

Model Answers

Correct options have been highlighted in red (with cross)

Group A- CET-2018 (May 22, 2018)

SECTION I- Quantitative Ability

1. What will be 30 % of a number whose 90% is 54?
 - A. 36
 - B. 24
 - C. 72
 - D. 18 X**
 - E. 16

2. Three wheels can complete 60, 36 and 24 revolutions per minute. There is a red spot on each wheel that touches the ground at time zero. After how much time, all these spots will simultaneously touch the ground again?
 - A. 5 s
 - B. $\frac{5}{4}$ s
 - C. $\frac{5}{3}$ s
 - D. 6 s X**
 - E. 8 s

3. A school has enough food for 400 children for 12 days. How long will the food last if 80 more children join them?
 - A. 6 days
 - B. 7 days
 - C. 8 days
 - D. 9 days
 - E. 10 days X**

4. If the time in a clock is 4.20, the angle between the minute hand, and the hour hand will be:
 - A. 5°
 - B. 10° X**
 - C. 15°

- D. 20°
E. 25°
5. $\frac{3}{4}$ of $\frac{5}{6}$ of $\frac{7}{10}$ of 4560 is equal to:
A. 1995 X
B. 2000
C. 2450
D. 2800
E. 3800
6. The difference between 6 times, and 8 times of a number is 14. What is the number?
A. 12
B. 7 X
C. 9
D. 6
E. 4
7. Two circles touch each other internally. Their radii are 2 cm and 3 cm. The biggest chord of the greater circle which is outside the inner circle is of length:
A. $4\sqrt{2}$ cm X
B. $3\sqrt{2}$ cm
C. $2\sqrt{2}$ cm
D. $\sqrt{2}$ cm
E. 2 cm
8. An alloy of gold, and silver weights 50g. It contains 80% gold. How much gold should be added to the alloy so that percentage of gold is increased to 90?
A. 30 g
B. 40 g
C. 50 g X
D. 55 g
E. 60 g

9. A gardener had a number of shrubs to plant in rows. At first he tried to plant 8, then 12 and then 16 in a row but he always had 3 shrubs left with him. On trying 7 shrubs he was left with none. Find the total number of shrubs.

A. 127

B. 147 X

C. 157

D. 167

E. 177

10. The difference between the compound interest and the simple interest for 2 years on a sum of Rs 12,000 at a certain rate of interest is Rs 120. Find the rate of interest.

A. 5%

B. 6%

C. 8%

D. 10% X

E. 12%

11. If $a + \frac{1}{b} = 1$, and $b + \frac{1}{c} = 1$, then $c + \frac{1}{a} = ?$

A. 1 X

B. 4

C. 6

D. 8

E. 24

12. There is total 60 litre of milk which has only 84% milk and rest is water. How much water must be added to it so that milk becomes 64% ?

A. 18 litres

B. 18.75 litres X

C. 15.50 litres

D. 19.50 litres

E. 21 litres

13. In a stream running at 2 kmph, a motor boat goes 6 km upstream, and back again to the starting point in 33 minutes. Find the speed of the motorboat in still water.

A. 22 kmph X

B. 33 kmph

C. 44 kmph

D. 25 kmph

E. 45 kmph

14. If the length of a certain rectangle is decreased by 4 cm and the width is increased by 3 cm, a square with the same area as the original rectangle would result. Find the perimeter of the original rectangle.

A. 45 cm

B. 50 cm X

C. 60 cm

D. 70 cm

E. 80 cm

15. A goods train leaves a station at a certain time, and at a fixed speed. After 6 hours, an express train leaves the same station, and moves in the same direction at a uniform speed of 90 kmph. This train catches up the goods train in 4 hours. Find the speed of the goods train.

A. 36 kmph X

B. 38 kmph

C. 40 kmph

D. 45 kmph

E. 50 kmph

Section II- Data Interpretation

Q.16-20: Study the following table carefully and answer the questions given below:

Number of marks obtained by five students in five subjects in an Examination

(Total marks in each of all the five subjects are 200)

Subject → Students ↓	English	Math	History	Geography	Science
A	115	180	120	90	140
B	170	106	150	135	100
C	102	108	132	110	90
D	98	106	162	148	120
E	163	125	136	124	115

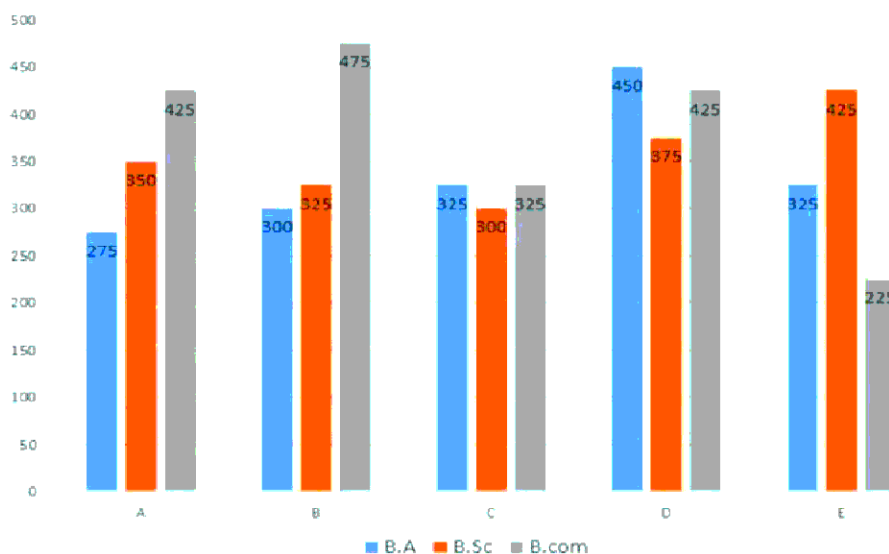
16. The total marks obtained by B in English and history together were approximately what percentage of marks obtained by E in English?
- A. 150
B. 100
C. 200 X
D. 250
E. 175
17. Marks obtained by C in History were approximately what percentage of marks obtained by A in Geography?
- A. 167
B. 67
C. 133
D. 33
E. 150 X
18. Who among them secured highest total marks in English, History and Geography?
- A. A
B. B X
C. C
D. D
E. E

19. If the minimum pass percentage is 50 in each subject to be declared pass in the examination, how many of them failed in the examination?
- A. None
 - B. 2
 - C. 1
 - D. 3 X**
 - E. 4

20. Who among them secured highest total percentage of marks?
- A. A
 - B. B
 - C. C
 - D. D
 - E. E X**

Q. 21-25: Study the following graph carefully to answer the questions that follow:

Number of students enrolled in three different disciplines in five different colleges



21. What is the total number of students studying B.Sc. in all the Colleges together?
- A. 1825
 - B. 1975
 - C. 1650
 - D. 1775 X**
 - E. No option is correct

22. What is the respective ratio of total number of students studying B.Sc in the colleges C and E together to those studying B.A. in the colleges A and B together?
- A. 24 : 23
 B. 25 : 27
 C. 29 : 23 X
 D. 29 : 27
 E. No option is correct
23. What is the respective ratio of total number of students studying B.Sc., B.A. and B.Com. in all the Colleges together?
- A. 71 : 67 : 75 X
 B. 67 : 71 : 75
 C. 71 : 68 : 75
 D. 75 : 71 : 68
 E. No option is correct
24. Number of students studying B.Com. in College C forms approximately what per cent of the total number of students studying B.Com. in all the colleges together?
- A. 39%
 B. 21%
 C. 44%
 D. 33%
 E. 17% X
25. Number of students studying B.A. in College B forms what per cent of total number of students studying in all the disciplines together in that college? (Round off to two digits after decimal)
- A. 26.86%
 B. 27.27% X
 C. 29.84%
 D. 32.51%
 E. No option is correct

Q. 26-30: The following table shows the distribution of value of sales of cars of two companies A and B in the given months.

Values of sales of Company A and B:

Month	A	B
January	575000	862500
February	450000	337500
March	375000	625000
April	625000	1562500
May	300000	350000
June	175000	125000

26. By what per cent is the sales of Company B more than that of Company A in March?
- A. $70\frac{2}{3}\%$
 - B. $64\frac{2}{3}\%$
 - C. $65\frac{1}{3}\%$
 - D. $66\frac{2}{3}\%$ X
 - E. 67%
27. By what per cent has the sales of Company A increased in April as compared to that in March?
- A. $66\frac{2}{3}\%$ X
 - B. 65%
 - C. $67\frac{1}{3}\%$
 - D. $53\frac{1}{3}\%$
 - E. $70\frac{2}{3}\%$
28. What is the total sales of Company B in all the months together?
- A. 3762400
 - B. 3862500 X
 - C. 3742500
 - D. 3852500
 - E. 3962500
29. In how many months is the sales of Company B more than that of Company A?
- A. 1
 - B. 2
 - C. 3
 - D. 4 X
 - E. 5
30. What is the average value of sales of Company B for all the months?
- A. 542850
 - B. 552960
 - C. 643750 X
 - D. 742850
 - E. 644950

Section III- Logical Reasoning & General Intelligence

Q. 31-34: Refer to the data below and answer the questions that follow.

Five teams from five different colleges- SIT, KIT, MIT, VIT and NIT, participated in Inter-College Champions League (ICCL) played in the year 2014. Each team played exactly one match against every other team. But due to some virus, data was corrupted and it was all up to the memory based facts remembered by statisticians. These facts are listed below. Each win provides two points to the winning team, each No-Result (i.e. N/R) gains one point to both teams and a loss gains zero. If two teams score same points, the team with higher run rate gets higher rank.

- The performance chart (number of won-Lost-N/R matches) for only SIT and KIT was identical. SIT topped the list because of the higher net run rate.
- NIT didn't win any match.
- MIT won two matches and lost one.
- There was only one match which didn't produce any result. Every team scored at least one point.
- VIT beat only NIT.

31. How many points did KIT score?

- A. 4
- B. 7
- C. 6 X
- D. 8
- E. 2

32. Refer to the data below and answer the questions that follow. How many matches did NIT lose?

- A. 1
- B. 2
- C. 3 X
- D. 4
- E. 5

33. Refer to the data below and answer the questions that follow. Which of the following teams defeated SIT?

- A. VIT
- B. KIT
- C. MIT
- D. SIT
- E. Can not be determined X

34. Refer to the data below and answer the questions that follow. Which of the following teams defeated SIT?

- A. VIT
- B. KIT X
- C. MIT
- D. SIT
- E. Can not be determined

Q. 35-38: Refer to the data below and answer the questions that follow.

Ten friends A, B, E, G, I, L, M, N, R and T went to Goa on a vacation. While going there they realized they forgot to book tickets for a cruise which was famous in Goa. When they tried to book it after reaching Goa, there were only 4 tickets available and they bought them. It was decided that the two couples out of the ten people will go on the cruise. The other six split themselves into two groups and one group went to a beach and the other group went shopping. Following is known about them:

- People who went for shopping were all girls
- None of the friends travelled alone
- Only 4 out of the 10 friends were girls and remaining were boys.
- A is a girl and N is a boy
- ‘M’ did not go on the cruise and also did not travel with ‘N’
- ‘B’ and ‘T’ both are boys and stay together wherever they go
- ‘A’ was very excited about going on the cruise with her partner but was not happy that ‘R’ would also be coming with them
- ‘N’ was jealous that his best friend ‘G’ went on the cruise while he couldn’t
- ‘B’ and ‘T’ had a fight and were not ready travel together

35. Which of the following is definitely false?

- A. G and A are a couple
- B. L went to the beach
- C. B, I, R, G and N are all boys
- D. L, T, E, A are all girls X
- E. No option is correct

36. Refer to the data below and answer the questions that follow. Which among the following combinations is definitely correct?

- A. G – boy – Cruise
- B. T – boy – Cruise
- C. E – boy – Beach
- D. None of these X
- E. All options are correct

37. Refer to the data below and answer the questions that follow. If both T and E are girls, who among the following is definitely a couple?

- A. A and G X
- B. T and R
- C. E and R
- D. Cannot be determined
- E. No option is correct

38. Which of the following additional information will help us determine the genders of all 10 friends?

- A. E is a boy
- B. E is a girl
- C. T is a girl
- D. Both E and T are girls X
- E. Both E and T are boys

Q. 39-42: Refer to the data below and answer the questions that follow.

At the eleventh hour, Pappu got his train ticket confirmed on Maharaja Express. He was surprised to see that the notification message from IRTC (Indian Rail Transport Corporation) indicated only the train number and the seat number, but there was no mention of the compartment number. On reaching the station, he saw that there were 9 compartments numbered S1 to S9 in that order and the engine was attached to compartment S1. He checked exactly 5 compartments before he found his compartment. In each of these 5 compartments, there was someone sitting in his seat number. The train being special, each compartment was painted with a different colour. Pappu checked the Red compartment immediately before he checked S9. He checked S9 immediately before he checked S4, wherein his seat number was taken by Charlie. S6 was the last compartment he checked, wherein his seat number was allotted to Emma. He checked the Yellow and Pink compartments as well, the Pink one being 4 compartments further away from the engine than the Yellow one. Immediately after checking the Green compartment, Pappu ran 2 compartments towards the engine side and found his seat number being occupied by Danny. Immediately after finding that his seat number in a compartment was occupied by Annie, Pappu ran 2 compartments further away from the engine to check the Blue compartment. Boyle was another person whom Pappu found to be occupying his seat number in one of the compartments.

39. Who was in the Pink compartment?

- A. Emma X
- B. Annie
- C. Danny
- D. Charlie
- E. Boyle

40. Which of the following combinations is correct?

- A. Annie, S7, Red X
- B. Danny, S4, Blue
- C. Boyle, S9, Pink
- D. Charlie, S6, Yellow
- E. Pappu, S1, Green

41. Who did Pappu find first occupying his seat number?

- A. Boyle
- B. Charlie
- C. Annie X
- D. Danny
- E. No option is correct

42. Which among the following is the correct order of colours starting from the engine side?

- A. Pink, Yellow, Green, Blue, Red
- B. Yellow, Green, Pink, Red, Blue X
- C. Red, Blue, Green, Pink, Yellow
- D. Red, Blue, Green, Yellow, Pink
- E. Blue, Red, Pink, Green, Yellow

Q 43-45: Refer to the data below and answer the questions that follow.

5 married couples come together to play a game. Among them, 5 teams each consisting of a man and woman are created such that the team members are not married to each other. The men include Brijesh, Vrijesh, Sajesh, Hrishikesh and Kamlesh. The women include Sumalata, Hemalata, Vimalata, Komalata and Swarnalata. The team names include Red, Blue, Green, Yellow and Black. The following information is also known.

–Kamlesh is married to Sumalata.

–Swarnalata is married to the person from the Red team.

–Sajesh is in the Green team.

–Brijesh is in the Black team.

–Hrishikesh's wife is in the Red team.

–Swarnalata is in the Blue team.

–Brijesh's wife is in the Yellow team.

–Komalata's husband is in the Green team.

43. To which team does Sumalata belong?

- A. Red
- B. Green X
- C. Yellow
- D. Black
- E. Cannot be determined

44. Who among the following is in the Red team?

- A. Kamlesh
- B. Sumalata
- C. Vrijesh X
- D. Komalata
- E. Brijesh

45. Who is Kamlesh teamed up with?

- A. Hemalata
- B. Swarnalata
- C. Vimalata
- D. Komalata
- E. Cannot be determined X

Section IV- English Language and Comprehension

Directions: For the Questions 46 to 50: Read the below passage and answer the following questions.

The fragments of information we have about any great writer's method of work should be enough to convince us that the process of creation is as surprising and varied as mankind itself. It would not surprise or disconcert me in the least if the plot of *Romeo and Juliet* had been conceived as a homosexual love affair. I have known very few writers, but those I have known, and whom I respect, confess at once that they have little idea where they are going when they first set pen to paper. They have a character, perhaps two; they are in that condition of eager discomfort which passes for inspiration; all admit to radical changes of destination once the journey has begun; one, to my certain knowledge, spent nine months on a novel about Kashmir, then reset the whole thing in the Scottish Highlands. I never heard of anyone making a 'skeleton', as we were taught at school. In the breaking and remarking, in the timing, interweaving, beginning afresh, the writer comes to discern things in his material which were not consciously in his mind when he began. This organic process, often leading to moments of extraordinary self-discovery, is of an indescribable fascination. A blurred image appears; he adds a brushstroke and another, and it is gone; but something was there, and he will not rest till he has captured it. Sometimes the yeast within a writer outlives a book he has written. I have heard of writers who read nothing but their own books; like adolescents they stand before the mirror, and still cannot fathom the exact outline of the vision before them. For the same reason, writers talk interminably about their own books, winking out hidden meaning, superimposing new ones, begging response from those around them. Of course a writer doing this is misunderstood: he might as well try to explain a crime or a love affair. He is also, incidentally, an unforgivable bore.

46. What is the nature of the process of creation according to the author of the passage?

- A. As surprising and complicated as mankind itself
- B. As complicated and complex as mankind itself
- C. As complicated and varied as mankind itself
- D. **As surprising and varied as mankind itself** X
- E. As complex and varied as mankind itself

47. "all admit to radical changes of destination once the journey has began". In this sentence the words destination and journey refers to whose destination and journey.

- A. Destination and journey of the character or characters X
- B. Destination and journey of the book
- C. Destination and journey of the writer
- D. Destination and journey refers to nothing
- E. Destination and journey every person's life destination and journey

48. Author of the passage would not be surprised if the plot of Romeo and Juliet had been conceived as a

- A. Tragedy
- B. Comedy
- C. Tragicomedy
- D. Homosexual love affair X
- E. Farce

49. According to the passage, the teaching of writing in school is

- A. Largely skeletal in nature
- B. Out of sync with learners' real needs
- C. Out dated, but without some relevance
- D. Very relevant to real nature of writing
- E. Out of sync with writers' real writing process X

50. Writing in the passage is described as

- A. Organic process X
- B. Difficult process
- C. Skeleton
- D. Mirror
- E. Vision

Directions: For the Questions 51 to 54: Each sentence given below contains one or no grammatical mistake. Read the sentences and choose the correct answer.

51. Neither Satish nor Ritesh have come.

- A. Neither Satish nor Ritesh have came.
- B. Neither Satish nor Ritesh have been come.
- C. Neither Satish nor Ritesh has come. X
- D. Neither Satish nor Ritesh came.
- E. No correction

52. One of my friend is leaving for Patna today.

- A. The sentence is grammatically correct.
- B. One of my friends is leaving for Patna today. X
- C. One of my friends is leaving to Patna today.
- D. One of my friends left for Patna today.
- E. One of my friends have left for Patna today.

53. Nirmal is an afraid man.

- A. Nirmal is a frightened man. X
- B. Nirmal is the man afraid
- C. The statement has no grammar mistake
- D. Nirmal is an afraid of man.
- E. Nirmal is an afraid that man.

54. I have to write a one thousand words seminar paper.

- A. I have to write an one thousand words seminar paper.
- B. I have to write a thousand words seminar paper. X
- C. I have to write a one thousand word seminar paper.
- D. I have to write thousand words seminar papers.
- E. The syntax of the sentence is correct.

Directions: For the Questions 55 to 57: choose the appropriate one word substitutes to the following statements.

55. One who does not believe in the existence of God?

- A. Apostate
- B. Theist
- C. Oriental
- D. Pagan
- E. Atheist X

56. One who is bad in spellings?

- A. Cacographer X
- B. Illiterate
- C. Uneducated
- D. Drop Out
- E. No option is correct

57. One who feeds on human flesh?

- A. Vampire
- B. Lucifer
- C. Cannibal X
- D. Devil
- E. Psycho

Directions: For the Questions 58 to 59: Choose the correctly spelled words among the given options.

58. Which of the following spellings is correct?

- A. Definitely X
- B. Definitly
- C. Difenitely
- D. Definetly
- E. Defenitly

59. Which of the following spellings is correct?

- A. Exhorbitant
- B. Exorbitant X
- C. Ehxorbitant
- D. Exorbitent
- E. Exorhbitent

Direction: For the Question 60: In the question below, choose the word that shows the same relationship as given in the question.

60. Lung : Man : : Gill :

- A. Cow
- B. Fish X
- C. Hen
- D. Peacock
- E. No option is correct

SECTION V

General Awareness and Awareness of Socio-Economic Environment

61. What are the elements of business ethics?

- A. Values, rights and duties X
- B. Attitudes, pressure and environment
- C. Value, environment and attitude
- D. Responsibilities
- E. No option is correct

62. When a company is taken over by another one and clearly becomes the new owner, this is called

- A. Merger
- B. Acquisition X
- C. Strategic alliance
- D. Partnership firm
- E. No option is correct

63. National Civil Services Day in India is observed on-

- A. April 23
- B. April 24
- C. April 18
- D. April 21 X
- E. No option is correct

64. FBI is the intelligence agency of ?

- A. United Kingdom
- B. USA X
- C. Israel
- D. Iran
- E. India

65. The name of the white revolution is associated with?

- A. J. V. Narlikar
- B. J. C. Bose
- C. Kurien Verghese X
- D. M. S. Swaminathan
- E. C. Rangarajan

66. At present, Prime Minister of United Kingdom is

- A. Theresa May X
- B. Tony Blair
- C. David Cameron
- D. Margaret Thatcher
- E. No option is correct

67. World Environment Protection Day is celebrated on:

- A. June 05
- B. June 08
- C. November 26 X
- D. March 21
- E. No option is correct

68. Which Index is used to calculate inflation in India ?

- A. Wholesale Price Index X
- B. GDP deflator
- C. Productive Price Index
- D. Commodity Price Index
- E. No option is correct

69. At present, who is Chairman of SEBI ?

- A. U K Sinha
- B. C B Bhave
- C. Ajay Tyagi X
- D. M Damodaran
- E. No option is correct

70. Which of the following scheme is related to the management and conversion of cattle dung and solid in farms to Compost, fertilizer, bio-gas and bio-CNG?

- A. Galvanizing Organic Bio-Agro Resources Dhan X
- B. Swachhh Bharat Abhiyan
- C. Pradhan Mantri Jeevan Jyoti Beema Yojna
- D. Prime Minister Krishi Sinchai Yojna
- E. No option is correct

71. Who of the following is not the member of the National Development Council?

- A. Governor of the State X
- B. Chief Minister of the State
- C. Members of the Planning Commission
- D. All cabinet Ministers
- E. All options are correct

72. Chandi Prasad Bhatt is an eminent:

- A. Musician
- B. Environmentalist X
- C. RTI Activist
- D. Indian Foreign Service Officer
- E. No option is correct

73. Siang River festival is much famous festival of:

- A. Himachal Pradesh
- B. Mizoram
- C. Jammu & Kashmir
- D. Arunachal Pradesh X
- E. No option is correct

74. Who is the founder of Airtel ?

- A. Kumar Mangalam Birla
- B. Azim Premji
- C. Sunil Bharti Mittal X
- D. Anil Ambani
- E. Mukesh Ambani

75. The winner of 2017 Nobel Prize for peace was:

- A. Kailash Satyarthi
- B. International Campaign to Abolish Nuclear Weapons (ICAN) X
- C. Malala Yousafzai
- D. Juan Manuel Santos
- E. No option is correct