

Reg.No.:

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--



VEKANANDHA COLLEGE OF ENGINEERING FOR WOMEN

[AUTONOMOUS INSTITUTION AFFILIATED TO ANNA UNIVERSITY, CHENNAI]

Elayampalayam – 637 205, Tiruchengode, Namakkal Dt., Tamil Nadu.

Question Paper Code:140001

B.E. /B.Tech. DEGREE END-SEMESTER EXAMINATIONS – NOV. / DEC. 2024

Third Semester

Computer Science and Engineering

U23CTCP1– VERBAL, QUANTITATIVE APTITUDE AND REASONING-I

(Common to All)

(Regulation 2023)

Time: Three Hours

Maximum: 100 Marks

Answer ALL the questions

Knowledge Levels (KL)	K1 – Remembering	K3 – Applying	K5 – Evaluating
	K2 – Understanding	K4 – Analyzing	K6 – Creating

PART – A

Answer ALL Questions

(50 x 1 = 50 marks)

Q.No.	Questions	Marks	KL	CO
1.	Select the appropriate conjunction for the blanks. _____ you can wear sandals _____ sneakers to the event. a) Neither...nor b) Not only...but also c) Either...or d) Both...and	1	K1	CO1
2.	Select the appropriate conjunction for the blanks. I would like to try _____ Sushi _____ John to know the differences. a) Neither...nor b) Not only...but also c) Either...or d) Both...and	1	K1	CO1

3. Identify the type of Noun. 1 K1 CO1
A **Tower** of Giraffes was located in the forest.
a) Collective
b) Abstract
c) Proper
d) Common
4. Identify the type of Noun. 1 K1 CO1
Are you preparing for **Engineering Mathematics**?
a) Collective
b) Abstract
c) Proper
d) Common
5. Identify the type of Noun. 1 K1 CO1
He is the **Bill Gates** of our Class.
a) Collective
b) Abstract
c) Proper
d) Common
6. Choose the appropriate verb for the given error in the conditional clause. 1 K1 CO1
If he **was** a Prime Minister, he would administer the states well.
a) is
b) were
c) are
d) has
7. Choose the appropriate verb for the given error in the conditional clause. 1 K1 CO1
My aunt **would** come, if it is not raining today.
a) might
b) should
c) will
d) could

8. Choose the appropriate verb for the given error in the conditional clause. 1 K1 CO1
Kavitha **will not get** into trouble, if she had taken my advice.
- a) would not have got
 - b) will not had got
 - c) should not have been got
 - d) shall not had got
9. Select the option for suitable adjective. 1 K1 CO1
Please provide me with _____ recommendations for this issue.
- a) few
 - b) all
 - c) some
 - d) much
10. Select the option for suitable adjective. 1 K1 CO1
He was the _____ candidate selected in the order at this company's maiden recruitment.
- a) best
 - b) intelligent
 - c) resourceful
 - d) first
11. Select the appropriate verb for subject agreement. 1 K1 CO1
One hundred and fifty rupees _____ the ticket fare for this movie today
- a) is
 - b) are
 - c) will
 - d) were
12. Select the appropriate verb for subject agreement. 1 K1 CO1
The committee _____ these questions carefully.
- a) debate
 - b) debates
 - c) debating
 - d) debatable

13. Select the appropriate verb for subject agreement. 1 K1 CO1
All of the smart watches, even the scratched one, _____ in this case.
a) is
b) are
c) be
d) been
14. If x and y are two digits of the number $65356xy$ such that this number is divisible by 80, then $x + y =$ _____. 1 K2 CO2
a) 4
b) 3
c) 2
d) 5
15. If the number $26x355y8$ is divisible by 72, then $3x - 2y =$ _____. 1 K2 CO2
a) 10
b) 11
c) 13
d) 15
16. If the number $364*5354$ is completely divisible by 9, then the smallest whole number in the place of * will be _____. 1 K2 CO2
a) 2
b) 4
c) 6
d) 8
17. Which of the following cannot be a perfect cube? 1 K1 CO2
a) 729
b) 1221
c) 2197
d) 1728
18. The cube of 56 is _____. 1 K1 CO2
a) 175616
b) 186258
c) 148726
d) 258412

19. What is the remainder when $1! + 2! + 3! + \dots + 100!$ is divided by 5? 1 K1 CO2
- 3
 - 4
 - 5
 - 6
20. Find the remainder when 16^{73} is divided by 9. 1 K1 CO2
- 5
 - 6
 - 7
 - 8
21. What is the remainder when 2^{384} is divided by 17? 1 K1 CO2
- 1
 - 2
 - 3
 - 4
22. Find $\sqrt{96.04} + \sqrt{40.96} + \sqrt{75.69}$. 1 K1 CO2
- 25.8
 - 25
 - 24.9
 - 26
23. If 17^{200} is divided by 18 then the remainder is _____. 1 K2 CO2
- 4
 - 1
 - 2
 - 0
24. Find the unit digit of $(2568^{23})81$ is _____. 1 K1 CO2
- 8
 - 6
 - 4
 - 2
25. What is the Unit digit of $71 \times 72 \times 73 \times 74 \times 76$? 1 K1 CO2
- 6
 - 4
 - 8
 - 12

26. The average monthly income of A and B is Rs. 5000. The average monthly income of B and C is Rs. 6500 and the average monthly income of A and C is Rs. 5500. What is the monthly income of A ? 1 K1 CO3
- a) 5000
 - b) 4000
 - c) 7000
 - d) 3000
27. Average of five numbers is 30. If each number is multiplied by 3, what will be the new average? 1 K1 CO3
- a) 89
 - b) 96
 - c) 100
 - d) 90
28. The average of 40 numbers is 15. If two numbers 23 and 32 are discarded, find the average of the remaining numbers. 1 K1 CO3
- a) 13
 - b) 14.34
 - c) 15.68
 - d) 18
29. If the average of 5 consecutive odd numbers is 99, then find the smallest number. 1 K1 CO3
- a) 91
 - b) 95
 - c) 97
 - d) 93
30. A cricketer has completed 10 innings and his average is 21 runs. How many runs must he make in his next innings so as to raise his average to 24? 1 K1 CO3
- a) 57
 - b) 63
 - c) 54
 - d) 68

31. The average temperature for Monday, Tuesday and Wednesday is 36.3 degree C. The average temperature for Tuesday, Wednesday and Thursday is 36.7 degree C. If Monday's temperature recorded as 39 degree C, then find the Thursday's temperature. 1 K1 CO3
- a) 38°C
 b) 40.2°C
 c) 41.2°C
 d) 43°C
32. What is the average of first five multiples of 14? 1 K1 CO3
- a) 38
 b) 40
 c) 46
 d) 42
33. Find the L.C.M. of 22, 54, 108, 135 and 198. 1 K1 CO3
- a) 330
 b) 1980
 c) 5940
 d) 11880
34. Find the H.C.F of 253, 299 and 391. 1 K1 CO3
- a) 11
 b) 13
 c) 17
 d) 23
35. Six bells commence tolling together and toll at intervals of 2, 4, 6, 8, 10 and 12 seconds respectively. In 30 minutes, how many times do they toll together? 1 K1 CO3
- a) 4
 b) 10
 c) 15
 d) 16
36. The H.C.F. and L.C.M. of two numbers are 12 and 336 respectively. If one of the numbers is 84, then find other number. 1 K1 CO3
- a) 36
 b) 48
 c) 72
 d) 96

37. The product of two numbers is 2028 and their H.C.F. is 13. 1 K2 CO3
The number of such pairs is _____.
a) 1
b) 2
c) 3
d) 4
38. A sum of money is to be distributed among A, B, C in the 1 K1 CO4
proportion of 2 : 3 : 5 . If B gets Rs. 1000 more than C,
what is A's share?
a) 500
b) 1000
c) 1500
d) 2000
39. If a:b = 2:3, b:c = 3:4, c:d = 6:5, find a:b:c:d. 1 K1 CO4
a) 8:12:24:30
b) 8:18:24:20
c) 12:18:24:36
d) 12:8:20:24
40. Find out the third proportion of the term 12 and 24. 1 K1 CO4
a) 36
b) 42
c) 48
d) 53
41. Two numbers are in the ratio of 5:8 .If 4 is subtracted from 1 K2 CO4
each then the ratio become 1:2.The small number is_____.
a) 16
b) 4
c) 10
d) 2
42. If in a certain language, NATURE is coded as GTWVCP, 1 K2 CO5
how is FAMINE coded in that code?
a) PGCHOK
b) GPKOCH
c) GANIOE
d) FZ NJME

43. In a certain code, MONKEY is written as OPNLFZ. How is TIGER written in that code? 1 K2 CO5
- JUFHS
 - FHJUS
 - JUHFS
 - HFJUS
44. If ROSE is coded as 57, CHAIR is coded as 37. What will be the code for SEARCH? 1 K2 CO5
- 55
 - 56
 - 57
 - 62
45. Pointing out to a lady, a girl said, "She is the daughter-in-law of the grandmother of my father's only son." How is the lady related to the girl? 1 K2 CO5
- Sister-in-law
 - Mother
 - Mother-in-law
 - Aunt
46. A is B's sister. C is B's mother. D is C's father. E is D's mother. Then, how is A related to D? 1 K2 CO5
- Grandmother
 - Daughter
 - Granddaughter
 - None of these
47. Pointing to a man in a photograph, a woman said, "His brother's father is the only son of my grandfather." How is the woman related to the man in the photograph? 1 K2 CO5
- Mother
 - Aunty
 - Sister
 - Daughter
48. **Statements:** 1 K2 CO5
- I. All soldiers are men.
 II. Some citizens are soldiers.
- Conclusions:**
- I. Some citizens are men.
 II. All soldiers are citizens.

- a) If only conclusion I follows
- b) If only conclusion II follows
- c) If both I and II follows
- d) If either I or II follows
- e) If neither I nor II follows

49. **Statements:**

1 K2 CO5

- I. All parrots are mangoes.
- II. Some Mangoes are donkeys.

Conclusions:

- I. Some parrots are donkeys.
- II. Some donkey are mangoes.
- a) If only conclusion I follows
- b) If only conclusion II follows
- c) If both I and II follows
- d) If either I or II follows

50. **Statements:**

1 K2 CO5

- I. All benches are cots.
- II. No cot is lamp.
- III. Some lamps are candles.

Conclusions:

- I. Some cots are benches.
- II. Some candles are cots.
- a) If only conclusion I follows
- b) If only conclusion II follows
- c) If both I and II follows
- d) If either I or II follows

PART – B

(5 x 4 = 20 marks)

Q.No.	Questions	Marks	KL	CO
51. a)	The average marks of 14 students was calculated as 71, but it was later found that the marks of one student has been wrongly entered as 42 instead of 56 and of another student as 74 instead of 32. What is the correct average?	4	K3	CO3

(OR)

b)	The average marks of 200 students in a class is 40. If the average of passed candidates is 45 and that of the failed candidates is 25. Find the number of failed students.	4	K3	CO3
----	--	---	----	-----

52. a) Mahesh gave one-fourth of his money to Suresh. Suresh, in turn, gave one-third of what he received to Jayesh. If the difference between the amount of Suresh and Jayesh is Rs. 100/-, how much money did Mahesh have? 4 K2 CO2

(OR)

b) Solve and identify which term of the arithmetic Progression 88,90,92,94,, is 142? 4 K3 CO2

53. a) 7000 is to be divided into A, B, C, and D in such a way that the ratio of share of A: B is 1: 2, B: C is 3: 1, and C: D is 2: 3. Find the sum of (A and C) and (B and D). 4 K3 CO4

(OR)

b) The ratio of prices of 2 dresses is 10:15. If the price of the first dress is increased by 10% and that of the second dress by Rs.400 then the ratio of their prices is 4:7. What are the initial prices of the dresses? 4 K3 CO4

54. a) The average weight of 12 persons increases by 3 kg when a new person comes in place of one of them weighing 60 kg. What might be the weight of the new person? 4 K3 CO3

(OR)

b) Find the least number which when divided by 12, leaves a remainder of 7; when divided by 15, leaves a remainder of 10 and when divided by 16, leaves a remainder of 11. 4 K3 CO3

55. a) **Statement:** 4 K3 CO5

- I. Only a few Roses are sunflower
- II. Only a few sunflowers are jasmine
- III. Some sunflowers are not lilies

Conclusion:

- I. Some roses can be jasmine
- II. Some roses are jasmine
- III. Some lilies are rose

- A) Only I Follows
- B) Only II Follows
- C) Both I & II Follows
- D) All Follows
- E) Either I or III and II Follows

(OR)

b) Directions (1-3): Following questions are based on 4 K3 CO5
the information provided below:

'A × B' means 'A is mother of B'.

'A – B' means 'A is brother of B'.

'A + B' means 'A is sister of B'.

'A ÷ B' means 'A is father of B'.

Q1. If the expression $M \times N + R \div T$ is true, then which of the following is true?

- (a) M is father of R
- (b) N is aunt of T
- (c) M is grandfather of T
- (d) T is sister of N

Q2. Which of the following means "Q is brother of T"?

- (a) $Y \div Q - T + R$
- (b) $T \div Q - Y - R$
- (c) $T \times M - R + Q$
- (d) $T + M \div Y + Q$

Q3. If the expression $M - Q - D \div F + C$, then which of the following is true?

- (a) C is daughter of F
- (b) F is niece of C
- (c) C is sister of F
- (d) None of these

PART – C

(2 x 15 = 30 marks)

Q.No.	Questions	Marks	KL	CO
56. a)	Write a paragraph in about 150 words on the following topic: <i>Many things that used to be done in the home by hands are now being done by machines. Does this development bring more advantages or disadvantages?</i>	15	K3	CO1

Highlight at the end of the paragraph two proper nouns, two common nouns, two adjectives of quality, two adjectives of number, two adverbs, one conditional sentence and four determiners.

(OR)

- b) i. **Label the highlighted noun with the type they belong to:** 5 K3 CO1

Tornadic **waterspouts** are **tornadoes** that form over water, or move from land to water. They have the same characteristics as a **land** tornado. They are associated with severe thunderstorms, and are often accompanied by high winds and seas, large **hail**, and frequent dangerous **lightning**.

- ii. **Spot the subject-verb agreement errors in the passage.** 5 K3 CO1

It are one thing to visit a zoo as an ordinary member of the public but quite another to live in the middle of it. This, at times, can be an mixed blessing. It certainly enable you to rush out at any hour of the day or night to observe your charges, but it also mean that you is on duty twenty-four hours a day,

- iii. **Fill in the blanks with the appropriate words given below.** (5 M) 5 K3 CO1

Today most businessmen are very worried. To begin with, they are not used to competition. In the past they sold whatever ...(1)... produced at whatever prices they chose. But ...(2)... increasing competition, customers began to ...(3)... and choose. Imports suddenly became ...(4)... available and that too at cheaper ...(5)...

1. (solve as per the direction given above)

A. it
B. he
C. they
D. we

2. (solve as per the direction given above)

A. with
B. by
C. after
D. from

3. (solve as per the direction given above)

- A. buy
- B. take
- C. pick
- D. want

4. (solve as per the direction given above)

- A. hardly
- B. easily
- C. frequently
- D. conveniently

5. (solve as per the direction given above)

- A. costs
- B. returns
- C. dividend
- D. prices

57. a) **Directions (1-5): Study the following information to answer the given questions** 15 K3 CO5
(5x3)

In a certain code language,

'loud of Speaker minister' is written as 'ga gmo til su'

'hard false loud promise on', is written as 'kil zo gmo ye na'

'minister false political energy' is written as 'zo ra til da'

'political conclude of promise' is written as 'da ga nic kil'.

1. What is the code for 'on'?

- (a) ye
- (b) na
- (c) zo
- (d) Either na or zo
- (e) Either ye or na

2. What does 'su' stand for?

- (a) minister
- (b) loud
- (c) of
- (d) Speaker
- (e) None of these

3. What is the code for 'energy loud conclude'?

- (a) nic ye til
- (b) gmo ra nic
- (c) ra ga gmo
- (d) da ra nic
- (e) None of these

4. Which of the following does 'kil til na' stand for?

- (a) promise of loud
- (b) hard loud promise
- (c) minister promise hard
- (d) minister promise on
- (e) Either (c) or (d)

5. Which of the following may represent 'beyond limits of loud'?

- (a) ga zo til da
- (b) ga ba gmo nee
- (c) ga ba nic kil
- (d) gmo ba til ra
- (e) None of these

(OR)

b) 1) Statements:

(3 M) 15 K3 CO5

- I) All heroes are villains.
- II) All villains are zeros.
- III) Some heroes are jokers.

Conclusion:

- i) Some Jokers are heroes
- ii) Some villains are jokers
- iii) Some zeros are villains
- 1. Only I, II follow
- 2. All I, II, III follows
- 3. Only I, III follow
- 4. Only I, II follow
- 5. None of these

2) Statements:

(3 M)

- I) Some parrots are owls.
- II) All owls are pigeons.
- III) All pigeons are snakes.

Conclusion:

- i) Some parrots are pigeons
- ii) Some pigeons are parrots
- iii) All owls are snakes
- 1. All follow
- 2. Only I, III follow
- 3. Only II, III follow
- 4. Only I, II follow
- 5. None of these

3) Statements:

(3 M)

- I) All crows are foxes.
- II) All cats are jaguars.
- III) Some cats are crows.

Conclusion:

- I) Some jaguars are crows
- II) Some foxes are jaguars
- III) Some crows are Jaguars
- 1. Only I, II follow
- 2. All I, II, III follow
- 3. Only I, III follow
- 4. Only II, III follows
- 5. None of these

4) Statements:

(3 M)

- I) All ducks are rats
- II) Some rats are hats
- III) All hats are leaves

Conclusion:

- I) Some leaves are ducks
- II) Some hats are ducks
- III) Some leaves are rats
- 1. Only I follow
- 2. Only II follows
- 3. Only III follows
- 4. Only II and III follow

5) Statements:

(3 M)

- I) All stones are flowers
- II) All flowers are cars
- III) Some cars are trucks

Conclusions:

- I) Some trucks are stones
- II) Some cars are stones
- III) Some trucks are flowers
- 1. Only II follows
- 2. Only II and III follow
- 3. Only I follow
- 4. Only III follows
- 5. None follows