

B.Tech. DEGREE EXAMINATION, JANUARY 2024
Second Semester

18PDH101T – GENERAL APTITUDE
(For the candidates admitted during the academic year 2020-2021 & 2021-2022)

Time: Two Hours

Max. Marks: 100

Name of the Candidate : _____

Register Number :

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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. If the strength of a school reduced by 20% from 2017 to 2018, by what percentage should it be increased to bring it back to the original number?
(A) 25% (A) 20%
(C) 10% (C) 50%
2. A and B have ₹ 75 and ₹ 60 with them respectively. The amount with A is how much percentage more than that of B?
(A) 30% (A) 15%
(C) 40% (C) 25%
3. If the selling price of 30 pens is equal to the cost price of 40 pens, find the profit percentage?
(A) 20% (A) $33\frac{1}{3}\%$
(C) 60% (C) 40%
4. Ram received ₹ 12,500 in denominations of ₹ 200 and ₹ 500. If he received a total of 37 notes, how many ₹ 500 notes did he receive?
(A) 15 (B) 16
(C) 17 (D) 19
5. The sum of the digits of a 2 digit number is 10. The number formed by interchanging the digits of the number is 36 more than the original number. What is the product of the digits of the number?
(A) 21 (B) 35
(C) 40 (D) 18
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 $60 - [30 - \{35 - (15 - *)\}] = 60$, 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. If a number 836475Z is divisible by 11, then find the whole number in place of Z.
(A) 2 (B) 3
(C) 4 (D) 5
12. Three bells toll at intervals of 5, 10 and 15 seconds respectively. If they toll together at the same time, after how many seconds will they toll together again for the first time?
(A) 5 (B) 10
(C) 15 (D) 30
13. Find the LCM of $\frac{35}{2}$ and $\frac{70}{3}$
(A) 1 (B) 35
(C) 100 (D) 70
14. Find the unit digit of $4! + 5! + 6! + 7!$
(A) 4 (B) 5
(C) 6 (D) 7
15. What is the maximum power of 3 in $9!$?
(A) 4 (B) 10
(C) 15 (D) 20
16. Mr 'A' wants to type first 1000 natural numbers. How many times he has to press the buttons of a computer keyboard?
(A) 2893 (B) 2987
(C) 3000 (D) 1000
17. 150 is what percentage of 120?
(A) 150% (B) 125%
(C) 110% (D) 75%
18. Which of the following is least?
(A) 20% of (80) (B) 30% of (60)
(C) 35% of (50) (D) 40% of (45)
19. A number when increased by 40% becomes 420. What is the number?
(A) 200 (B) 300
(C) 400 (D) 240
20. The length of a rectangle increased by 25% and the breadth decreased by 10%. What is the percentage increase in its area?
(A) 10% (B) 35%
(C) 15% (D) 12.5%

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. If selling price of 20 apples is same as cost price of 25 apples, then find the profit %
 (A) 25% (B) 50%
 (C) 75% (D) 100%
27. Find the single equivalent discount of successive discounts 10% and 20%.
 (A) 28% (B) 40%
 (C) 55% (D) 78%
28. A shopkeeper sells his goods at ₹.700. Find the loss % if its cost price is ₹. 1000.
 (A) 30% (B) 40%
 (C) 50% (D) 60%
29. A sum becomes ₹ 3000 in 5 years at 10 % per annum at simple interest. What is the sum?
 (A) ₹1000 (B) ₹ 2000
 (C) ₹ 200 (D) ₹ 2500
30. Find the simple interest on ₹ 30,000 at 10% per annum for 3 years?
 (A) ₹ 3000 (B) ₹ 6000
 (C) ₹ 9000 (D) ₹ 12000
31. Find the difference between CI and SI on ₹ 500 at 10% p.a for 2 years?
 (A) ₹ 50 (B) ₹ 10
 (C) ₹ 5 (D) ₹ 25
32. A sum of money at SI amounts ₹ 560 in 3 years at 4% p.a. Find the sum?
 (A) ₹ 500 (B) ₹ 400
 (C) ₹ 450 (D) ₹ 200

33. If $\log 4x - \log 8 = \log 12$ then x is
 (A) 12 (B) 24
 (C) 36 (D) 48
34. Simplify: $\log_2 96 - \log_2 3$
 (A) 5 (B) 4
 (C) 3 (D) 1
35. $\log 2 + \log 4 + \log 6$ is
 (A) $\log 12$ (B) $\log 48$
 (C) $\log 24$ (D) $\log 36$
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 each of the question below, four different ways of writing a sentence/ the underlined part are indicated. Choose the best way of writing the sentence.

41. Everybody at the party love the chocolate cake Shelley made.
 (A) Everybody at the party love the chocolate cake Shelley made
 (B) Everybody at the party loving the chocolate cake Shelley made
 (C) Everybody at the party loves the chocolate cake Shelley made
 (D) Everybody love the chocolate cake Shelley made at the party
42. Health professionals widely concur that, beyond a certain amount of exercise each day, the benefits that an individual can expect to device by further exercise is negligible.
 (A) By further exercise is
 (B) From further exercise are
 (C) In furthering exercise are
 (D) By exercising further would be

43. By the time we have reached France, we will have been backpacking for twelve weeks.
 (A) By the time we have reached France, we will have been backpacking for twelve weeks
 (B) By the time we have reached France we will have backpacked for twelve weeks
 (C) By the time we reach France, we will have been backpacking for twelve weeks
 (D) By the time we will have reached France we will have backpacked for twelve weeks
44. Because women buy approximately 80 percent of ties sold in the united states, they are often displayed near displayed near perfume or women's clothing departments.
 (A) They are often displayed
 (B) Ties are often being displayed
 (C) The displaying of ties is often
 (D) Ties are often displayed
45. The activism of state citizens have lead to a significant decrease in the number of traffic accidents.
 (A) Have lead to a significant decrease in the number
 (B) Have lead to significant decreases in the number
 (C) Has lead to a significant decrease in the number
 (D) Has been significant in the decrease in the number

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

46. Wood : Carve
 (A) Clay : Mould
 (B) Paper : Burn
 (C) Trees : Play
 (D) Pipe : Music
47. Doctor : Patient
 (A) Driver : Nurse
 (B) Lawyer : Client
 (C) Teacher : Book
 (D) Dog : Puppy
48. Chef : Restaurant
 (A) Druggist : Pharmacy
 (B) Player : Game
 (C) Lover : Park
 (D) Chemist : Physics
49. Dancer : Stage
 (A) Speaker : Pulpit
 (B) Writer : Book
 (C) Professor : lecture
 (D) Horse : Wagon
50. Mirror : Reflection
 (A) Water : Refraction
 (B) Computer : Screen
 (C) Pen : Ink
 (D) People : Population

Choose the SYNONYM of the underlined word:

51. The store keeper eventually paid \$56 billion to rectify the disaster.
 (A) To command
 (B) Destroy
 (C) Correct
 (D) To build
52. Actors are typically in ecstasy upon winning an Oscar.
 (A) Exhaust
 (B) Strong
 (C) Joy
 (D) Greed

53. Aromatic flowers can add greatly to the ambience of a room
 (A) Crippled (B) Fragment
 (C) Sentimental (D) Stinking
54. He was slothful and so he failed his exam.
 (A) Fat (B) Stubborn
 (C) Lazy (D) Ignorant
55. People should not meddle with things they don't understand
 (A) Disregard (B) Interface
 (C) Overlook (D) Free

Choose the antonym of the underlined word.

56. Most Utopian ideas are considered romantic, since they are idealized and practically impossible to carry out fully.
 (A) Frivolous (B) Earthy
 (C) Pensive (D) Tacit
57. I had to answer a panel of erudite people for my Ph.D. viva voice.
 (A) Unscholarly (B) Swathe
 (C) Mire (D) Perpetuate
58. The speaker was unable to pacify the crowd.
 (A) Excite (B) Antagonist
 (C) Threaten (D) Challenge
59. His officer was a very strict person.
 (A) Pleasant (B) Open hearted
 (C) Lenient (D) Indifferent
60. He has an aversion to milk.
 (A) Dear (B) Loving
 (C) Liking (D) Pet

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

Identify the part of the sentence that contains an error:

66. A glass of this (A)/ green juice every morning (B)/ helped myself (C)/ lose weight (D).
67. Young girls seems (A)/ to be on an (B)/ unsung mission (C)/ to save the world (D).
68. In a world where (A)/ everything we say and do (B)/ and everywhere we go (C)/ are recorded and analysed (D).
69. It was found that (A)/ there were 1.1 million tweet (B)/ that were classified (C)/ as problematic or abusive.
70. Do we really (A)/ want our legacy (B)/ to contained all the hate (C)/ we have ever felt (D).

In the question given below, a set of sentences is given, which when properly sequenced form a coherent paragraph. From the options, choose the one the provides the correct find order of the rearranged statements.

71. P. Elite American colleges are now widely suspected of admitting male applicants with lower grades, to even up the numbers.
 Q. Atleast in the rick world, that wasteful truth has been triumphantly overcome.
 R. Stendhal once wrote that all geniuses who were born women were lost to the public good.
 S. yet, despite this monumental advance, much ability, both male and female, is wasted because of tenacious stereotypes.
 (A) PQSR (B) PSRQ
 (C) RQPS (D) RSQP
72. P. The oldest fossil gasses are joint 70 million years old. Although grass may have evolved a bit earlier than that.
 Q. These have been land plants for 465 million years, yet there were no flowers for over two thirds of that time.
 R. The equally familiar grasses appeared even more recently.
 S. Flowing plants only appeared in the middle of the dinosaur era.
 (A) SRQP (B) QRPS
 (C) RPSQ (D) QSRP
73. P. The crash in the Alps has launched a search for a solution to the problem of accessing the cockpit from outside if the plane has been commandeered from within.
 Q. Flight safety has so far focused on threats from the passenger side, and the 9/11 terror episode led to fortification of the cockpit.

- R. But if they are in position to act, pilots can override this mechanism.
 S. In exceptional circumstances. Such as an emergency affecting the pilot and the cockpit area, the crew can use a code that opens the cockpit door briefly, or it even opens automatically if the pilots are immobilized due to depressurization.
 (A) PQRS (B) PSRQ
 (C) QPSR (D) QSRP

74. P. Indeed, Indian policy – planners find themselves in a predicament thanks to the continued monetary earning by some nations and the shrinkage in world trade
 Q. in this context, a fund starved country like India, will do well to focus on foreign direct investment rather than get unduly worried about foreign institutional investment, which will have its ebb and flow depending on the environment outside.
 R. with everyone waiting for the other to act first, there is definitely on the political bosses to devise quick solutions to accelerate the economy.
 S. Given this 'new normal' kind of an environment they will have to look at ways to protect the Indian economy from external vicissitudes.
 (A) PSQR (B) RSQP
 (C) QSRP (D) RPQS
75. P. Comments have the potential to turn a news website into a democratic polyphony.
 Q. But, there is also a danger of its descending to cacophony if readers do not express opinions in a language that behoves the requirements of a matured public sphere.
 R. It can become a site for multiple concurrent debates for registering dissent, for pursuing an idea and finally for building a polity of informed choices.
 S. The role of moderator is to retain the space for polyphony
 (A) PQRS (B) PQSR
 (C) SQPR (D) PRQS

Read the following passage and answer the questions:

While a smartphone, tablet or computer can be a highly productive tool, compulsive use of these devices can interfere with work, school, and relationships. When you spend more time on social media or playing games than you do interacting with real people, or you can't stop yourself from repeatedly checking texts, emails, or apps even when it has negative consequences in your life—it may be time to reassess your technology use.

Smartphone addiction, sometimes colloquially known as 'nomophobia' (fear or begin without a phone), is often fuelled by an internet overuse problem or internet addiction disorder.

76. Compulsive use of devices is _____.
 (A) Harmful to your life (B) Useful for growth
 (C) More important for relationships (D) Highly recommended for knowledge development
77. It may be time to reassess your technology use if _____.
 (A) Fall sick quite often (B) You gain weight
 (C) It affects you negatively (D) Your mobile phone is slow
78. 'Nomophobia' means
 (A) TV addiction (B) Movie addiction
 (C) Mobile phone addiction (D) Drug addiction

79. Technology devices are
(A) Productive tools if used properly (B) Of no use
(C) Old-fashioned (D) Very expensive
80. Fear of being without a smart phone can be called a _____.
(A) Physical illness (B) Psychological disorder
(C) Mental retardation (D) Lonely attitude

* * * * *

WORK SHEET

