3}$$

But the number is natural.

Hence, required number = 5

13. A certain number when divided by 175 leaves a remainder 132. When the same number is divided by 25, the remainder is

(a) 6   (b) 7

(c) 8   (d) 9

Sol. *(b)* Dividend = (Divisor × Quotient) + Remainder

$$= 175 \times q + 132$$

$$= 25 \times 7 \times q + 25 \times 5 + 7$$

$$= 25(7q+5) + 7$$

It is clear that when the number is divided by 25, remainder will be 7.

14. Two pipes A and B can fill a cistern in 3h and 4h respectively and a waste pipe C can empty it in 2h. If all the three pipes are kept open, then the cistern will be filled in

(a) 5h   (b) 8h   (c) 10h   (d) 12h

Sol. *(d)* Given, time taken by pipe A to fill cistern = 3 h,

Time taken by pipe B to fill cistern = 4 h

And time taken by waste pipe C to empty the cistern

$$= 2\,\text{h}$$

Then, the part of cistern filled in 1h when all three pipes are opened $= \frac{1}{3} + \frac{1}{4} - \frac{1}{2}$

$$= \frac{4+3-6}{12} = \frac{1}{12}$$

Hence, the cistern will be filled in 12h.

15. In what time ₹8000 will amount to ₹9261 at 10% per annum compound interest, when the interest is compounded half-yearly?

(a) $3\frac{1}{2}$ yr   (b) $1\frac{1}{2}$ yr   (c) $2\frac{1}{2}$ yr   (d) 2 yr

Sol. *(b)* Interest is compounded half-yearly.

∴ Rate of interest = 5%

Time $= \frac{n}{2}$ yr (let) = n half-years

By the formula,

$$A = P\left(1 + \frac{r}{100}\right)^t$$

$$\Rightarrow 9261 = 8000\left(1 + \frac{5}{100}\right)^n$$

$$\Rightarrow \frac{9261}{8000} = \left(\frac{21}{20}\right)^n \Rightarrow \left(\frac{21}{20}\right)^3 = \left(\frac{21}{20}\right)^n$$

∴ $n = 3$ half-years

$$= \frac{3}{2}\,\text{yr} = 1\frac{1}{2}\,\text{yr}$$

16. A starts business with ₹3500 and after 5 months, B joins with A as his partner. After a year, the profit is divided in the ratio 2:3. What is B's contribution in the capital?

(a) ₹8000   (b) ₹8500

(c) ₹9000   (d) ₹7500

Sol. *(c)* A's investment of ₹3500 is for 12 months.

B's investment (let it be ₹x) is for 7 months only.

At the end the year the profit is divided in the ratio 2 : 3 and it must be equal to the ratio of the product, (amount × time)

$$\frac{12 \times 3500}{7x} = \frac{2}{3}$$

$$\Rightarrow \qquad x = \frac{12 \times 3500}{7} \times \frac{3}{2}$$

$$\Rightarrow \qquad x = 9000$$

∴ B's investment = ₹9000

17. A completes 7/10 of a work in 15 days, then he completes the remaining work with the help of B in 4 days. The time required for A and B together to complete the entire work is

(a) $10\frac{1}{2}$ days   (b) $12\frac{2}{3}$ days

(c) $13\frac{1}{3}$ days   (d) $8\frac{1}{4}$ days

Sol. *(c)* A completes $\frac{7}{10}$ of a work.

Remaining work $= 1 - \frac{7}{10} = \frac{3}{10}$

According to the question,

$(A+B)$ complete the $\frac{3}{10}$ of work in 4 days.

$$\Rightarrow (A+B)\text{'s work in 1 day} = \frac{3}{10 \times 4} = \frac{3}{40}$$

∴ $(A+B)$ can complete the work in $\frac{40}{3}$ days

$$= 13\frac{1}{3}\,\text{days}$$

18. The simple interest on a sum of money is $\dfrac{1}{16}$ of the principal and the number of years is equal to the rate per cent per annum. The rate per annum is

(a) $1\dfrac{1}{2}\%$ (b) $2\dfrac{1}{2}\%$ (c) $3\dfrac{1}{2}\%$ (d) $4\dfrac{1}{2}\%$

Sol. (b) Let the annual rate of interest $= r\%$

Time $= r$ yrs

Let the principal be ₹x.

∴ Interest $= ₹\dfrac{x}{16}$

According to the question,

$$\dfrac{x}{16} = \dfrac{x \times r \times r}{100}$$

$$\Rightarrow \quad 16r^2 = 100$$

$$\Rightarrow \quad r^2 = \dfrac{100}{16} = \dfrac{25}{4}$$

$$\therefore \quad r = \sqrt{\dfrac{25}{4}} = \dfrac{5}{2} = 2\dfrac{1}{2}\%$$

19. 380 mangoes are distributed among some boys and girls who are 85 in number. Each boy gets four mangoes and each girl gets five. The number of boys is

(a) 15   (b) 38
(c) 40   (d) 45

Sol. (d) Let the number of boys x and number of girls be $85-x$.

According to the question,

$$x \times 4 + (85-x) \times 5 = 380$$

$$\Rightarrow \quad 4x + 425 - 5x = 380$$

$$\Rightarrow \quad x = 45$$

∴ Number of boys $= 45$

20. The value of $\dfrac{(243)^{0.13} \times (243)^{0.07}}{(7)^{0.25} \times 49^{(0.075)} \times (343)^{0.2}}$ is

(a) $\dfrac{3}{7}$ (b) $\dfrac{7}{3}$ (c) $1\dfrac{3}{7}$ (d) $2\dfrac{2}{7}$

Sol. (a) $\dfrac{(243)^{0.13+0.07}}{(7)^{0.25} \times (7 \times 7)^{0.075} \times (7 \times 7 \times 7)^{0.2}}$

$$= \dfrac{(3)^{5^{0.2}}}{(7)^{0.25} \times (7)^{0.075 \times 2} \times (7)^{3 \times 0.2}}$$

$$= \dfrac{(3)^{5 \times 0.2}}{(7)^{0.25+0.15+0.60}} = \dfrac{3}{7}$$

21. A coconut merchant finds that the cost price of 2750 coconuts is the same as the selling price of 2500 coconuts. His loss or gain will be

(a) 5% loss   (b) 10% gain
(c) 15% loss   (d) 20% gain

Sol. (b) Cost price of 2750 coconuts = Selling price of 2500 coconuts

$$\dfrac{CP}{SP} = \dfrac{2500}{2750} = \dfrac{10}{11}$$

Gain per cent $= \dfrac{SP - CP}{CP} \times 100$

$$= \dfrac{11-10}{10} \times 100 = \dfrac{1}{10} \times 100 = 10\%$$

22. If 20% of $(P+Q) = 50\%$ of $(P-Q)$, then find $P:Q$.

(a) 7:8   (b) 7:3   (c) 7:5   (d) 5:7

Sol. (b) Given, 20% of $(P+Q) = 50\%$ of $(P-Q)$

$$\Rightarrow \quad \dfrac{20(P+Q)}{100} = \dfrac{50}{100}(P-Q)$$

$$\Rightarrow \quad \dfrac{P+Q}{P-Q} = \dfrac{5}{2}$$

$$\Rightarrow \quad \dfrac{2P}{2Q} = \dfrac{5+2}{5-2} \quad \text{(by componendo and dividendo)}$$

$$\Rightarrow \quad \dfrac{P}{Q} = \dfrac{7}{3} = 7:3$$

23. Zinc and copper are in the ratio 5:3 in 400g of an alloy. How much of copper (in g) should be added to make the ratio 5:4?

(a) 72   (b) 200   (c) 50   (d) 66

Sol. (c) Quantity of zinc in the alloy

$$= \dfrac{5}{5+3} \times 400 = \dfrac{5}{8} \times 400 = 250\,g$$

and quantity of copper

$$= \dfrac{3}{5+3} \times 400 = 150\,g$$

Let copper added be x g.

According to question,

$$\dfrac{250}{150+x} = \dfrac{5}{4}$$

$$\Rightarrow \quad 1000 = 750 + 5x$$

$$\Rightarrow \quad 5x = 250$$

$$\Rightarrow \quad x = 50\,g$$

24. 4 yr ago, the ratio of the ages of A and B was 2:3 and after 4 yr, it will becomes 5:7. Find their present ages.

(a) 36 yr and 40 yr   (b) 32 yr and 48 yr
(c) 40 yr and 56 yr   (d) 36 yr and 52 yr

Sol. (d) 4 yr ago, let the ages of A and B be $2x$ yr and $3x$ yr, respectively.

According to the question,

After $(4+4)$ i.e. 8 yr,

$$\dfrac{2x+8}{3x+8} = \dfrac{5}{7}$$

$$\Rightarrow \quad 14x + 56 = 15x + 40$$

$$\therefore \quad x = 16$$

Present age of $A = 2x + 4 = 2 \times 16 + 4 = 36$ yr

Present age of $B = 3x + 4 = 3 \times 6 + 4 = 52$ yr

25. A man rows a boat 18 km in 4 h downstream and return upstream in 12 h. The speed of the stream (in km/h) is

(a) 1   (b) 1.5   (c) 2   (d) 2.5

Sol. (b) Speed downstream $= \dfrac{18}{4} = \dfrac{9}{2}$ km/h

Speed upstream $= \dfrac{18}{12} = \dfrac{3}{2}$ km/h

Now, speed of the stream

$$= \dfrac{\text{Speed downstream} - \text{Speed upstream}}{2}$$

$$= \dfrac{\dfrac{9}{2} - \dfrac{3}{2}}{2} = \dfrac{6}{4} = \dfrac{3}{2} = 1.5 \text{ km/h}$$

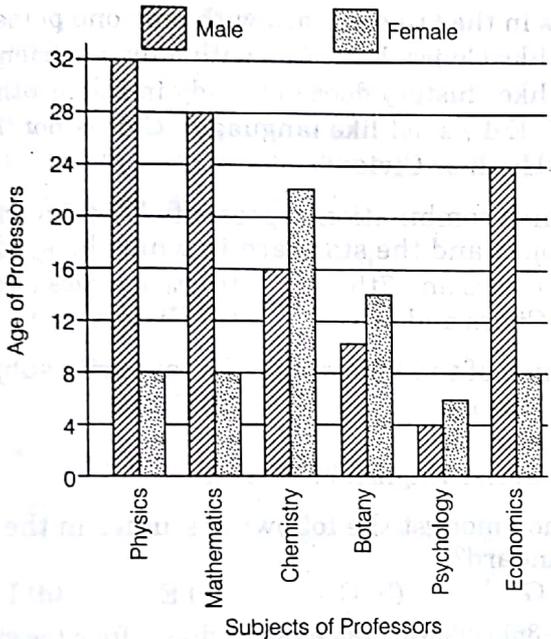**DIRECTIONS** (Q.Nos 26-30) *Study the two figures given below and answer the given questions that follow.*

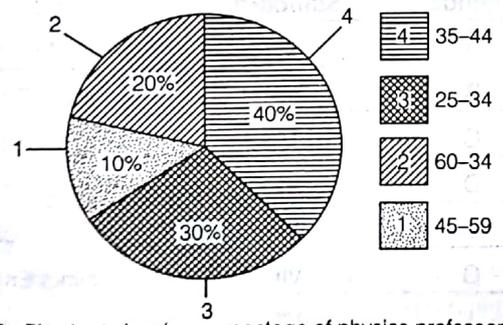Fig. 1 : Graph showing professors of different subjects and age

Fig. 2 : Pie chart showing percentage of physics professors

26. How many Physics professors belong to the age group 35-44?

(a) 18   (b) 16   (c) 14   (d) 12

Sol. (b) From figure 1, the total number of Physics professors are $32 + 8 = 40$. From figure 2, 40% of Physics professors are in the age group 35-44. Hence, number of Physics professors in the 35-44 age group equal $40 \times \dfrac{40}{100} = 16$.

27. Which one of the following disciplines has the highest ratio of males to females?

(a) Physics
(b) Mathematics
(c) Chemistry
(d) Economics

Sol. (a) Chemistry, Botany and Psychology have more females than males, so we don't calculate the ratios for them.

For Physics, male/female ratio $= \dfrac{32}{8} = 4$

For Mathematics, male/female ratio $= \dfrac{28}{8} = 3.5$

For Economics, males/female ratio $= \dfrac{24}{8} = 3$

Hence, Physics has the highest male/female ratio.

28. What percentage of all Psychology professors are females?

(a) 40%   (b) 50%
(c) 60%   (d) 70%

Sol. (c) Number of female Psychology professors is 6 from Fig 1.

Total number of Psychology professors is $6 + 4 = 10$, again from Fig 1.

Hence, percentage of all Psychology professors, who are female

$$= \dfrac{6}{10} \times 100 = 60\%$$

29. If the number of female Physics professors in the age group 25-34 equals 25% of all the Physics professors in that age group, then what is the number of male Physics professors in the age group 25-34?

(a) 9   (b) 6
(c) 3   (d) 2

Sol. (a) Total number of Physics professors is 40, from Fig 1. From Fig 2, the percentage of Physics professors in the age group 25-34 is 30%.

Hence, total number of Physics professors in the 25-34 range is $40 \times \dfrac{30}{100} = 12$

Out of these 12, 25% i.e. $\left(\dfrac{25}{100}\right)$ are females.

Hence, the number of male Physics professors in the age group 25-34 is

$$12 - \dfrac{12 \times 25}{100} = 12 - 3 = 9$$

30. If the Psychology professors in the university constitute 2% of all the professors in the university, then what is the number of professors in the university?

(a) 400   (b) 500
(c) 600   (d) 700

Sol. (b) From Fig 1, total number of Psychology professors is $6 + 4 = 10$.

Let total number of professors in the university be P. We are given that 2% of $P = 10$.

$$\Rightarrow \quad \dfrac{2P}{100} = 10$$

$$\Rightarrow \quad P = 500$$

Reasoning and Logical Deduction

DIRECTIONS (Q.Nos 31-32) *In each of these questions, two Statements I and II are given. These may have a cause and effect relationship or may have independent causes or be the effects of independent cause.*

Give answer

(a) if Statement I is the cause and Statement II is its effect

(b) if Statement II is the cause and Statement I is its effect

(c) if both Statements I and II are effects of independent causes

(d) if both Statements I and II are effects of some common cause

31. I. Large number of people living in the low-lying areas have been evacuated during the last few days to safer places.

II. The Government has rushed in relief supplies to the people living in the affected areas.

Sol. *(d)* Both statements are effects at some common cause as these are measures taken by Government.

32. I. The local cooperative credit society has decided to stop giving loans to farmers with immediate effect.

II. A large number of credit society members have withdrawn major parts of their deposits from the credit society.

Sol. *(b)* Here, Statement II is the cause and Statement I is its effect i.e., since a large number of members have withdrawn major amount of deposits from the credit society, so the credit society has decided to stop giving loans to farmers with immediate effect.

33. In a class of thirty students, Mahesh is 14th from the left and Ramesh is 20th from the right end. How many students are there between Ramesh and Mahesh?

(a) 3
(b) 2
(c) 4
(d) Data inadequate

Sol. *(b)*

Left ⊢————┼———┼————⊣Right
         20th 14th
       Ramesh Mahesh

Ramesh's position from left = 30−20+1=10+1=11th

Mahesh's position from left = 14th

Clearly, there are 2 students in between Ramesh and Mahesh.

Hence, option (b) is the correct answer.

DIRECTIONS (Q.Nos 34-36) *Study the following information and answer the following questions.*

A, B, C, D, E, G and I are seven friends who study in three different standards namely 5th, 6th and 7th such that not less than two friends study in the same standard. Each friend also has a different favourite subject namely History, Civics, English, Marathi, Hindi, Maths and Economics but not necessarily in the same order.

A likes Maths and studies in the 5th standard with only one other friend who likes Marathi.

I studies with two other friends. Both the friends who study with I like languages (here, languages include only Hindi, Marathi and English).

D studies in the 6th standard with only one person and does not like Civics. E studies with only one friend. The one who likes history does not study in 5th or 6th standard. E does not like languages. C does not like English, Hindi or Civics.

34. Which combination represents E's favourite subject and the standard in which he studies?

(a) Civics and 7th
(b) Economics and 5th
(c) Civics and 6th
(d) History and 7th

35. Which of the following is I's favourite subject?

(a) History
(b) Civics
(c) Marathi
(d) Either English or Marathi

36. Who amongst the following studies in the 7th standard?

(a) G
(b) C
(c) E
(d) I

Sol. (34-36) Following table can be drawn from the given information

Friends	Standard	Subject
A	V	Maths
B	VII	Hindi/English
C	V	Marathi
D	VI	Economics
E	VI	Civics
G	VII	Hindi/English
I	VII	History

34. *(c)* E's favourite subject is Civics and he studies in 6th standard.

35. *(a)* I's favourite subject is History.

36. *(a)* G studies in 7th standard.

37. A farmer has 1798 sheep and 986 lambs. He divides them into flocks by keeping sheep and lambs separate, having the same number of animals in each flock. If the flocks should be as large as possible, then the total number of flocks is
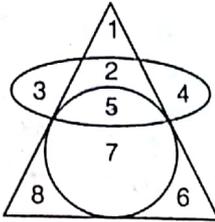
(a) 102
(b) 48
(c) 30
(d) None of these

Sol. *(b)* In this question, we have to divide 1798 sheeps and 986 lambs into the largest possible groups.

To find that, we will find the HCF of 1798 and 986.

So, HCF (1798,986) = 58

∴ Number of flocks $= \dfrac{1798}{58} + \dfrac{986}{58} = 31 + 17 = 48$

38. Which number is common to all the geometrical figures in the diagram below?

(a) 7 (b) 5 (c) 2 (d) 4

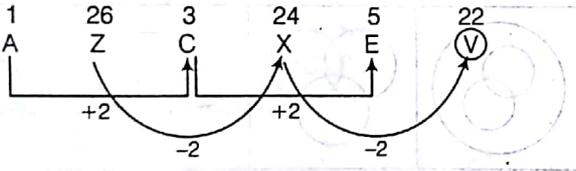**Sol.** *(b)* Number 5 is common to all the geometrical figures in the given diagram.

DIRECTIONS (Q.Nos. 39-41) *What should come in the place of question mark (?) in the following series?*

39. A, Z, C, X, E,?
  (a) U (b) W
  (c) V (d) Y

Sol *(c)* There are two interwoven series.

The pattern is as follows

∴ ? = V

40. 2, 8, 18, 32, 50,?
  (a) 64 (b) 72
  (c) 70 (d) 68

Sol *(b)* The pattern is as follows

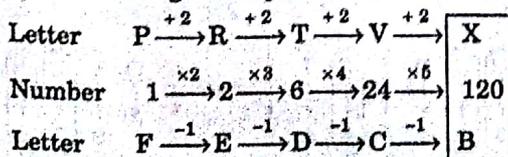$1^2 + 1^2 = 2;\ 2^2 + 2^2 = 8$

$3^2 + 3^2 = 18;\ 4^2 + 4^2 = 32$

$5^2 + 5^2 = 50;\ 6^2 + 6^2 = 72$

∴ ? = 72

41. P 1 F, R 2 E, T 6 D, V 24 C, ?
  (a) X 120 B
  (b) Y 100 C
  (c) Y 120 B
  (d) X 120 C

Sol. *(a)* Pattern of given alpha-numeric series is as follows

Letter	P	$\xrightarrow{+2}$ R	$\xrightarrow{+2}$ T	$\xrightarrow{+2}$ V	$\xrightarrow{+2}$	X
Number	1	$\xrightarrow{\times 2}$ 2	$\xrightarrow{\times 3}$ 6	$\xrightarrow{\times 4}$ 24	$\xrightarrow{\times 5}$	120
Letter	F	$\xrightarrow{-1}$ E	$\xrightarrow{-1}$ D	$\xrightarrow{-1}$ C	$\xrightarrow{-1}$	B

DIRECTIONS (Q.Nos. 42-44) *Read the following information carefully to answer the questions that follow.*

  I. Ruchi and Suresh are married couple having two children, Manisha and Divya.
  II. Divya is married to Amit who is the son of Gauri and Tarun.
  III. Nishi is the daughter of Amit.
  IV. Karuna, who is Amit's sister, is married to Harish and has two sons, Vijay and Parikshit.
  V. Gauri is the maternal grandmother of Parikshit.
  VI. Manisha is the maternal aunt of Nishi.

42. What is the difference between the number of females and the number of males in the second generation?
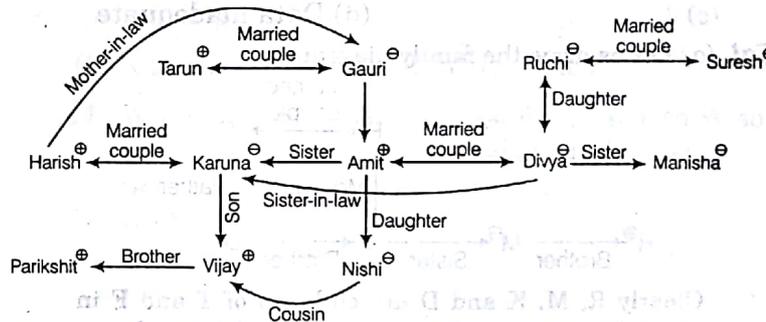 (a) 5 (b) 1
  (c) 2 (d) 3

43. Which of the following is true?
  (a) Tarun is Divya's maternal uncle
  (b) Vijay is the son of Manisha
  (c) Gauri is Harish's mother-in-law
  (d) Nishi is the cousin of Karuna

44. How is Karuna related to Divya?
  (a) Aunt (b) Sister-in-law
  (c) Mother (d) Sister

Sol. (42-44) Let us see the family diagram

42. *(b)* Number of females in the 2nd generation = 3
  (Karuna, Divya and Manisha)

  Number of males in the 2nd generation = 2
  (Harish and Amit)

  ∴ Required difference = 3 − 2 = 1

43. *(c)* Gauri is Harish's mother-in-law.

44. *(b)* Karuna is Divya's sister-in-law.

DIRECTIONS (Q.Nos. 45-46) *In each of the questions below is given a statement followed by assumptions numbered I and II. Consider the statement and decide which of the given assumptions is implicit.*

Give answer
  (a) if only Assumption I is implicit
  (b) if only Assumption II is implicit
  (c) if both I and II are implicit
  (d) if neither I nor II is implicit

45. Statement Patient's condition would improve after this operation.

Assumptions

I. The patient can be operated upon in this condition.

II. The patient cannot be operated upon in this condition.

Sol. (a) It is very much implied in the statement that the patient is in a position to be operated upon. Therefore, Assumption I is implicit.

46. Statement "If you want to give any advertisement, give it in newspaper 'X'" A tells B.

Assumptions

I. B wants to publicise his products.

II. Newspaper 'X' has a wide circulation.

Sol. (b) The word 'if' in the statement implies that B may or may not be willing to publicise his products. Statement further suggests that advertisement should be given in newspaper 'X'. This means that 'X' will help advertise better. In other words, newspaper 'X' has a wide circulation. So only Assumption II is implicit.

47. D is K's brother. M is K's sister. T is R's father who is M's brother, F is K's mother. Atleast how many sons do T and F have?

(a) 2   (b) 3

(c) 4   (d) Data inadequate

Sol. (a) Let us draw the family diagram
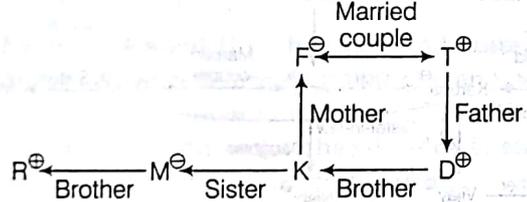
Clearly R, M, K and D are children of T and F in which M is a female and gender of K is not known but R and D are the male children of F and T. Hence, T and F have atleast two sons.

DIRECTIONS (Q.Nos. 48-49) *Read the following passage carefully and answer the questions that follow.*

In the network diagram given below the figures represent the flow of natural gas through pipelines between major cities A, B, C, D and E (in suitable units). Assume that supply equal demand in the network (although not on individual nodes).
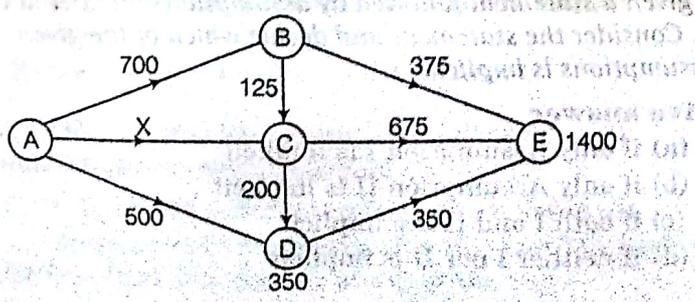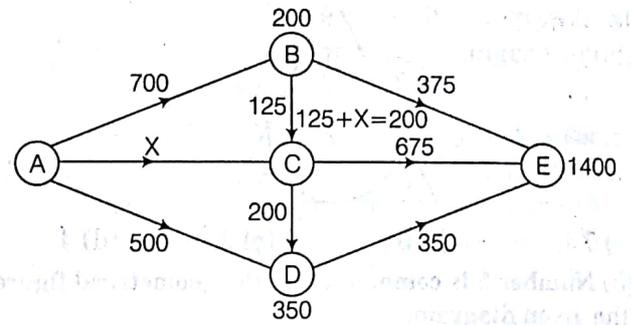

48. What is the number of units demanded at B?

(a) 175   (b) 200

(c) 225   (d) 250

49. If the number of units of demanded in C is 225, what is the value of X?

(a) 975   (b) 875

(c) 775   (d) 850
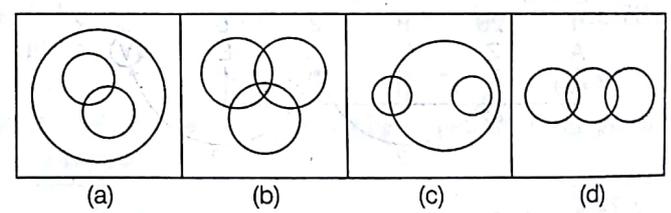
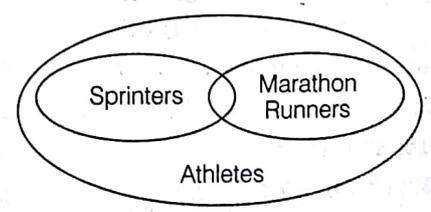**Sol.** (48-49) Refer to the following figure of the same.

48. (b) From the figure, it would be $700-(375+125)=200$

49. (a) At Node C,

$$125+X-200-675=225$$
$$\Rightarrow \qquad X=975$$

50. Which of the following combinations of circles best represents Athletes, Sprinters and Marathon runners?

(a)   (b)   (c)   (d)

Sol. (a) All sprinters and marathon runners are athletes and also some sprinters can be marathon runners.

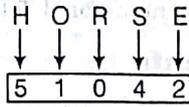**51.** If in a certain code language 'HONESTY' is written as '5132468' and 'POVERTY' is written as '7192068', then how will 'HORSE' be written in that language?

(a) 50124

(b) 51042

(c) 51024

(d) 52014

Sol. (b) As,

Similarly,

$$\begin{array}{c c c c c} H & O & R & S & E \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ 5 & 1 & 0 & 4 & 2 \end{array}$$
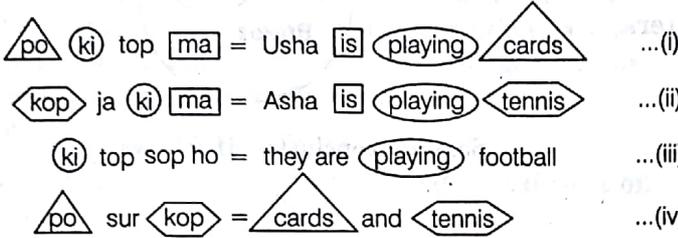
∴ HORSE ⇒ 51042

52. In a certain code language, 'po ki top ma' means 'Usha is playing cards', 'kop ja ki ma' means 'Asha is playing tennis', 'ki top sop ho' means 'they are playing football' and 'po sur kop' means 'cards and tennis'. Which word in that language means 'Asha'?

(a) ja   (b) ma
(c) kop   (d) top

Sol. (a)

po   ki   top   ma = Usha   is   playing   cards   ...(i)

kop   ja   ki   ma = Asha   is   playing   tennis   ...(ii)

ki   top   sop   ho = they are   playing   football   ...(iii)

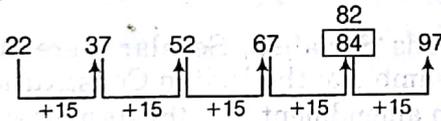po   sur   kop = cards   and   tennis   ...(iv)

From Eqs (i), (ii) and (iv), 'ja' means 'Asha'.

DIRECTIONS (Q.Nos. 53-55) *In each of these questions, a number series is given. In each series, only one number is wrong. Find out the wrong number.*

53. 22, 37, 52, 67, 84, 97
(a) 52   (b) 84
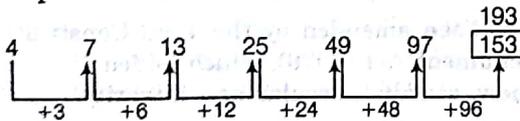(c) 97   (d) 67

Sol (b) The pattern is as follows

$$\underset{+15}{22}\ \underset{+15}{37}\ \underset{+15}{52}\ \underset{+15}{67}\ \underset{+15}{\boxed{84}}^{82}\ 97$$

So, 84 is the incorrect term, it should be 82.

54. 4, 7, 13, 25, 49, 97, 153
(a) 25   (b) 49
(c) 97   (d) 153

Sol (d) The pattern is as follows

$$\underset{+3}{4}\ \underset{+6}{7}\ \underset{+12}{13}\ \underset{+24}{25}\ \underset{+48}{49}\ \underset{+96}{97}\ \boxed{153}^{193}$$
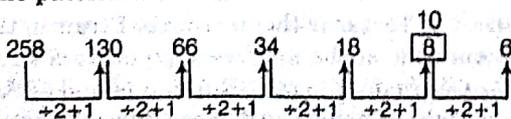
So, 153 is the incorrect term, it should be 193.

55. 258, 130, 66, 34, 18, 8, 6
(a) 130   (b) 66
(c) 34   (d) 8

Sol (d) The pattern is as follows

$$\underset{\div2+1}{258}\ \underset{\div2+1}{130}\ \underset{\div2+1}{66}\ \underset{\div2+1}{34}\ \underset{\div2+1}{18}\ \boxed{8}^{10}\ \underset{\div2+1}{6}$$
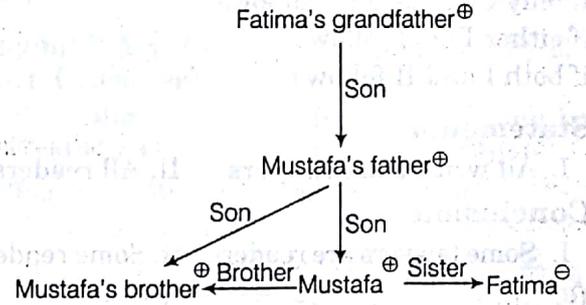
Hence, number 8 is wrong term and should be replaced by 10.

56. Fatima while introducing Mustafa to her husband said, "His brother's father is the only son of my grandfather."
How is Fatima related to Mustafa?
(a) Aunt   (b) Sister
(c) Niece   (d) Mother

Sol. (b) Let us draw the family diagram

Fatima's grandfather⊕
|
Son
↓
Mustafa's father⊕
Son ↙   ↓ Son
Mustafa's brother⊕ ←Brother— Mustafa⊕ —Sister→ Fatima⊖

So, it is clear that Fatima is the sister of Mustafa

DIRECTIONS (Q. Nos. 57-58) *Read the following information carefully and answer the questions that follow*

Four Metropolitan cities X, Y, Z and W are connected by different routes and different modes of transport a given below

(1) X and Y are connected by both boat and bus
(2) Y and W are connected by air only
(3) Y and Z are connected by air and bus
(4) X and W are connected by bus only
(5) X and Z are connected by train only

57. Which route would be possible from Y to W so that atleast 3 different modes can be used?
(a) Y- X - Z - W
(b) Y - Z - X - W
(c) Y - Z - Y - W
(d) None of the above

58. Which mode of transport would help one to reach from Z to W, starting from Z but without changing the mode of transport?
(a) Boat   (b) Train
(c) Bus   (d) Air

Sol. (57 and 58) Information given in questions is arranged as

X —Bus/boat→ Y
Bus (X-W)   Train (X-Z)   Air (Y-W) / Bus (Y-Z)
W   Air   Z
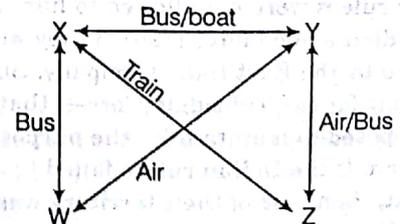
57. (b) Y —Air→ Z —Train→ X —Bus→ W
So, possible route with atleast 3 different routes is Y-Z-X-W.

58. (d) Only possible mode is by air from Z-Y-W.

DIRECTIONS (Q.Nos. 59-60) *In each of the questions below are given two statements followed by two conclusion numbered I and II.*

Decide which of the given conclusion (s) logically follow(s) from the two given statements disregarding commonly known facts.

Give answer
(a) if only Conclusion I follows
(b) if only Conclusion II follows
(c) if either I or II follows
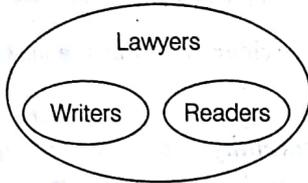(d) if both I and II follows

59. Statements
  I. All writers are lawyers.   II. All readers are lawyers.
  Conclusion
  I. Some lawyers are readers.   II. Some readers are writers.
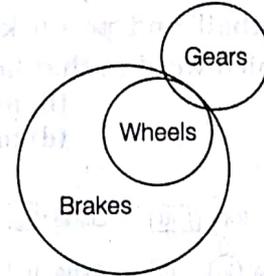 *Sol.* (a)

So, only conclusion I follows.

60. Statements
  I. Some gears are wheels.
  II. All wheels are brakes.
  Conclusion
  I. No brake is gear.
  II. Atleast some gears are brakes.
  Sol. (b)

So, only conclusion II follows.

General Knowledge and Current Affairs

61. Tulsidas wrote 'Rama Charitamanas' during the reign of
  (a) Akbar   (b) Shahjahan
  (c) Krishnadev Ray   (d) Rama Ray
  Sol. (a) Rama Charitamanas is an epic poem in the language Awadhi. It was composed by the 16th century Indian bhakti poet Goswami Tulsidas during the reign of Mughal Emperor Akbar.

62. Who introduced Subsidiary Alliance System?
  (a) Lord Dalhousie
  (b) Lord William Bentic
  (c) Lord Wellesley
  (d) Lord Irwin
  Sol. (c) The doctrine of subsidiary alliance was introduced by Lord Wellesley, British Governor General in India from 1798 to 1805. According to subsidiary alliance, princely rulers were not allowed to have an independent armed force instead they were to be protected by the East India Company. But for this, they had to pay for the 'subsidiary forces' that the company was supposed to maintain for the purpose of this protection. If the Indian rulers failed to make the payment, then part of their territory was taken away as penalty.

63. The Great Bath of the Indus Valley Civilisation was discovered in
  (a) Ropar   (b) Mohenjodaro
  (c) Harappa   (d) Kalibanga

Sol. (b) The Great Bath of the Indus Valley Civilisation was discovered in Mohenjodaro. It was a public water tank for the people of Harappa. It is approximately 12 meters in length and 7 meters wide, with a maximum depth of 2.4 meters.

64. The words 'Socialist', 'Secular' were introduced in the Preamble of the Indian Constitution by the
  (a) 38th amendment   (b) 40th amendment
  (c) 42nd amendment   (d) 44th amendment
  Sol. (c) The term 'preamble' refers to the introduction or preface to the Constitution. The Preamble to the Indian Constitution is based on the 'Objectives Resolution', which was drafted and moved by Pandit Jawaharlal Nehru, and adopted by the Constituent Assembly.

It has been amended by the 42nd Constitutional Amendment Act (1976), which added three new words namely, socialist, secular and integrity.

65. Which of the following is the narrowest strait of the world?
  (a) Strait of Tartar
  (b) Bab-el-Mandeb
  (c) Strait of Dardanelles
  (d) Foveaux Strait
  Sol. (a) Strait of Tartar is the narrowest Strait in the world. It is 7.3 km wide at the narrowest point. It is a strait in the Pacific Ocean dividing the Russian island of Sakhalin from mainland Asia (South-East Russia), connecting the Sea of Okhotsk on the North with the Sea of Japan on the South.

66. The land frontier of India is about 15200 km. Which of the following countries shares the largest border length with India?
(a) Bangladesh
(b) Pakistan
(c) China
(d) Nepal

Sol. (a) The neighbouring countries of India in decreasing order of border length are: Bangladesh, China, Pakistan, Nepal, Myanmar and Bhutan.

67. Mahabodhi Temple Complex which is included in the UNESCO World Heritage Site is located in which state of India?
(a) Bihar
(b) Jharkhand
(c) West Bengal
(d) Rajasthan

Sol. (a) Mahabodhi Temple Complex is located at Bodh Gaya in Bihar. It is spread over an area of 4.86 hectares and was inscribed in the UNESCO World Heritage List 1 as a unique property of cultural and archaeological importance.

68. Which among the following is the driest desert on the Earth?
(a) Kalahari
(b) Atacama
(c) Mojave Desert
(d) Tabernas Desert

Sol. (b) The Atacama is the driest desert on the Earth is located in South America mainly in Chile. It is a dry desert because it is blocked from moisture on both sides by the Andes Mountains and by the Chilean Coast Range.

69. The average salinity of sea water is
(a) 3.5‰
(b) 2.5‰
(c) 4.5‰
(d) 8.2‰

Sol. (a) On average, sea water in the world's oceans has a salinity of approximately 3.5‰, or 35 parts per thousand. This means that for every 1 litre (1000 ml) of sea water there are 35 grams of salts.

70. The following is needed for the growth and repair of our body.
(a) Fats
(b) Carbohydrates
(c) Proteins
(d) Vitamins

Sol. (c) Proteins are essential nutrient for the human body. They are one of the building blocks of body tissue and can also serve as a fuel source. As a fuel, proteins provide as much energy density as carbohydrates e.g. 4 kcal per gram.

71. The theme for World Earth Day 2018 is ....
(a) Save Earth
(b) Control Pollution
(c) Environmental and Climate Literacy
(d) End Plastic Pollution

Sol. (d) The World Earth Day was celebrated on 22nd April, 2018. It is celebrated to spread awareness of the need for conservation and also to take action to protect the environment. This day was first celebrated on 22nd April, 1970 and has ever since been an annual event. The theme for World Earth Day 2018 is 'End Plastic Pollution'.

72. NITI Aayog was set up in the year
(a) 2014
(b) 2015
(c) 2016
(d) 2017

Sol. (b) The National Institution for Transforming India, also called NITI Aayog, was formed via a resolution of the Union Cabinet on 1st January, 2015. NITI Aayog is the premier policy 'Think-Tank' of the Government of India, providing both directional and policy inputs.

73. 'Playing It My Way' is the autobiography of which Cricketer?
(a) M.S. Dhoni
(b) Sachin Tendulkar
(c) Virat Kohli
(d) Yuvraj Singh

Sol. (b) 'Playing It My Way' is the autobiography of Sachin Tendulkar published in 2014.

74. By which among the following articles, Finance Commission has been constituted?
(a) Article 282
(b) Article 250
(c) Article 280
(d) Article 148

Sol. (c) The Finance Commission is constituted by Article 280. It is appointed by the President of India. Presently, it is 15th Finance Commission which is constituted in November 2017.

75. Who has been appointed as the first Chief Financial Officer (CFO) of Reserve Bank of India in May 2018?
(a) Sudha Balakrishnan
(b) Nasirul Mulk
(c) Nirbhay Sharma
(d) CK Prasad

Sol. (a) Reserve Bank of India (RBI) has appointed Sudha Balakrishnan as the first Chief Financial Officer (CFO). She will be the 12th Executive Director of the RBI and will have tenure of three years.

76. Who won the best Actress Award in the 65th National Film Awards in 2018?
(a) Sridevi
(b) Madhuri Dixit
(c) Kareena Kapoor
(d) Kajol

Sol. (a) Sridevi won the best Actress Award in the 65th National Film Awards in 2018 for the film 'Mom'.

77. The winner of Dhyan Chand Awards 2017 for Hockey is
(a) Bhupender Singh
(b) Syed Shahid Hakim
(c) Heera Nand Kataria
(d) Sumarai Tete

Sol. (d) The winner of Dhyan Chand Awards 2017 for Hockey is Sumarai Tete.

78. Benjamin Netanyahu who came to India in January 2018 for 6-days visit is the Prime Minister of ....
(a) Canada
(b) France
(c) Israel
(d) England

Sol. (c) Benjamin Netanyahu who came to India for 6-days visit from 14 - 19 January 2018 is the Prime Minister of Israel. He came to India with the aim to strengthen ties with India.

79. Which among the following programmes is NOT being implemented in India with assistance of World Bank?
   (a) National Vector Borne Disease Control and Polio Eradication
   (b) National Rural Livelihoods Project
   (c) PMGSY Rural Roads Project
   (d) Delhi Mumbai Industrial Corridor Project

Sol. *(d)* The Delhi-Mumbai Industrial Corridor Project (DMICDC) is a planned industrial development project. It is implemented by the Delhi-Mumbai Industrial Corridor Development Corporation, and autonomous body composed of government and the private sector. Japan is the major investor for this project.

80. Other than Venezuela, which among the following from the South American countries is a member of OPEC?
   (a) Argentina   (b) Brazil
   (c) Ecuador   (d) Bolivia

Sol. *(c)* The Organisation of the Petroleum Exporting Countries (OPEC) was founded in Baghdad, Iraq, with the signing of an agreement in 1960 by five countries namely Islamic Republic of Iran, Iraq, Kuwait, Saudi Arabia and Venezuela. Later other countries also became the member of this organisation e.g. Qatar (1961), Indonesia (1962), Libya (1962), the United Arab Emirates (1967), Algeria (1969), Nigeria (1971), Ecuador (1973), Gabon (1975), Angola (2007) and Equatorial Guinea (2017).

81. Which of the following is India's largest Nuclear Research Reactor?
   (a) Purnima   (b) Cirus
   (c) Apsara   (d) Dhruv

Sol. *(d)* The Dhruv reactor is India's largest Nuclear Research Reactor. It is located in the Mumbai suburb of Trombay at the Bhabha Atomic Research Centre (BARC). It is India's primary generator of weapons-grade plutonium-bearing spent fuel for its nuclear weapons programme.

82. Who among the following is a renowned Sitar player?
   (a) Sukhwinder Singh
   (b) Shujaat Khan
   (c) Kishan Maharaj
   d) Bhajan Sopori

Sol. *(b)* Shujaat Khan, belongs to Kolkata, is a renowned Sitar player of the Imdadkhani Gharana (school of music). He is the son of legendary sitar player Ustad Vilayat Khan.

83. Popular Juice brand 'Minute Maid' belongs to which of the following companies?
   (a) Pepsico India   (b) ITC Ltd
   (c) Coca Cola   (d) Dabur

Sol. *(c)* Minute Maid brand is owned by the world famous company Coca Cola. They are exclusively makers of the fruit juices and drinks. They produce flavours such as berry punch, cherry limeade, and raspberry with many other variants.

84. 'Carnival' the famous cultural festival is celebrated in which country?
   (a) Brazil   (b) South Africa
   (c) Thailand   (d) Indonesia

Sol. *(a)* Historically, Carnival is a religious celebration which is celebrated in Rio-De-Jeneiro, Brazil. The festival takes place in February or March each year, over the 5 days.

85. Which of the following personalities has never served as the Prime Minister of India?
   (a) Zakir Hussain
   (b) Lal Bahadur Shastri
   (c) Indira Gandhi
   (d) Inder Kumar Gujral

Sol. *(a)* Dr. Zakir Hussain Khan (1897–1969) was the third President of India; from 13th May, 1967 until his death on 3rd May, 1969. He was an educationist and intellectual. He was also the India's first Muslim President and the first to die in office.

86. Radisson Group of Hotels has its main headquarters in which country?
   (a) USA   (b) Brazil
   (c) Australia   (d) France

Sol. *(a)* Radisson Hotels is an international hotel company and a subsidiary of the Radisson Hotel Group. It has its main headquarters in Minnetonka, Minnesota, a suburb of Minneapolis in United States of America. It operates the brands Radisson, Radisson Blu, Radisson Red, Country Inns and Suites by Radisson and Park Inn by Radisson with more than 990 locations in 73 countries.

87. Jamsetji Nusserwanji Tata is the founder of which of the following group of Hotels?
   (a) Ambassador Hotels
   (b) ITC Welcome Group
   (c) Park Group of Hotels
   (d) The Taj Group of Hotels

Sol. *(d)* Jamsetji Nusserwanji Tata, founder of the Tata Group, opened the Taj Mahal Palace, a hotel in Mumbai, on 16th December, 1903. It was the first Taj hotel. As of 2017, the company operates a total of 99 hotels and hotel-resorts, with 83 across India and 16 in other countries.

88. Which fast food chain is the largest pizza delivering service in the world?
   (a) Pizza hut
   (b) Pizza King
   (c) Dominos
   (d) Subway

Sol. *(a)* Pizza hut is the largest pizza delivering service in the world. It was founded in 1958 by Dan and Frank Carney, in Kansas City. It has 6000 restaurants in US itself and 5139 stores in other 93 countries.

89. Public Distribution System (PDS) is operated under the responsibility of the
   1. Central Government
   2. State Government
   3. Local Government
   Codes
   (a) Only 1   (b) 2 and 3   (c) 1 and 2   (d) Only 2

Sol. (c) PDS is operated under the joint responsibility of the Central and the State Governments. The Central Government, through Food Corporation of India (FCI), has assumed the responsibility for procurement, storage, transportation and bulk allocation of food grains to the State Governments.

90. Which is the largest Food and Hospitality fair in India?
   (a) AAHAR
   (b) Bengaluru food festival
   (c) Annapurna World of Food India
   (d) None of the above

Sol. (a) AAHAR is the largest Food and Hospitality fair in India. It is the largest show of its kind in South Asia. The 33rd Aahar International Food & Hospitality Fair was held from 13-17 Mar 2018 to offer a platform for facilitating growth and modernisation in the processed food and hospitality sector.

Aptitude for Service Sector

91. If you had to choose between being a good listner or a good communicator, what would be your choice?
   (a) Good listner
   (b) Good communicator
   (c) Good listner for sometimes, good communicator for sometimes
   (d) Simultaneously both (a) and (b)

Sol. (d) For most of the professions, communication skills, such as being able to express one self and to understand others correctly are required for success and fulfulling organisation's goal. So, it is both necessary for a person to be a good listner and good communicator simultaneously.

92. How do you prefer to communicate with your colleagues?
   (a) In person   (b) Over the phone
   (c) Via email or messages   (d) Both (b) and (c)

Sol. (a) If I communicate my colleagues face to face, it will help to solve the problem easily. I can know his stand/point clearly and can influence the attitude and behaviour of them which ultimately help to solve the problem.

93. Your next door neighbour often installs loudspeakers and plays religious music loudly, which disturbs your family and the study of your siblings too much. You will
   (a) go and pick up and fight with him to stop the music
   (b) inform the police
   (c) try to ignore the issue
   (d) request him to play the music softly so that it does not disturb your family

Sol. (d) I will request him to play the music softly. He has the fundamental right to practice his religion, but at the same time he has to maintain peace and cannot disturb the others. I will try to make him understand this politely.

94. In Delhi a large number of Non-Governmental Organisations (NGOs) are active, some get government funds and others raise their own funds from different business houses.
   What is your opinion about them?
   (a) NGOs are hopeless.
   (b) Most NGOs are doing a good work.
   (c) Some NGOs are really doing a very good job to serve the society.
   (d) Most NGOs are misappropriating funds and not doing their assigned job.

Sol. (c) Some NGOs have dedicated individuals who work really very hard for the upliftment of underprivileged children, old person, destitutes, poor women, etc. The volunteers are from different backgrounds but collectively they want to contribute something to the society with their individual skills for a common goal.

95. Imagine a colleague whom you don't get along with but you need his help for a project, how do you handle the situation?
   (a) You approach him and ask for his help.
   (b) You try to help from some other sources.
   (c) You indirectly approach him through another colleague.
   (d) You try to do the project single handedly.

Sol. (a) I approach the colleague and request him to help. In this way, I try to complete my project perfectly as I believe professional and personal relationship are different. In work place, it is our first and foremost duty to be a true professional.

96. Your cook who has worked for you for more than 8 years honestly, wants to quit his job, your reaction will be
   (a) shout at him and call him a cheat
   (b) ask him to replace another cook
   (c) ask him to replace another cook
   (d) talk to him nicely and try to find out his problem and act accordingly

Sol. (d) I will talk to him and try to find out his actual problem as it is possible that he has genuine problem.

If it is money oriented, then I will try to solve it by enhancing his salary as much as I can. If he has other problem, I will also try to solve his problems accordingly.

97. An assitant working under you do not turn up for work for three days without informing you. On his return, he informs that his mother had to be taken to hospital you will

(a) ignore this lapse and counsel him approximately

(b) shout at him and warm him to take steps in next time

(c) cut his salary for three days

(d) explain to him that he should have informed you about his problem and should not repeat the mistake again.

Sol. (d) I try to make him understand his fault. Whatever the situation is, the employee should inform the office. Three days gap is too long, he should inform the office previously. At the same time, I must talk to him patiently and sympathetically.

98. Which of the following is/are qualities of an ideal manager?

(a) Decision-making ability

(b) Good Communication skills

(c) A pleasant personality

(d) All of the above

Sol. (d) An ideal manager should be good decision-maker. He should also have pleasant personality and good communication skills.

99. The element(s) that one need(s) to possess to make successful communication is/are.

(a) reflect and improve   (b) questioning

(c) effective listening   (d) All of these

Sol. (d) All these three factors are necessary for successful communication. As communication is the exchange and flow of information and ideas from one person to another or to many people. Communication consists of the sender the message and the receiver. Thus, to communicate properly above three elements are mandatory to make successful communication.

100. Which of the following is an examples of a channel used in the communication process?

(a) E-mail   (b) Newspaper

(c) Telephones lines   (d) All of these

Sol. (d) Communication is a process of exchanging information, ideas, thoughts and emotions through speech, signals, written matter or expression.

All the above channels are used to convey our ideas. Thus, all these are necessary for communication.

101. Who introduced the concept of noise in his model of communication?

(a) Wilber Schramm

(b) George Gerbren

(c) Charles E. Osgood

(d) Gland Shannon and Warren Weaver

Sol. (d) Shannon and Weaver's mathematical model of communication can be divided into five parts, *viz*, an information sources, a transmitter, a channel, the receive, the destination and noise. They introduced noise as an important source in communication.

102. Which of the following is a type of verbal communication?

(a) oral communication

(b) written communication

(c) body language

(d) both (a) and (b)

Sol. (d) Verbal Communication is the form of communication in which message is transmitted verbally either through word of mouth or a piece of writing. Thus, it is divided into oral and written communication.

103. What is/are the major element(s) of oral communication?

(a) pitch   (b) volume

(c) clarity   (d) All of these

Sol. (d) Oral communication, includes face to face conversation, speech, telephonic conversation, video, radio, television, voice over internet etc. The pitch, volume speed and clarity at speaking influence oral communication.

104. Written communication includes

(a) printed and handwritten matter

(b) speech

(c) monologue

(d) signs and symbols

Sol. (a) In written communication, message can be transmitted *via* e-mail, letter, report, memo, etc. Thus, printed and handwritten matter are examples of written communication.

105. Vocabulary, grammar, style and format are the major elements of

(a) oral communication

(b) written communication

(c) verbal communication

(d) None of the above

Sol. (b) When we write something, we become particular about vocabulary, grammar, style and format of the particular language. All these are major elements to maintain the written communication.

106. The quality of a good listner includes
(a) pay attention
(b) positive feedback
(c) respond appropriately
(d) All of these
Sol. *(d)* Communication is a two way social process, which is reciprocal and continuous. A good listner must pay attention, respond appropriately and give positive feedback. All these factors are very necessary for a good listner.

107. Non-verbal communication includes
(a) tone of voice
(b) body language
(c) posture
(d) Both 'b' and 'c'
Sol. *(d)* Non-verbal communication refers to the communication other than oral and written form. It includes gesture, body language, posture, facial expressions, etc.

108. The correct sequence in the communication process is
(a) selection, attention, perception, retention
(b) attention, selection, retention, perception
(c) selection, retention, perception, attention
(d) perception, attention, selection, retention
Sol. *(d)* Communication is the process of exchanging information, ideas, thoughts and emotions. The correct sequence in this process is perception, attention, selection and retention.

109. One of your friends has a child with special need. Most of your friends try to avoid her. What will you do?
(a) Try to ignore her.
(b) Keep contact with her and learn the method to communicate with the child.
(c) Advise her to keep the child in a sanitorium.
(d) Recommending some well known specialists for her child.
Sol. *(b)* I will keep contact with my friend, and will encourage her to lead a normal life. I would often visit to her place and try to learn the method to communicate with her child as she does. We should always treat this kind of child patiently and with great affection. This type of sympathetic behaviour gradually helps to make the relationship with the child.

110. If you have some problem with your colleagues, you would
(a) complain against them to your boss
(b) get annoyed with the employer
(c) do nothing
(d) try to solve this problem through discussion
Sol. *(d)* If I have some problem with some of my colleagues I will try to solve it through healthy discussion. As I know proper atmosphere in office is to be maintained by all the employees as well as employer, so I try my level best to solve the misunderstanding. In this case, only face to to face conversation or direct interaction can help to mitigate the problem.

111. Levels of Management consist of
(a) Top Level Management
(b) Middle Level Management
(c) Lower level Management
(d) All of the above
Sol. *(d)* Management is a process comprising of inter-related functions and is based on certain principles. It consists of three levels, i.e., top level, middle level and lower level. All these levels together help in achieving group goals, create a dynamic organisation and increase efficiency.

112. What is the function of top level management?
(a) Responsible for welfare and survival of the organisation
(b) Analyse business environment
(c) Formulate overall organisational goals and strategies
(d) All of the above
Sol. *(d)* Top level management consists of the Board of Directors, the Chief Executive and the Managing Director. Their main functions consist of all the above functions as they are responsible for overall growth of the organisation.

113. What do you mean by the importance of staffing?
(a) Obtaining consistent personnel
(b) Optimum utilisation of human resources
(c) Helps to initiate action
(d) Both (a) and (b)
Sol. *(d)* Staffing is described as the managerial function of filling and keeping the position filled in the organisational structure. Thus, the importance of staffing is to obtain competent personnel for the organisation. It also means the optimum utilisation of human resources.

114. Which management level is responsible for implemeting and controlling plans and strategies developed by top management?
(a) Middle level management
(b) Lower level management
(c) Both (a) and (b)
(d) None of the above
Sol. *(a)* Top level management in an organisation is responsible for the formulation of overall organisational goals and strategies. These plans and strategies are implemented by the Middle level management staff which consists of heads of functional departments, plants superintendents, etc.

115. Why controlling is an important function of management?
(a) It helps in accomplishing organisational goals.
(b) It helps in judging accuracy of standard.
(c) It helps in making efficient use of resources.
(d) All of the above

Sol. *(c)* Controlling is considered as an indispensable function of management. It is the force which helps the management to attain the pre-determined or planned performance. Thus, the importance of controlling is stated in the above points clearly.

116. You are on the door of a lift in the hospital. The hospital does not allow to take any eatables inside the hospital. The watchman asks if you are carrying any food inside your bag.

(a) You will handover the food items.

(b) You will hide the truth.

(c) You will fight with watchman and insist on carrying the food packet inside.

(d) You will call the police for help.

Sol. *(a)* We must respect the guidelines set by any institution. It is our duty to go by rules. In this situation, I would hand over the food items as one should not go against the rules of the hospital.

117. A customer calls you with a problem that need to be fixed immediately. To properly fix the problem, you need to gather some information, but there is little time to do so. What would you do in this situation?

(a) Take whatever time is needed to gather information.

(b) Quickly gather information to make smaller fixes now and make bigger fixes later.

(c) Contact your manager for help and wait for direction on what to do

(d) Explain potential issue associated with quickly fixing the problem without all the information.

Sol. *(b)* Without gathering information, the problem could not be fixed and at the same time, fixing the problem was necessary. In such a situation, I will gather information quickly and this way I would able to fix the problem (for time being) the customer can be satisfied.

118. You are a departmental manager. You have recently thought of a news procedure that you believe would improve the work process. Some of your employees do not agree with the change and one of your employees openly criticises the idea to your director. You would

(a) decide not to respond to the critics in order to avoid unnecessary conflicts

(b) reprimand the employee for going over to the director

(c) meet the employee for a talk and explain the advantages of that new procedure

(d) decide to not to go ahead with your plans as keeping employees satisfied is also required

Sol. *(c)* In such a situation, as a good manager I will try to find out the reason of criticism from the employees so that the change is accepted unanimously.

119. A neighbour staying opposite your house dumps the garbage bag in stairs almost every day. It happens after the sweeper has already collected the garbage. You will

(a) shout at your neighbour and create scene

(b) bring it to the notice of President of R.W.A.

(c) ignore this development but look for an opportunity to insult them in front of other neighbours

(d) politely tell the neighbour to avoid doing this as stairs are used by everyone

Sol. *(d)* Fighting with neighbours over small issues is not good as it disturbs the harmony among neighbours. But pointing towards the problem in a polite way will certainly solve the problem.

120. On coming across a very demanding and dominating customer, you would

(a) tell him that he has no business to behave like that

(b) should back at him and tell him that he is unreasonable

(c) politely tell him that he is behaving unreasonably

(d) try and resolve his problem but inform your seniors

Sol. *(c)* I would try to be polite to the customer even if I have to tell him that he is being unreasonable shouting or debating with him is not going to solve this problem.

121. Your friend is quite argumentative and rude with his parents. You have seen him insulting his parents many times. You would

(a) insult your friend in front of others by pointing towards his behaviour

(b) You will have a friendly conversation with your friend reminding him that parents need respect

(c) You will quarrel with your friend over his rudeness to his parents

(d) talk to his parents and try to find out why he is behaving like this

Sol. *(b)* As a friend, I can have a friendly conversation with him and try to convince him that all parents need to be respected. Even if they are wrong, one should not insult them. It is most likely that your friend will listen to you.

122. In the past one month one of your employees has shown a major decline in performance. He has started coming late and seems very irritated and frustrated with his work. This behaviour is influencing the atmosphere in the office as she is a popular employee. What would you do in such a situation?

(a) You feel that since she is a very popular employee it is crucial that she be replaced temporarily

(b) You meet with the employee and explain him that his negative behaviour is affecting not only his performance but that of entire office. You express sincere desire to help him during his rough patch on condition that she cooperate with you and improve his attitude

(c) You call a staff meeting to talk about the negative atmosphere and point out towards that particular employee

(d) You give him a termination letter without talking to him or understanding cause of his problem

Sol. *(b)* As the concerned person has been a good employee, it is very essential for the administration department to talk to that person and find out the reason of his negative behaviour. I would try to give valuable suggestion. Terminating his job is not a good solution.

123. You are taking your father to hospital as he is not well. On way there is an accident where a boy got minor injuries. What will you do in this situation?

(a) You will leave the boy in the injured situation.

(b) You will inform the boy's family but leave him where he is till his family comes.

(c) You will take the boy to the hospital along with your father and get him treated and inform his family.

(d) You will inform the police about the accident.

Sol. *(c)* As the boy has sustained injuries, as a good citizen I will take him to the hospital and get him treated for his injuries.

124. While coming back from a late night show, you saw two men trying to molest a girl. You will

(a) ignore the scene and go back to your house

(b) inform the police

(c) try to stop those two men trying to molest the girl

(d) yourself start molesting that girl

Sol. *(c)* As a law abiding citizen I should protect the girl, inform the police and try to stop those men from behaving in such a shameless manner.

125. You and your best friend participated in a debute competition. You gave your best but your friend got first place and you lost. You will

(a) be angry with your friend and stop talking to him

(b) congratulate your friend and recognise that he is more talented and deserved winning

(c) start quarreling and arguing with the judges

(d) stop participating in any competition

Sol. *(b)* In a competition most deserving talent wins. In such a situation, I would acknowledge one's talent and congratulate him/her. But keep trying do not give up. May be one day you may get the first prize.

126. You are aware that large amount of company stuff has been going missing over the past couple of weeks. You have noticed one of your colleagues putting stationary and papers from the office into her bag on a number of occasions and suspect that she is responsible.

(a) Gather more evidence and catch her red handed

(b) Confront your colleague and question her about what you have noticed

(c) Inform your manager that you suspect your colleague is stealing

(d) Don't do anything. Let the management catch her stealing

Sol. *(c)* In such a situation, I will involve a senior personnel. He can deal with the situation through the correct channels and will take corrective action.

127. At the end of a busy day at work, you accidentally send an email containing an attachment with some confidential client information to the wrong person. Which of the following will be the best thing to do ?

(a) Decide to leave the office and deal with the problem tomorrow.

(b) Decide to overlook your error, send the email to the correct person and leave things like that.

(c) Immediately send a follow up email to the 'wrong' person or if possible telephone him explaining your mistake. Then send the email to the correct person.

(d) Find your Manager, explain what has happened to them and let them deal with any problem.

Sol. *(c)* In such a situation third option is correct as it is the most effective decision. It is basic courtesy to explain the mistake to the concerned person and send the email to the correct person. Such a situation should not be postponed.

128. You are an electrician. There is a short circuit at night in one of your client's house which is at a distance. You get a call to come to his house immediately. In this situation you will

(a) ignore the telephone call

(b) refuse to go in the night, promise to come in the morning

(c) immediately get up, go to the client's house and repair the fault

(d) demand too much money to repair the fault at such old hours

Sol. (c) This is the most effective action/decision. Any electric fault cannot be ignored. I would try to rectify the fault immediately so that problem does not get complicated or may not result in time.

129. You were late to catch a train and entered the compartment late. By mistake, you occupy a wrong berth in the compartment which was unoccupied at that time. When the rightful passenger demands his seat, you would

(a) say sorry to him and vacate the berth

(b) tell the passenger that you would not vacate the berth

(c) vacate but grumble in front of the passenger that he should not make much fuss about it

(d) vacate the berth quietly

Sol. (a) In such a situation most effective action I would take is to apologise to the co-passenger for your mistake. Also vacate his berth quietly as I am not the rightful owner of that berth.

130. Everyone in your department has received a new computer system except for you. What would you do?

(a) Assume this is a mistake, speak to your manager.

(b) Confront your manager and question him why you have not got a new computer.

(c) Take a new computer from one of your colleagues.

(d) Complain to the Human Resource Department.

Sol. (b) I would speak to my manager who has the responsibility for ensuring that everyone gets a computer. It is not right to take away someone else's computer. Immediately, complaining to HR without talking to my manager is a rash action and not advisable.

131. You are a team leader, while reaching a decision you would

(a) let other's decide

(b) consult all members and then reach on a decision

(c) let the matter be pending and later impose your decision

(d) take a decision and inform others

Sol. (b) A good leader will try to make a decision after consulting other members of his team. This is a good strategy for effective working of the team as members feel involved while carrying out any particular work.

132. You have a party at home in the evening. However, your maid suddenly falls sick. Since you had informed your maid, she sends her 10 year old daughter to help you. You would

(a) ask your maid to come even if she is sick

(b) send the little girl back and manage the arrangements on your own

(c) start giving instructions to the little girl

(d) take the little girl's help for those things that you are not able to manage on your own

Sol. (b) If my maid is sick, it is not ethical to call her. Making a 10 year old girl to work is also illegal and incorrect. So, I should not use her services and send her back.

133. An old man asks you for a lift for a location which does not fall in your way, you are getting late for your office. In such a situation, you will

(a) not listen to the old man's request and rush to your office

(b) take the old man in your car, leave him at his house then rush to your office

(c) inform your boss that you will be late due to this situation and then drop the old man

(d) drop the old man to a near by location which is on your way

Sol. (d) Reaching office late is unethical option as well as not helping the old man is also not advisable. Here, one may take option (d) as it will solve the problem of old man to some extent and I will not be late for the office.

134. A local thug (bad element) has started illegal construction on your vacant plot. He has refused your request to vacate and has threatened you of dire consequences in case you do not sell the property at a cheap price to him. You would

(a) sell the property at a cheap price to him

(b) ask for help from your neighbours

(c) negotiate with the goon to get a higher price

(d) inform the police for necessary action

Sol. (d) In such a situation going to the police is best option otherwise my life can be in danger. Moreover neighbours also do not help in such a situation.

135. You are a team leader of a X company, you are handling a time bound project. During the project review meeting you find that the project is likely to get delayed due to lack of cooperation of the team members. You would
  (a) warn the team members about their non-cooperation
  (b) look into the reason for non-cooperation
  (c) ask for replacement of team members
  (d) ask for an extension of time citing the reasons

Sol. *(b)* As a team leader it is necessary to find out the reasons of non-cooperation by other team members. So, I must try to find out the reasons and try to rectify.

136. You have called for a team meeting just after lunch. But some members of your team have forgotten about it and didn't reach the conference room. In that case, you will
  (a) wait till they come for the meeting
  (b) start the meeting without them
  (c) send someone to call them and give them a lecture on their arrival
  (d) ask them to come immediately and delay the meeting for a few minutes

Sol. *(d)* It is essential for a leader to keep the group together. Therefore I will wait for other members for a few minutes. This shows leadership and asking them to join immediately shows command, which is necessary at this stage.

137. To create an effective decision-making environment at the office, a manager should do which of the following?
  (a) Rely on his/her intuition for decision making
  (b) Do lot of research on important strategies related to decision making
  (c) Ask from the staff people who have high academic achievements
  (d) Encourage every member to share and participate in the decision making process

Sol. *(d)* By involving other people in decision-making process, a manager not only ensures full participation but also takes a well thought and informed decision. Relying solely on intuition may tend to overlook many aspects related to the decision.

138. It is reported that private educational institutions are running schools as a business venture by charging huge fees in some pretext or the other. You feel
  (a) they are justified as they offer quality services
  (b) they are not justified as it creates unnecessary burden on parents
  (c) i am indifferent as I don't have a school going kid
  (d) schools don't force the parents to seek their child's admission so there is no responsibility

Sol. *(b)* As a responsible citizen, it is my duty to raise voice against wrong doings in the society. Private schools create pressure on the parents therefore government intervention in this regard is necessary.

139. At the workplace, a colleague asks for your opinion on a matter that is not directly related to you. What will you do?
  (a) Not interested in the conversion as it is not directly related to me
  (b) Give my honest opinion in a straight forward manner
  (c) Avoid him/her as it may lead to nowhere
  (d) Diplomatically answer the question

Sol. *(b)* It is good to give my honest and straightforward opinion even if the matter is not related to me. Diplomatic answers may create trouble for the college and avoiding him/her may result in loosing a valuable acquaintance at the workplace.

140. You work with dedication but some of the colleagues in the office think opposite of you. You will
  (a) raise the issue with your boss
  (b) enter into a heated argument with them
  (c) not react as it does not affect your work
  (d) get frustrated and resign

Sol. *(c)* In this situation, I will be quiet and continue my good work as we cannot control the thinking of others. The management, colleagues and everyone will see the work done by me so I will let my work speak for myself.

English Language and Comprehension

DIRECTIONS (Q. Nos. 141-146) *Choose the word which best expresses the meaning of the underlined word in the sentence.*

141. Shweta spoke <u>impromptu</u> on the occasion.
   (a) without preparation   (b) eloquently
   (c) briefly   (d) forcefully
   Sol. *(a)* 'impromptu' means without any preparation. So, option (a) best expresses its meaning.

142. Kashish was a <u>votary</u> of women empowerment.
   (a) opposer   (b) supporter
   (c) helper   (d) spokesperson
   Sol. *(b)* votary means a person who strongly supports a cause or person. So, 'supporter' best expresses its meaning.

143. He has an <u>impeccable</u> dressing sense.
   (a) elaborate   (b) flawless   (c) grand   (d) tight
   Sol. *(b)* The word 'impeccable' means in accordance with the highest standards. So, flawless best expresses its meaning.

144. The employees signed the document under <u>coercion</u>.
   (a) compulsion   (b) confusion
   (c) supervision   (d) security
   Sol. *(a)* 'coercion' means the action of persuading someone to do something by using force or threats. So, compulsion best expresses its meaning.

145. There is <u>copious</u> supply of water for the crops.
   (a) considerable   (b) plentiful
   (c) adequate   (d) sufficient
   Sol. *(b)* 'Copious' means in large amount. So, 'plentiful' best expresses its meaning.

146. The ascetic lived a very <u>austere</u> life.
   (a) luxurious   (b) boisterous
   (c) exciting   (d) strict
   Sol. *(d)* The word 'austere' means severe or strict in manner or attitude. So, strict is closed in meaning to it.

DIRECTIONS (Q. No. 147-152) *Choose the word which is closest to the opposite in meaning of the underlined word in the sentence.*

147. The diplomat <u>yielded</u> to temptation.
   (a) skirted   (b) resisted
   (c) succumbed   (d) reverted
   Sol. *(b)* 'yielded' means to give into someone or something. So, resisted is opposite in meaning to it.

148. The proposal of fare hike was <u>denounced</u> by one and all.
   (a) announced   (b) pronounced
   (c) appraised   (d) commended
   Sol. *(d)* 'denounced' means publicly declare to be wrong or evil. So, commended is opposite in meaning to it.

149. Some plants look <u>innocuous</u> but are the opposite.
   (a) harmful   (b) huge
   (c) harmless   (d) small
   Sol. *(c)* The word 'innocuous' means not harmful or offensive. So, harmless is opposite in meaning to it.

150. The ship sank in the <u>turbid</u> water of the sea.
   (a) deep   (b) muddy
   (c) fresh   (d) clear
   Sol. *(d)* 'turbid' means not transparent because a lot of small pieces of matter are held in it. So, clear is opposite in meaning to it.

151. Ridhima is an <u>amateur</u> bird-watcher.
   (a) average   (b) experienced
   (c) professional   (d) skilled
   Sol. *(c)* 'amateur' means someone who does not have much skill in what they do. So, professional is opposite in meaning to it.

152. One must not <u>pamper</u> a child if he has done something wrong.
   (a) scold   (d) scorn
   (c) neglect   (d) support
   Sol. *(c)* The word 'pamper' means to treat with too much kindness and attention. So, neglect is opposite in meaning to it.

DIRECTIONS (Q.Nos. 153-158) *In each of the following questions, four words are given, three of which are spelt correctly while one is miss-spelt. Choose the miss-spelt word.*

153. (a) fatuous   (b) obituary
   (c) Mortury   (d) Congress
   Sol. *(c)* The correct spelling is mortuary.

154. (a) Solidarity   (b) Digress
   (c) Solemn   (d) Congeniall
   Sol. *(d)* The correct spelling is Congenial.

155. (a) Impassioned   (b) Abbay
   (c) Correlation   (d) Tumultous
   Sol. *(b)* The correct spelling is Abbey.

156. (a) Philately   (b) Philosophy
   (c) Actuality   (d) Nomancloture
   Sol. *(d)* The correct spelling is Nomenclature.

157. (a) Sovereign   (b) Persanage
   (c) Lucid   (d) Bovine
   Sol. *(b)* The correct spelling is Personage.

158. (a) Amicable   (b) Sociable
   (c) Vulnarable   (d) Malleable
   Sol. *(c)* The correct spelling is Vulnerable.

DIRECTIONS (Q. Nos. 159-164) *In each of the following questions, an idiomatic expression is followed by four alternatives. Choose the one which best expresses the meaning of the given idiom.*

159. A gentleman at large
(a) a reliable person
(b) a fat person
(c) an unreliable person
(d) a sophisticated person
Sol. *(c)* The idiom a gentleman at large means an unreliable person.

160. Like a fish out of water
(a) in an easy situation
(b) near a beach
(c) in a dream state
(d) in a very difficult and unsuitable situation
Sol. *(d)* Like a fish out of water means to feel awkward.

161. To clip one's wings
(a) to share one's problems
(b) to deprive one of power
(c) to criticise someone
(d) to support someone
Sol. *(b)* To clip one's wings means to deprive one of power.

162. To make both ends meet
(a) to join two ends
(b) to live a lavish life
(c) to help someone to survive
(d) To live within one's earning
Sol. *(d)* To make both ends meet means to live within one's earning.

163. To win laurels
(a) to win friends
(b) to get support of someone
(c) to win honour
(d) to fail badly
Sol. *(c)* The idiom to win laurels means to win honour.

164. To kick the bucket
(a) To fall down
(b) To sympathise
(c) To show anger
(d) to die
Sol. *(d)* The idiom to kick the bucket means to die.

DIRECTIONS (Q. Nos. 165-170) *In each of the following questions, choose the most suitable word for the given expression.*

165. One who is present everywhere.
(a) Omnipresent
(b) Omnipotent
(c) Omnivorous
(d) Eternal
Sol. *(a)* Omnipresent

166. One who does not believe in the existence of God.
(a) Atheist
(b) Agnostic
(c) Arboreal
(d) Acoustic
Sol. *(b)* Agnostic

167. One who has a long experience of any occupation.
(a) Amateur
(b) Versatile
(c) Veteran
(d) Philanderer
Sol. *(c)* Veteran

168. A place where dead bodies are kept for identification.
(a) Sanatorium
(b) Infirmary
(c) Auditorium
(d) Morgue
Sol. *(d)* Morgue

169. Holding office without any remuneration.
(a) tertiary
(b) Honorary
(c) Salutary
(d) Potable
Sol. *(b)* Honorary

170. A list of headings of the business to be transacted at a meeting.
(a) Minutes
(b) Propoganda
(c) Agenda
(d) Points
Sol. *(c)* Agenda

DIRECTIONS (Q Nos. 171-176) *In each of the following questions, a sentence is given, part of which has been underlined. Three possible substitutes for the underlined part are suggested as alternatives. Choose the alternative which can most appropriately replace the underlined part to make the sentence grammatically correct. However, if you think the sentence is correct as it is, choose 'No change required' as your answer.*

171. We are doing this in the interest of the needys.
(a) interest of the needy
(b) interest of the needy's
(c) interest form the needy
(d) no change required
Sol. *(a)* 'interest of the needy' should be used in place of 'interest of the needys' to make the sentence grammatically correct.

172. The Prime Minister called over the President today.
(a) called upon
(b) called off
(c) called on
(d) no change required
Sol. *(c)* 'called over' is incorrect. It should be replaced by, 'called on'. 'called on' means to come to see someone.

173. Suppose you are selected, will you join the hotel?
(a) Suppose if
(b) Suppose when
(c) Supposing
(d) No change required
Sol. *(d)* No change required

174. I am waiting for two hours now.
(a) I have waiting
(b) I had been waiting
(c) I have been waiting
(d) No change required
Sol. *(c)* I have been waiting

175. Students find difficult to <u>cope with</u> the tough competition.
   (a) cope up with   (b) coping with
   (c) cope on with   (d) no change required
   Sol. (d) no change required

176. By noon Sakshi <u>wrote</u> twelve e-mails.
   (a) had written   (b) had been writing
   (c) have written   (d) no change required
   Sol. (a) 'had written' should be used in place of 'wrote' to correct the given sentence as the sentence describes an action that happened in the past tense.

DIRECTIONS (Q. Nos. 177-180) *Fill in the blanks.*

177. One must do .... duties honestly.
   (a) his   (b) her   (c) ones   (d) one's
   Sol. (d) one's

178. Naveen ran as fast .... to catch the train.
   (a) as he can   (b) as he would
   (c) as he could   (d) as one could
   Sol. (c) as he could

179. Kanishtha is .... to be a model.
   (a) too fat   (b) so fat
   (c) to fat   (d) very fat
   Sol. (a) too fat

180. My father keeps all his .... papers is his briefcase.
   (a) required   (b) necessary
   (c) useful   (d) confidential
   SoL. (d) confidential

DIRECTIONS (Q. Nos. 181-200) *Read the following passages carefully to answer the questions that follow.*

PASSAGE-I

People project their mental processes into their handwriting. They subconsciously shape and organise their letters, words and lines in ways that directly reflect their personalities. This explains why no two handwritings are or even can be alike; the medium is just too personal. Everyday observation confirms the link between handwriting and personality, at least in an elementary way. Precise people construct their words with care, slowly and exactly; dynamic people dash them off. Flamboyant people boldly cover half a page with a few words and a signature, whose siz fittingly reflects their expansive sense of self. Most of us have made such observations. But it takes a practiced eye to discern the scores of variations and interpret the subtle interplay of forces at work in any given handwriting. In fact in Europe, handwriting analysis known as graphology, now enjoys scientific acceptance and common use.

181. If you are a showy and colourful person, your handwriting is likely to be
   (a) neat and slow   (b) dashing and careless
   (c) bold and large   (d) legible but small
   Sol. (c) bold and large

182. Graphology is
   (a) the study of graphs
   (b) the analysis of handwriting
   (c) a special branch of phonetics
   (d) a graphical description of handwriting
   Sol. (c) a special branch of phonetics

183. Handwriting analysis is
   (a) not useful to us
   (b) an elementary study
   (c) an imprecise science
   (d) a means of studying personality
   Sol. (b) an elementary study

184. According to the author, people are
   (a) not conscious of what they write
   (b) aggressive in the nature of their wiring
   (c) not conscious of the way they write
   (d) not used to personal writing
   Sol. (a) not conscious of what they write

185. The fact that handwriting is related to personality
   (a) has been noticed by most people
   (b) is appreciated by dynamic people
   (c) is restricted to persons who write carefully
   (d) is known only to graphologists
   Sol. (d) is known only to graphologists

PASSAGE-II

The simplest method of welding two pieces of metal together is known as pressure welding. The ends of metal are heated to a white heat - for iron, the welding temperature should be about 1300°C in a flame. At this temperature the metal becomes plastic. The ends are the pressed or hammered together, and the joint is smoothed off. Care must be taken to ensure that the surfaces are thoroughly clean first, for dirt will weaken the weld. Moreover, the heating of iron or steel to a high temperature cause oxidation, and a film of oxide is formed on the heated surfaces. For this reason, a flux is applied to the heated metal. At welding heat, the flux melts, and the oxide particles are dissolved in it together with any other impurities which may be present. The metal surfaces are pressed together, and the flux is squeezed out from the centre of the weld. A number of different types of weld may be used, but for fairly thick bars of metals, a vee-shaped weld should normally be employed. It is rather stronger than the ordinary butt weld.

186. The simplest way of welding two pieces of metal together is
    (a) heating the metal
    (b) holding it in a flame
    (c) coating the metal with plastic
    (d) hammering heated pieces

Sol. (d) hammering heated pieces

187. Unless the surfaces are cleaned first
    (a) the metal will not take white heat
    (b) the resulting weld will be weak
    (c) the joint will be rough
    (d) the metal will be less plastic

Sol. (d) the metal will be less plastic

188. When iron is heated to about 1300 degree centigrade
    (a) flames turn from white to blue
    (b) chemical reaction starts
    (c) oxide film is found on its surfaces
    (d) it turns into steel

Sol. (b) chemical reaction starts

189. The flux is used to
    (a) make the metal plastic
    (b) cool the heated metal
    (c) cover up any dirt
    (d) dissolve oxide and other impurities

Sol. (a) make the metal plastic

190. For fairly thick bars of metals
    (a) a vee-shaped wild should be used
    (b) ordinary butt weld should be used
    (c) a number of different types of weld may be used
    (d) a pressure weld may be used

Sol. (c) a number of different types of weld may be used

PASSAGE-III

Soil scientists have shown that the soil teems with millions of living things, many of them useful, others harmful. The living things which are useful include earthworms and various kinds of bacteria. Earthworms loosen the soil and so enable air and water to enter it. Bacteria, which are microscopic living things break down dead plants and animals and make humus, or take nitrogen from the air and change it into substances that plants use. The living things that do harm include other bacteria and fungi which cause disease. Other harmful things are pest such as wire worms which feed on the roots of grass and other plants. While the farmer can usually keep weeds in check by careful cultivation, this alone may not protect his crops from insects, pests and diseases. Nowadays, however, he is much better able to control these enemies. He may plant specially resistant types of seeds or he may keep the pests and diseases in check with chemicals. With better seeds farmers have

been able to increase their crop yields. They can grow crops that ripen more quickly and have a stronger resistance to disease, frost or drought.

191. Scientists who study soil believe that
    (a) all insects and bacteria are harmful
    (b) only microscopic living things are useful
    (c) only earthworms are useful
    (d) not all worms and bacteria are harmful

Sol. (d) not all worms and bacteria are harmful

192. The living things that do harm
    (a) break down plants and animals
    (b) use up the nitrogen from the air
    (c) cause diseases in the plants
    (d) loosen up the soil from air and water

Sol. (b) use up the nitrogen from the air

193. Farmers are always careful
    (a) to control insects and fungi that attack plants
    (b) to encourage pests in the soil
    (c) to eliminate all bacteria from the soil
    (d) to foster all kinds of worms in the Earth

Sol. (c) to eliminate all bacteria from the soil

194. Nowadays it is possible to reduce the loss caused by pests and harmful bacteria
    (a) with the use of chemical fertilisers
    (b) through the development of resistant seeds
    (c) by using weeds as killers
    (d) by controlling earthworms

Sol. (a) with the use of chemical fertilisers

195. The farmers today can also select seeds
    (a) of slow ripening variety
    (b) resistant to frost and drought
    (c) for economy is costs
    (d) of lower resistance to disease

Sol. (b) resistant to frost and drought

PASSAGE-IV

How can you improve your reading speed? By taking off the brakes. You wouldn't think of driving a car with the brake on. Yet as a reader you probably have several brakes slowing you down.

One very common brake is regressing– looking back every now and then at something already read. It is like stepping backwards every few metres as you walk– hardly the way to move ahead quickly. Regression may arise from a lack of confidence, vocabulary deficiency, or actually missing a word or phrase. It makes a long sentence seem even more complex as the eyes frequently regress. Eye movement photographs of 12, 000 readers in America showed that university students regress an average of 15 times in reading only 100 words. The average student of class four was found to look back 20

times. In short, regression consumes one-sixth of your precious reading time. Release this brake and enjoy a spurt in reading speed.

196. In the context of the passage, what does 'regression' mean?
  (a) Lack of desire to improve the reading speed
  (b) Looking back at what is already read
  (c) Lack of proper understanding of what one reads
  (d) Comparing the reading speed of school and university students

  Sol. *(b)* Looking back at what is already read

197. According to the author reading with regression is like
  (a) driving with poor quality brakes
  (b) stepping backwards while walking
  (c) using several brakes in order to slow down
  (d) making sudden spurts in reading speed

Sol. *(b)* stepping backwards while walking

198. In order to be a good reader you should
  (a) regress whenever necessary
  (b) be like a careful driver
  (c) not look back frequently while reading
  (d) test your vocabulary frequently

  Sol. *(c)* not look back frequently while reading

199. The average student of class 4 regresses
  (a) 15 times in reading 100 words
  (b) 10 times in reading 100 words
  (c) 20 times in reading 100 words
  (d) 25 times in reading 100 words

  Sol. *(c)* 20 times in reading 100 words

200. How much time does regression consume?
  (a) 1/3rd of your reading time
  (b) 1/4th of your reading time
  (c) 1/5th of your reading time
  (d) 1/6th of your reading time

  Sol. *(d)* 1/6th of your reading time