

**A 10**

**Sreenidhi Institute of Science & Technology**

(An Autonomous Institution)

**Code No: 101MA71**

**B. TECH. III – Year I – Semester Examinations, MAY/JUNE, 2014 (Supplementary)**

**LOGICAL REASONING (Common to all branches Except EEE)**

**Time: 2 Hours Max. Marks: 50**

**Note : Answer Any 50 Questions.**

**Student can solve more than 50 questions, but maximum 50 marks will be awarded.**

**Calculator's are not allowed.**

**Directions (1-8)**Each problem consists of a problem followed by two statements. Decide whether data in the statements are sufficient to answer the question. Select your answer according to whether:  
(a) statement 1 alone is sufficient, but statement 2 alone is not sufficient to answer the question  
(b) statement 2 alone is sufficient, but statement 1 alone is not sufficient to answer the question  
(c) both statements taken together are sufficient to answer the question, but neither statement alone is sufficient

(d) Each statement alone is sufficient

(e) Statements 1 and 2 together are not sufficient, and additional data is needed to answer the question.

1. Is the integer k is divisible by 40?
2. 8 is a factor of k

2) k is a factor of 10

1. What is (x2 / y2) + (y2 / x2)?

1) x/y + y/x = 6  
2) x/y - y/x = 2

1. What is the probability that x3 - 8 = 0 when x is selected from a set of 8 integers?

1) The smallest number in the set is -11

2) The arithmetic mean of the set is 1/8.

1. If n is positive integer, is 150/n an integer?

I: n < 7 II: n is a prime number

1. If m and n are positive integers, is √(n-m) an integer?

I: n > m+ 15 II: n = m (m+1)

1. If x< 0, is y > 0?

I: x/y < 0 II: y-x > 0

1. If Juan had a doctor’s appointment on a certain day, was the appointment on a Wednesday?

I. Exactly 60 hours before the appointment, it was Monday.

II. The appointment was between 1:00 p.m. and 9:00 p.m.

1. What is the average speed for the total journey?

I. The average speed on the onward journey was 6 kmph.

II. The average sped on the return journey was 50 kmph.

**Directions (9-14): Read the following information to answer the given questions:**

1. A,B,C,D,E,F and G are playing cards sitting around a circular table.
2. D is not neighbor of C or E.
3. A is neighbor of B and C
4. G, who is second to the left of D, is the neighbor of E and F.
5. Which of the following is correct?

a) B is between A and D b) D is between F and G

c) E is to the immediate right of G d) F is to the immediate left of G

10. Which of the following has the pair with the second person sitting to the immediate right of the first

person?

a) BD b) GF c) EC d)AE e) None of these

11. Which of the following will be D’s position after E and D interchange their places? a) Neighbor of G and C b) To the immediate left C c) To the immediate right of F

d) Neighbor of C and A e) None of these

12. What is the position of C?

a) Second to the left of B b) Third to the right of F c) To the immediate left of A

d) To the immediate right of E e) None of these

13. Which of the following has the second person sitting between the first and third persons? a)DAB b) GCE c) BCA d) GFD e) None of these

14. Which of the following is wrong?

a) A is to the immediate right of B b) B is to the immediate left of D c) F is between G and D

d) E is between G and C e) All are correct

15. Statements: All cars are cars. All fans are cats.

Conclusions: a) All cars are fans b) Some fans are cars c) a or b d) neither a nor b

16. Statements: All roads are waters. Some waters are boats.

Conclusion: a) Some boats are roads b) All waters are boats c) a or b d) neither a nor b

17. Statements: Some hens are cows. All cows are horses. Conclusion: a) Some horses are hens b) Some hens are horses c) a or b d) a and b

18. Statements: Some papers are pens. Some pencils are pens. Conclusion: a) Some pens are pencils b) Some pens are papers c) a or b d) a and b

19. Statements: All windows are doors. No door is wall.

Conclusion: a) No window is wall. b) No wall is door c) a or b d) a and b

20. Statements: All mangoes are golden in color. No golden-colored things are cheap. Concl: a)All mangoes are cheap b) Golden-colored mangoes are not cheap c) a or b d) a and b

21. Statements: Most teachers are boys. Some boys are students.

Conclusion: a) Some students are boys b) Some teachers are students c)a or b d) a and b

22. Statements: Raman is always successful. No fool is always successful. Conclusion: a) Raman is a fool b) Raman is not a fool c) a or b d) a and b

23. All pens are elephants. Some elephants are cats a)Some pens are cats b)No pens are cats c)All pens are cats d) None

24. Some shirts are shorts. No shirts are trousers. a) Some shirts are trousers b)Some shirts are not trousers c)Both a and b d)None

25. Find odd one.891, 583, 176, 462, 154, 342, 330

a) 176 b)462 c) 342 d) 891

26. Find odd one.930, 282, 435, 616, 714, 192, 570

a) 570 b) 930 c) 616 d) 192

27. Find odd one. 311, 284, 260, 239, 220, 206, 194

a) 194 b)206 c)220 d)284

28. Find odd one.8, 16, 48, 100, 288, 576, 1728.

a) 16 b) 100 c) 576 d) 1728

29. Find odd one.18, 32, 98, 162, 242, 338   
 a)32 b)96 c)162 d)338

30. Find the number that should come at the blank in 44, 47, 56, 83, and 164? a) 403 b) 407 c) 245 d) 345

31. Find the missing number in 25, 38, \_, 64, -27, 90

a) -1 b) 51 c) 39 d) -32

32. Find the number that should come at the blank in 44, 47, 56, 83, \_, 164?

a) 403 b) 407 c) 245 d) 34

**(33-36)** There are six children playing football, namely A, B, C, D, E and F. A and E are brothers. F is the sister of E. C is the only son of A’s uncle. B and D are the daughters of the brother of C’s father.

33. How is C related to F ?

a) Cousin b) Brother c) Son d) Uncle e) None

34. How many male players are there?

a) One b) Three c) four d) Five e) Six

35. How many female players are there?

a) One b) Two c) Three d) Four e) Five

36. How is D related to A?

a)Uncle b)Sister c) Niece d)Cousin e) None

37. In a certain code language, if IMPEND=61 and DISH=40, then FRUIT= ?

a) 86 b) 68 c)74 d) 76 e)98

38. In a certain code language, if BUG = 90 and ALMS= 180, then CADET = ?

a) 153 b) 165 c) 175 d) 148 e) 185

39. n a certain code language, If INFER= 25 and JERSEY = 28, then CHOICE=?

a) 34 b) 39 c) 41 d) 47 e) 49

40. In a certain code language, if FRAME = 48 and HURDLE = 74, then FIGMENT =?

a)74 b) 89 c) 91 d) 87 e) 81

41. aba - - a - - ba - - b –

a) bbabb b) abbbb c) abbba d) abbab

42. 4, 7, 11, 18, 29, 47,….,123, 199

a) 76 b)70 c) 84 d)102 e) 95

43. 2, 6, 12, 20, ……….,42, 56, 72, 90.

a) 20 b) 21 c) 30 d)12 e) 23

44. 17, 7, 24, 19, 9, 28, …., 8, 31, 27, 10, 37.

a) 20 b) 21 c) 18 d) 12 e) 23

45. Food : Stomach : ; Fuel : ?

(a)Engine (b) Automobile (c) Rail (d) Aeroplane (e) None of the above.

46. Water : Sand: : Ocean : ?

(a) Engine (b) River (c) Desert (d) Waves (e)None of the these.

1. Introducing a girl, Vipin said, “Her mother is the only daughter of my mother-in-law”. How is Vipin

related to that girl?

(a) Uncle (b) Father (c) Brother (d) Husband (e) None of the above.

1. Showing the lady in the par, Vineet said, “ She is the daughter of my grandfather’s only son”. How

is Vineet related to that lay?

(a) Brother (b) Cousin (c) Father (d) Uncle (e) None of the above.

1. A man said to a lady, “Your mother’s husband’s sister is my aunt”. Ho is that lady related to that

man?

(a) Daughter (b) Sister (c) Grand-daughter (d) Mother (e) Aunt.

1. Introducing a man, a woman said, “His wife is the only daughter of my father”. How is that man

related to the woman?

(a) Husband (b)Brother (c) Father in Law (d) Maternal-uncle (d)None of the above

51. On dividing (18377)10 by 11 the remainder will be

a)1 b)10 c)9 d)2

52. FHKN : HJMP :: KRWZ : ?

a) CEGI b) MTYB c) QTVX d) GIKM

53. DGKN : BIIP :: FJMQ : ?

a) DLKO b) FHKO c) EGIN d) BENY

54. GKNQ : ? :: DHLO : WSOL

a) XVBE b) DBHS c) TPMJ d) QZXO

55. The last day of a century cannot be

a) Sunday b) Tuesday c) Wednesday d) Friday

56. How many times will the hands of a clock coincide in a day

a) 24 b) 22 c) 44 d) 48

57. What will be the day on 1st January 2030

a) Monday b) Tuesday c) Wednesday d) Saturday

58. G, H, J, M, \_, V

a)T b)S c)R d)Q

59. ABD, DGK, HMS, MTB, SBL,\_\_\_\_\_\_\_\_

a) XKW b) ZAB c) ZKU d) ZKW

60. Doctor : Patient :: Politician :

a) Masses b) voter c) power d) chair

61. In a certain code AUDIOS is written XXALLV then code of STEREO

a) PVBUHR b) PWBUHR c) PWBUBR d) PVBUBR

62. If COMPUTER is EROSWWGU then SOFTWARE is

a) URHWYDTH b) UQIWYDTH c) URIWIDTH d) UQHWYDTH

63. If MONITORING is 13P14J20P18J14 then COMPONENTS is

a) 3O13Q15O20T b) 3P13Q1505020T c) 3P13P1505020T d) None

64. If SEPARATE is ESTEAPRA then VIOLENCE is

a) IVCNELOE b) EVCINOEL c) IVLONECE d) EVICINEOL

65. JAK, KBL, LCM, MDN \_\_\_\_\_\_

a) QEP b)NEO c)MEN d)PFQ

66. AB CA FB JA \_\_\_\_\_\_\_\_

a)OB b)OC c)NA d)NB

67. If Horse: Stable then Cow: \_\_\_\_\_\_\_

a) Cage b) Den c) Burrow d) Shed

68. If Olympics: 8 then Wimbledon: \_\_\_\_\_\_\_

a) 1 b) 2 c) 3 d) 4

69. If Tennis: Players: 12 then Cricket: Players: \_\_\_\_\_

a) 39 b) 33 c) 22 d) 26

70. Find the odd one ?

a) Bunker b) Fuel c) Bin d) Travel

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