B.Tech. DEGREE EXAMINATION, JUNE 2023
Second Semester

18PDH101T – GENERAL APTITUDE
(For the candidates admitted during the academic year 2018-2019 to 2021-2022)

Time: Two Hours

Max. Marks: 100

Name of the Candidate : _____

Register Number :

Signature of the Candidate : _____

INSTRUCTIONS TO THE CANDIDATE

1. The Question Booklet contains 80 Questions.

2. **ANSWER ALL** the questions. **This paper contains TWO parts.**

3. **CALCULATORS OR ANY OTHER MATHEMATICAL DEVICES ARE NOT ALLOWED.**

4. Write your **NAME, REGISTER NUMBER** and put your **SIGNATURE** in the places specified on the first page of this Question Booklet.

5. Do not open this Question Booklet until the Hall Superintendent signals the commencement of the examination.

6. Check whether the Answer Sheet and the Question Booklet are in good condition. If not, before writing anything on the Answer Sheet, ask for the replacement of the Question Booklet / Answer Sheet.

7. Write and shade your **REGISTER NUMBER,** in the specified place in the **OMR** coding sheet.

8. Write and shade the question paper version code in the specified place in the **OMR** coding sheet.

9. Answer should be shaded with **BLUE or BLACK BALL PEN** in the Coding Sheet.

10. All instructions given in the **OMR** coding sheet should be strictly followed.

11. Use Answer Sheet carefully. No spare Answer Sheet will be given.

12. The answer should be given only in the Answer Sheet.

13. The last few pages of the Question Booklet are blank, except for the words 'Rough Work'. You can use them for any rough calculations.

PART – A (50 Marks)

Instructions:
   (i)   Question No. 1 to 10 carries 2 marks each
   (ii)   Question No. 11 to 40 carries 1 mark each

1. Average of five numbers is 20. If each number is multiplied by 2, what will be the new average?
   (A) 30   (B) 40
   (C) 50   (D) 60

2. If the number 467×4 is divisible by 9, then find the value of X.
   (A) 4   (B) 5
   (C) 6   (D) 7

3. Find the number of zeros at the end of 103!
   (A) 20   (B) 23
   (C) 24   (D) 25

4. Find the value of 25% to 10% of ₹ 800.
   (A) 20   (B) 25
   (C) 30   (D) 25

5. If a retail seller buys 30 pencils at marked price of 27 pencils, find the profit percent.
   (A) 20%   (B) 9.5%
   (C) 10%   (D) 11.1%

6. In how many years the C.I on ₹ 10000 at the rate of 10% will be ₹ 2100?
   (A) 1.5 years   (B) 2 years
   (C) 2.5 years   (D) 3 years

7. Simran is younger than Nisha by 7 years, and the ratio of their ages is 7:9. What is the age of Simran?
   (A) 23.5 years   (B) 24 years
   (C) 24.5 years   (D) 25 years

8. If $\log 2 = 0.3010$ then find the number of digit in 2^{100}.
   (A) 20   (B) 30
   (C) 35   (D) 31

9. When $60 - \left[30 - \{35 - (15 - *)\}\right] = 60$, then $*$ is equal to
   (A) −19   (B) 35
   (C) 20   (D) 10

10. Find out the wrong number in the series
      3, 8, 15, 24, 34, 48, 63
   (A) 15   (B) 24
   (C) 34   (D) 48

11. Find the number which is completely divisible by 5.
    (A) 30690   (B) 3314
    (C) 2569   (D) 1816

12. Three-fourth of a number is 60 more than its one third. The number is
    (A) 84   (B) 108
    (C) 144   (D) 165

13. Find the number of factors of 120.
    (A) 15   (B) 16
    (C) 8   (D) 10

14. What is the remainder when 17^{200} is divided by 18?
    (A) 0   (B) 1
    (C) −1   (D) 16

15. H.C.F of two numbers is 7 and their LCM is 210. If one of the numbers is 35, find the other.
    (A) 32   (B) 42
    (C) 52   (D) 62

16. Find the number of zero's at the end 55!.
    (A) 13   (B) 12
    (C) 11   (D) 15

17. If 30% of 1520 + 40 % of 800 = X% of 5000, find the value of X.
    (A) 14.4   (B) 12.22
    (C) 15.52   (D) 18.82

18. If A's income is 12% more than B's income, B's income is how much less than A's income?
    (A) 9.7%   (B) 12.7%
    (C) 11.7%   (D) 10.7%

19. If a number X is 10% less than another number Y and Y is 10% more than 125, find the value of X.
    (A) 150   (B) 125
    (C) 123.75   (D) 175

20. A man purchases a TV for ₹ 8000 and sells it at 10% loss. What is the selling price of TV?
    (A) ₹ 7200   (B) ₹ 7000
    (C) ₹ 6900   (D) ₹ 6500

21. The C.P of an article is equal to the profit %, and a shopkeeper sells it at ₹ 56. Find the C.P of the article.
    (A) 40   (B) 60
    (C) 80   (D) 100

22. The ratio of the ages of Asin and Meena is 4:2. If the sum of their ages is 6 years, find the ratio of their ages after 8 years.
    (A) 8:6
    (B) 6:5
    (C) 6:4
    (D) 7:5

23. In how many years the S.I on ₹ 6000 at 10% rate of interest S.I will become ₹ 1800?
    (A) 3 years
    (B) 4 years
    (C) 5 years
    (D) 6 years

24. A sum of money amounts to 3300 in 2 years and ₹ 3600 in 5 years. What is the principal amount?
    (A) ₹ 2700
    (B) ₹ 2850
    (C) ₹ 2950
    (D) ₹ 3100

25. What is the C.I on ₹ 2500 for 2 years at rate of interest 4% P.A
    (A) ₹ 180
    (B) ₹ 210
    (C) ₹ 204
    (D) ₹ 220

26. Arjun's age after 15 years will be 5 times his age 5 years back. What is the present age of Arjun?
    (A) 20 years
    (B) 10 years
    (C) 15 years
    (D) 25 years

27. The total age of A and B is 12 years more than the total age of B and C, then C is how many years younger than A?
    (A) 12
    (B) 26
    (C) 36
    (D) 48

28. Find the value of $\log_2 64$.
    (A) 16
    (B) 8
    (C) 6
    (D) 32

29. $\log_4 3 \times \log_{243} 64 = ?$
    (A) $\dfrac{1}{3}$
    (B) $\dfrac{2}{5}$
    (C) $\dfrac{3}{4}$
    (D) $\dfrac{3}{5}$

30. If $\log 27 = 1.431$, then the value of $\log 9$ is
    (A) 0.934
    (B) 0.954
    (C) 0.945
    (D) 0.958

31. If $5^a = 3125$, then the value of $5^{(a-3)}$ is
    (A) 25
    (B) 125
    (C) 625
    (D) 1625

32. The value of $\left[(10)^{150} \div (10)^{146} \right]$
    (A) 1000   (B) 10000
    (C) 10^5 (D) 10^6

33. Find the unit digit in 2^{30}?
    (A) 8   (B) 4
    (C) 6   (D) 2

34. What is the fractional form of 0.232323.......?
    (A) $\dfrac{23}{100}$ (B) $\dfrac{23}{101}$
    (C) $\dfrac{23}{99}$ (D) $\dfrac{23}{90}$

35. How many pieces of 85 cm length can be cut from a rod of 4250 cm long?
    (A) 15   (B) 50
    (C) 20   (D) 55

36. A man has some hens and cows. If the number of heads be 48 and the number of feet equals 140, then the number of hens will be
    (A) 22   (B) 24
    (C) 20   (D) 26

37. 7, 10, 8, 11, 9, 12, _____ .
    (A) 7   (B) 10
    (C) 12   (D) 13

38. 544, 509, 474, 439, _____ .
    (A) 404   (B) 414
    (C) 420   (D) 445

39. CMM, EOO, GQQ, _____, KUU.
    (A) GRR   (B) GSS
    (C) ITT   (D) ISS

40. QAR, RAS, SAT, TAU, _____ .
    (A) UAV   (B) UAT
    (C) TAS   (D) TAT

PART – B (50 Marks)

Instructions:
   (i)   Question No. 41 to 50 carries 2 marks each
   (ii) Question No. 51 to 80 carries 1 mark each

In the questions below, four different ways of writing a sentence/ the underlined part are indicated. Choose the best way of writing the underlined part.

41. If he <u>would have revised</u> his first draft, he would have received a better grade.
    (A) Would have revised   (B) Had revised
    (C) Could of revised   (D) Had of revised

42. I am not too eager to go to this movie because it did not get good reviews.
   (A) I am not too eager to go to this movie because it did not get good reviews
   (B) Because of its poor reviews, I am not too eager to go this movie
   (C) I am not too eager to go the this movie because the critics did not give it good reviews
   (D) I am not too eager to go to this movie because of its poor reviews

43. Everybody at the party love that chocolate cake Shelly made.
   (A) Everybody at the party love chocolate cake Shelly made
   (B) Everybody at the party loving the chocolate cake Shelly made
   (C) Everybody at the party loves the chocolate cake Shelly made
   (D) Everybody love the chocolate cake Shelly made at the party

44. Health professionals widely concur that, beyond a certain amount of exercise each day the benefits that an individual can expect to derive by further exercise is negligible
   (A) By further exercise is
   (B) From further exercise is
   (C) In furthering exercise are
   (D) By exercising further would be

45. Scientists have created a new substance; this is so transparent as to be almost invisible
   (A) So transparent as to be
   (B) So transparent it has been
   (C) So transparent that it was
   (D) Transparent enough that it is

Rearrange the following sentences in a logical sequence to make a meaningful paragraph:

46. P. However, the real challenge today is in learning which is much harder
   Q. But the new world of business behaves differently from the world in which we grew up
   R. Learning is important for both people and organizations
   S. Each of us has 'mental model' that we have used over the years to make sense
   (A) RPSQ
   (B) QSPR
   (C) RSPQ
   (D) PRQS

47. P. Merchants soon grew rich as the demand for products increased
   Q. Trade started from person to person but grew to involve different towns in different lands
   R. Eventually, people got a greater variety of things to choose from
   S. People found work in transporting the goods or selling them
   (A) QSPR
   (B) QPSR
   (C) SPQR
   (D) SQPR

48. P. We never considered the impact of these actions on the animals involved
   Q. Almost all of us grew up eating meat, wearing leather, and going to circuses and zoos
   R. Many of us bought our beloved animals at pet shops, had guinea pigs and kept beautiful birds in cages
   S. We wore wool and silk, ate McDonald's burger, and fished a lot
   (A) PQRS
   (B) QRSP
   (C) SPQR
   (D) RSPQ

49. P. People can get infected by handling reptiles and then touching their months or an open cut

    Q. At first, they look perfect pets: exotic, quiet and tidy

    R. A study estimates that in 1995 there were as many as 6,700 reptile-caused salmonella infections

    S. But lizards and other pets can harbour a salmonella bacterium that makes people sick

    (A) QRPS (B) QRSP

    (C) PRSQ (D) QSRP

50. P. Mr. Raman's personality sets him apart from the rest

    Q. Nothing is too small for his attention

    R. He has a fanatical devotion to detail

    S. This is what makes him a different person

    (A) PRQS (B) PQRS

    (C) QSRP (D) SRQP

Choose the SYNONYM of the underlined word:

51. The store keeper eventually paid $56 billion to <u>rectify</u> the disaster.

    (A) To command (B) Destroy

    (C) Correct (D) To build

52. Actors are typically in <u>ecstasy</u> upon winning an Oscar.

    (A) Exhaust (B) Strong

    (C) Joy (D) Greed

53. <u>Aromatic</u> flowers can add greatly to the ambience of a room

    (A) Crippled (B) Fragment

    (C) Sentimental (D) Stinking

54. He was <u>slothful</u> and so he failed his exam.

    (A) Fat (B) Stubborn

    (C) Lazy (D) Ignorant

55. People should not <u>meddle</u> with things they don't understand

    (A) Disregard (B) Interface

    (C) Overlook (D) Free

Choose the ANTONYM of the underlined word:

56. We should try to make the instructions more <u>transparent</u>.

    (A) Translucent (B) Vague

    (C) Behind (D) Opaque

57. If it is a <u>genuine</u> Michelangelo drawing, it will sell for millions.

    (A) Rotten (B) Bogus

    (C) Unsound (D) Impure

58. He is a private man with a deep <u>antipathy</u> towards the press.
   (A) Indifference
   (B) Unwillingness
   (C) Fondness
   (D) Dislike

59. He rarely used taxis, which were regarded as <u>extravagant</u>.
   (A) Developing
   (B) Wonderful
   (C) Disappearing
   (D) Economical

60. The essay is written to <u>exalt</u> the simple beauty of the country
   (A) Ennoble
   (B) Glorify
   (C) Exalt
   (D) Depreciate

Choose the option that best completes the sentence grammatically / semantically:

61. The problem _____ Steven is that he cannot trust anyone.
   (A) From
   (B) By
   (C) With
   (D) Among

62. I suggested that Pruja _____ walk on and try to get help.
   (A) Would
   (B) Can
   (C) Should
   (D) Could

63. Had the function not been postponed because of the strike, he _____ been able to participate.
   (A) May have
   (B) Would have
   (C) Will have
   (D) Can have

64. He _____ any knowledge of your whereabouts.
   (A) Refuses
   (B) Rejects
   (C) Deny
   (D) Denies

65. The accused _____ to the judge for mercy.
   (A) Appealed
   (B) Requested
   (C) Begged
   (D) Applied

Choose the pair that has the similar relationship with that of the question pair:

66. Education : Development : :
   (A) Man : Speech
   (B) Nutrition : Health
   (C) Game : Play
   (D) Child : Growth

67. Melt : Liquid : :
   (A) Drink : Water
   (B) Cook : Food
   (C) Freeze : Solid
   (D) Heat : Iron

68. Sculptor : Chisel : :
   (A) Pathology : Disease
   (B) Tailor : Needle
   (C) Engineer : Site
   (D) Time : Seconds

69. Farmer : Crop : :
   (A) Fabric : Yarn
   (B) Cat : Kitten
   (C) Wish : Desire
   (D) Editor : Newspaper

70. Warm : Hot : :
   (A) Tailor : Textile
   (B) Sun : Planet
   (C) Horrible : Heinous
   (D) Fight : War

Identify the part of the sentence that contains an error. If there is no errors, choose 'NO ERROR' option:

71. 'Gulliver's Travels' are (A)/ the most fascinating adventure story (B)/ that I have ever read (C)/ No error (D).

72. People blamed him (A)/ for being (B)/ a coward (C)/ No error (D).

73. We had (A)/ lot of difficulty (B)/ in finding the way here (C)/ No error (D).

74. How is it that neither your friend Mahesh (A)/ nor his brother (B)/ have protested against this injustice (C)/ No error (D).

75. They left (A)/ their luggages (B)/ at the railway station (C) / No error (D).

Read the following passage and answer the questions that follow:

The idea of evolution (which is a gradual change) was not a new one. The Greeks had thought of it, so had Erasmus Darwin, the grandfather of Charles Darwin and also the Frenchman Lamarck. It is one thing to have an idea; we can call guess and sometimes make a lucky guess. It is quite another thing to produce a proof of the correctness of that idea. Darwin thought he had that proof in his note books. He saw that all animals had to struggle to service. Those which were best at surviving their environment. Passed on the good qualities which helped them to their descendants. This was called 'the survival of the fittest'. For example, in a cold climate, those who have the warmest fur will live. Darwin believed that this necessity for an animal to deal with its environment explained the immense variety of creatures.

76. At the time that Darwin arrived on the scene, the idea of evolution _____.
   (A) Was an idea unheard of
   (B) Had already been proved beyond doubt
   (C) Had been thought of but not proved
   (D) Was not thought fit for explanation

77. According to Darwinian thought, the world of animals is marked by _____.
   (A) Peaceful coexistence
   (B) A struggle for survival
   (C) Indifference towards each other
   (D) Love and friendship

78. The expression 'the survival of the fittest' means that _____.
   (A) The strong will survive while the weak will perish
   (B) The strong and weak will live peacefully
   (C) The strong will help the weak survive
   (D) Both the strong and the weak survive

79. In colder climates _____ .
    (A) All animals can survive
    (B) No animals can survive
    (C) Only animals with few can survive
    (D) Animals are hard to come by

80. Darwin thought that the environment _____ .
    (A) Has no effect on animals
    (B) Has lot of effect on animals
    (C) Has a marginal effect on animals
    (D) Has an effect on man but not on animals

* * * * *

WORK SHEET