

**B.Tech. DEGREE EXAMINATION, JANUARY 2023**  
Sixth Semester

15PD302 – EMPLOYABILITY SKILLS  
(For the candidates admitted during the academic year 2015-2016 to 2017-2018)

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. Find the unit digit of  $2019^{2019}$ .  
(A) 0 (B) 1  
(C) 9 (D) 8
2. If the side of a rhombus is increased by 25%, then by what % the area increases?  
(A) 25% (B) 50%  
(C) 31.25% (D) 56.25%
3. Ram is 40 years old and Rahim is 64 years old. How many years ago was the ratio of their ages 3:5?  
(A) 3 years (B) 4 years  
(C) 5 years (D) 6 years
4. Find the number of diagonals in hexagon?  
(A) 7 (B) 9  
(C) 11 (D) 13
5. Find the next number in the series: 11, 23, 47, 83, 131?  
(A) 151 (B) 171  
(C) 191 (D) 201
6. Find the first term of an Arithmetic progression whose 8<sup>th</sup> term is 39 and 12<sup>th</sup> term is 59.  
(A) 3 (B) 4  
(C) 5 (D) 6
7. Divide ₹ 680 among P, Q, R such that P gets  $\frac{2}{3}$  of what Q gets and Q gets  $\frac{1}{4}$  of what R gets. Find the share of R.  
(A) ₹ 400 (B) ₹ 300  
(C) ₹ 360 (D) ₹ 480
8. Excluding the stoppages, the speed of a car is 120 kmph and including the stoppages, the speed of the car is 100 kmph. For how many minutes does the car stop per hour?  
(A) 10 minutes (B) 15 minutes  
(C) 18 minutes (D) 20 minutes
9. 5 men can make 2000 baskets in 80 days working 10 hours per day. How many men can make 4000 baskets in 100 days working 8 hours per day?  
(A) 10 (B) 15  
(C) 20 (D) 25
10. In  $\triangle ABC$ ,  $\angle A + \angle B = 80^\circ$ ,  $\angle B + \angle C = 120^\circ$ , then find  $\angle A$ .  
(A)  $30^\circ$  (B)  $40^\circ$   
(C)  $50^\circ$  (D)  $60^\circ$

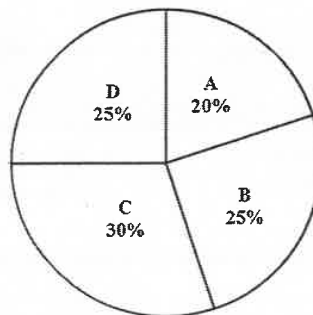
11. Find the value of  $\sqrt{676} \times \sqrt[3]{1331}$   
 (A) 11 (B) 26  
 (C) 286 (D) 300
12. Find the number of zero's at the end of  $264!$   
 (A) 52 (B) 62  
 (C) 64 (D) 80
13. Find the number of divisors of 1980.  
 (A) 3 (B) 9  
 (C) 18 (D) 36
14. Find  $40 \log_4 64$   
 (A) 40 (B) 120  
 (C) 160 (D) 200
15. If today is Wednesday, what is the day after 560 days?  
 (A) Wednesday (B) Thursday  
 (C) Friday (D) Sunday
16. Find the day of the week on 2<sup>nd</sup> October 1869.  
 (A) Friday (B) Saturday  
 (C) Monday (D) Tuesday
17. The price of sugar increases by 20%, then by what % does the consumption of sugar be reduced so that the total expenditure remains same?  
 (A) 16.67% (B) 20%  
 (C) 25% (D) 30%
18. By selling an article for ₹ 800, a men lose 20%. At what price should be sell the article to gain 40%?  
 (A) ₹ 1000 (B) ₹ 1200  
 (C) ₹ 1400 (D) ₹ 1600
19. Find the difference between simple interest and compound interest for a sum of ₹ 60,000 at the rate of 20% p.a. at the end of 2 years.  
 (A) ₹ 1200 (B) ₹ 2400  
 (C) ₹ 3600 (D) ₹ 4800
20. How many different garlands can be made using 10 different flowers?  
 (A)  $10!$  (B)  $9!$   
 (C)  $\frac{10!}{2}$  (D)  $\frac{9!}{2}$
21. Find the number of triangles formed by joining the vertices of a polygon of 8 sides.  
 (A) 56 (B) 64  
 (C) 45 (D) 72

22. Find the probability of getting 4 heads while tossing six coins.  
 (A)  $\frac{15}{64}$  (B)  $\frac{15}{32}$   
 (C)  $\frac{5}{64}$  (D)  $\frac{15}{128}$
23. Pointing to a lady, a man said, "She is my mother's father's sister"? How is the lady related to the man?  
 (A) Sister in law (B) Mother in law  
 (C) Grand aunt (D) Aunt
24. If HOME is coded as 41, RACE is coded as 27, then DHOOM is coded as  
 (A) 30 (B) 43  
 (C) 51 (D) 55
25. Find the odd one out in the series 256, 484, 676, 841  
 (A) 256 (B) 484  
 (C) 676 (D) 841
26. A boy agrees to work at the rate of ₹ 1 on the 1<sup>st</sup> day, ₹ 2 on the 2<sup>nd</sup> day, ₹ 4 on the 3<sup>rd</sup> day, ₹ 8 on the 4<sup>th</sup> day, ₹ 16 on the 5<sup>th</sup> day and so on. How much will the body get if he works for 30 days?  
 (A)  $2^{30}$  (B)  $2^{30} - 1$   
 (C)  $2^{29}$  (D)  $2^{29} - 1$
27. In a class, the number of girls is one less than then number of boys. If the product of number of boys and the number of girls is 272, then the number of girls in the class is  
 (A) 10 (B) 11  
 (C) 16 (D) 17
28. 40 students played football, 50 students played cricket, 20 students played both football and cricket and 10 students neither played football nor cricket. Find the total number of students.  
 (A) 90 (B) 70  
 (C) 80 (D) 100
29. Virat's average score in 40 innings was 62 runs, after playing his next innings his average becomes 65 runs. How much he scored in his last innings?  
 (A) 185 (B) 200  
 (C) 150 (D) 175
30. Total of ₹ 432 is to be divided among three workers P, Q and R such that 8 times P's share is equal to 12 times Q's share which is equal to 6 times R's share. How much did P make?  
 (A) ₹ 140 (B) ₹ 150  
 (C) ₹ 144 (D) ₹ 160
31. In a shop, there are some dogs and some parrots. The total number of heads is 28 and the total number of feet is 80. How many parrots are there?  
 (A) 10 (B) 12  
 (C) 16 (D) 20

32. A tank is filled by a pipe A in 10 hour and emptied by a pipe B in 12 hour. If both pipes are opened simultaneously, in what time the tank gets filled?  
 (A) 20 hours (B) 40 hours  
 (C) 60 hours (D) 80 hours
33. A chord of length 16 cm is at a distance of 6 cm from the centre of a circle. The radius of circle is  
 (A) 10 cm (B) 23 cm  
 (C) 21 cm (D) 20 cm
34. The ratio of radius of cylinder to that of cone is 1:2 and their heights are equal. Find the ratio of volume  
 (A) 1:2 (B) 2:3  
 (C) 3:4 (D) 4:5
35. In which triangle the centroid, orthocentre, circumcentre and incentre coincides?  
 (A) Scalene (B) Isosceles  
 (C) Equilateral (D) None of these

**Directions for questions 36 to 38:**

Percentage (%) of boys opted for various courses



Total number of boys = 400

36. How many boys opted for course A?  
 (A) 40 (B) 80  
 (C) 120 (D) 200
37. How many boys opted for course B and D?  
 (A) 150 (B) 200  
 (C) 220 (D) 250
38. Find the difference between those who opted for course A and C.  
 (A) 40 (B) 50  
 (C) 60 (D) 70

**Directions for question 39 and 40:**

Each of the questions is followed by two statements. You have to decide whether the information provided in the statements is sufficient for answering the questions.

**Mark (A)** if the question can be answered by using one of the statements alone, but cannot be answered by using the other statement alone.

**Mark (B)** if the question can be answered by using either statement alone

**Mark (C)** if the question can be answered by using both statements together, but cannot be answered by using either statement alone

**Mark (D)** if the question cannot be answered even by using both the statements together

39. Find the radius of circle.  
Statement I: area of circle is  $80\pi$   
Statement II:  $\pi = 3.14$

40. Is X divisible by 6?  
Statement I: 2X is divisible by 4  
Statement II: 3X is divisible by 18

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

41. Start the engine, and then you should press the accelerator.  
(A) Start the engine, and then you should press  
(B) Start the engine, and then press  
(C) Start the engine, then pressing  
(D) Starting the engine go on pressing
42. They continued to work in the field despite of the heavy rains.  
(A) Despite of the heavy rains  
(B) Inspite the heavy rains  
(C) Even though it rained heavily  
(D) Although heavily rains
43. Making friends is more rewarding than to make enemies.  
(A) To make enemies  
(B) To making enemies  
(C) For making enemies  
(D) Making enemies

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

44. Beautiful : Ugly  
(A) Car : Driver  
(B) Seeds : Farmer  
(C) Good : Bad  
(D) Morose : Dull
45. Lorry : Truck  
(A) Petrol : Gasoline  
(B) Coal : Coke  
(C) Torch : Light  
(D) Motor : Car

Rearrange the following sentences to form a coherent paragraph:

46. (P) Thus begins the search for relief: painkiller, ice, yoga, herbs, even surgery  
(Q) Most computer users develop disorders because they ignore warnings like tingling fingers, a numb hand or a sore shoulder  
(R) They keep pointing and dragging until tendons chafe and scar tissue forms  
(S) But cures are elusive, because repetitive strain injuries present a bog of ills that often defy easy diagnosis  
(A) QSPR  
(B) QPSR  
(C) QRPS  
(D) PQRS

47. (P) Today, the study of the fruit fly has expanded to research for human diseases  
(Q) This is because the fruit fly's robust genetic system makes it an invaluable tool for scientists studying current inheritance diseases  
(R) These diseases include Alzheimer's, Parkinson's and Huntington's disease  
(S) In past decades, scientists have used the fruit fly as a model organism for examining biological systems
- (A) SPQR (B) SPRQ  
(C) QPRS (D) PQRS

**Read the argument and answer the questions that follow:**

48. People in a South African tribe have observed that heavy rains are usually preceded by claps of thunder. They are convinced that the heavy rains are somehow caused by the claps of thunder.

**Which of the following, if true, would weaken the tribals conviction?**

- (A) The temperature must fall below 20°C for both heavy rains and claps of thunder to occur  
(B) The presence of rain bearing clouds is the reason for claps of thunder  
(C) The tribals of the particular tribe are unscientific people prone to superstitions  
(D) Claps of thunder actually cause heavy rains
49. The city council of Nowheresville has proposed establishing tollbooths on all of the major routes into the city. The council's reasoning is that this fee will force many commuters to switch from private automobiles to the public transportation system.

**Which of the following statements, if true, provides the best evidence that the city councils plan will be successful?**

- (A) Most of the citizens of Nowheresville support the new plan  
(B) Several other cities have attempted to implement the scheme in the past, with mixed results  
(C) A new study suggests that many commuters with cars would switch to public transportation if driving in the city becomes more expensive  
(D) The price of gasoline is projected to plummet in the next few months
50. In 1950, the average child visited the dentist once a year, by 1970, the number of visits had increased to two. Today the average child visits, the dentist thrice a year.

**Each of the following, if true, could explain this trend except.**

- (A) Dentist's fees have declined over the period (B) Better home care of teeth has reduced the number of cavities  
(C) Dental care has become less painful (D) Parents are more aware of the importance of dental care

**Choose the synonym of the underlined word:**

51. The rescue team searched among the ruins for signs of life  
(A) Terminal (B) Foundation  
(C) Rubble (D) Establishment
52. Since all of the employees collaborated on the project, they met the deadline.  
(A) Evolved (B) Advanced  
(C) Deconstructed (D) Worked together

53. The latest job promotion found him at the acme of his professional career.  
(A) Nadir (B) Median  
(C) Zenith (D) Epitome
54. As a generation, we were taught to look up to our leader with great reverence.  
(A) Respect (B) Deride  
(C) Derail (D) Admonish
55. Even erudite people found this puzzle difficult.  
(A) Research (B) Scholarly  
(C) Aforesaid (D) Indigenous
56. They waited for the crowd's fury to abate.  
(A) Dwindle (B) Amplify  
(C) Enhance (D) Astound
57. She disparaged her student's efforts  
(A) Lauded (B) Derided  
(C) Complimented (D) Appreciated

**Choose the antonym of the underlined word:**

58. Mohan gave a very furious speech on bribery.  
(A) Wrathful (B) Cheerful  
(C) Frenzied (D) Angry
59. The sanctity of every temple is enchanted.  
(A) Unattractive (B) Attractive  
(C) Alluring (D) Entrapping
60. Many people are needed to vitalize the unit of our association.  
(A) Strengthen (B) Nourish  
(C) Augment (D) Weaken
61. A man who shows zeal even at the time of great ordeals is exemplar.  
(A) Enthusiasm (B) Joy  
(C) Sorrow (D) Happiness
62. Mike Tyson is really a gentle man, but if provoked, he is diabolic.  
(A) Friendly (B) Devastative  
(C) Uncontrollable (D) Deadly
63. Charlie Chaplin is very famous for his hilarious actions.  
(A) Tragic (B) Comical  
(C) Laughable (D) Ludicrous
64. The chemical will retard the spread of fire.  
(A) Slacken (B) Decelerate  
(C) Speedup (D) Testify



**Choose the option that best completes the sentence semantically and grammatically:**

65. The formerly \_\_\_\_\_ waters of the lake have been polluted so that the fish are no longer visible from the surface.  
(A) Muddy (B) Tranquil  
(C) Stagnant (D) Pellucid
66. Confronted by his mother, the \_\_\_\_\_ four-year-old could not lie about scribbling on his bedroom walls with purple and blue markers.  
(A) Guileless (B) Inauspicious  
(C) Untarnished (D) Indiscriminate
67. Gypies do not live \_\_\_\_\_ at a particular place.  
(A) Broadly (B) Voluntarily  
(C) Permanently (D) Willingly
68. My pen is \_\_\_\_\_ than yours.  
(A) more costly (B) costliest  
(C) costlier (D) much costly
69. A new theatre \_\_\_\_\_ last Sunday.  
(A) has been opened (B) was opened  
(C) opened (D) had been opened
70. The messenger \_\_\_\_\_ hardly read or write.  
(A) can't (B) does  
(C) does not (D) can

**Identify the part of the sentence that contains an error. If there is no error, choose 'No error' option:**

71. He asked (A)/ supposing if he fails (B)/ what he would do (C)/ No error (D).
72. To die with honour (A)/ is better than (B)/ live with dishonor (C)/ No error (D).
73. The families (A)/ are living in Gulmohar park (B)/ for the last two decades (C)/ No error (D).
74. The secretariat (A)/ comprises of (B)/ many air-conditioned rooms (C)/ No error (D).
75. Heavy rain (A)/ prevented us (B)/ to go to the cinema (C)/ No error (D).

**Read the passage and answer the questions that follows:**

The last half of my life was spent at one of those painful epochs of human history, during which the world seemed to be getting worse; where past victories which had seemed to be definitive have turned out to be only temporary. When I was young, Victorian optimism was taken for granted. It was thought that freedom and prosperity would spread gradually throughout the world through an orderly process, and it was hoped that cruelty, tyranny and injustice would continually diminish. Hardly anyone was haunted by the fear of great war. Hardly anyone thought of the 19<sup>th</sup> century as a brief interlude between the past and future barbarism.

76. The author felt sad about the latter part of his life because  
(A) He was nostalgic about his childhood (B) The world had not become prosperous  
(C) The author had not won any further victories (D) The world was painfully disturbed during that period of time
77. The victories of the past  
(A) Brought permanent peace and prosperity (B) Ended cruelty, tyranny and injustice  
(C) Proved to be temporary events (D) Filled men with a sense of pessimism
78. The term 'definitive' used in the passage means  
(A) Defined (B) Final  
(C) Temporary (D) Incomplete
79. During the Victorian age people believed that  
(A) Strife would increase (B) There would be unlimited freedom  
(C) Wars would be fought on a bigger scale (D) Peace would prevail and happiness would engulf the whole world
80. "A brief interlude between the past and future barbarism" can be interpreted as  
(A) A short period of time between past and future acts of savagery (B) A short interlude between two great events  
(C) An interval between crude wars (D) A dramatic performance during wars

\* \* \* \* \*

## WORK SHEET

