B.Tech. DEGREE EXAMINATION, NOVEMBER 2022
Sixth Semester

18PDH201T – EMPLOYABILITY SKILLS AND PRACTICES
(For the candidates admitted from the academic year 2018-2019 to 2019-2020)

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 units digit of 287^{95}?
   (A) 7   (B) 9
   (C) 3   (D) 1

2. Which one of the following can't be square of natural number?
   (A) 32761   (B) 81225
   (C) 52537   (D) 20164

3. How many natural numbers between 23 and 100 are exactly divisible by 6?
   (A) 8   (B) 11
   (C) 13   (D) 12

4. If $\log_{10} 125 + \log_{10} 8 = x$, then find x?
   (A) 1/3   (B) 0.064
   (C) –3   (D) 3

5. Today is Monday. After 61 days, it will be:
   (A) Friday   (B) Saturday
   (C) Sunday   (D) Monday

6. How many numbers greater than 23000 can be formed from the digits 1, 2, 3, 4, 5?
   (A) 120   (B) 80
   (C) 90   (D) 100

7. A can cover a distance in 1 hour 24 minutes by covering 2/3rd of the distance at 4 kmph and the rest and 5 kmph. Find the total distance?
   (A) 5 km   (B) 6 km
   (C) 7 km   (D) 8 km

8. By selling an article for ₹ 144 a merchant gains such that the gain percent equals the cost price. Find the cost price of the article.
   (A) ₹ 60   (B) ₹ 70
   (C) ₹ 80   (D) ₹ 90

9. In a party of 250 people, 210 took milk 50 took coffee. Some persons took both. If 20 did not drink milk or coffee. Find the number persons who took both.
   (A) 20   (B) 30
   (C) 35   (D) 47

10. The present ages of three persons in the ratio 4:7:9. Eight year ago, the sum of their ages was 56. Find their present ages.
   (A) 8, 20, 28   (B) 16, 28, 36
   (C) 20, 35, 45,   (D) 12, 14, 18

11. The characteristics of the logarithm of 17235 is
    (A) 4   (B) 5
    (C) 3   (D) 1

12. Which of the following is not a leap year?
    (A) 800   (B) 900
    (C) 1600   (D) 2400

13. The calendar for the year 2007 will be same for the year?
    (A) 2014   (B) 2016
    (C) 2017   (D) 2018

14. If first day of the year 1999 was Tuesday, then what day of the week must have been on 1st January 2006?
    (A) Monday   (B) Tuesday
    (C) Wednesday   (D) Thursday

15. Father's age is 4 times that of his son. 5 years ago it was 7 times. Find the present age of the father.
    (A) 30   (B) 35
    (C) 40   (D) 45

16. In how many ways can 5 girls and 5 boys from a circle such that the boys and the girls alternate?
    (A) $4! \times 5!$ (B) $4! \times 3!$
    (C) $4! \times 4!$ (D) $3! \times 3!$

17. If A's salary is 50% higher than B's salary, then by how much percent is B's salary lower than A's?
    (A) 20%   (B) 50%
    (C) $33\frac{1}{3}\%$ (D) $16\frac{2}{3}\%$

18. A's age after 15 years will be 5 times his age 5 years ago. Find A's present age
    (A) 11 years   (B) 10 years
    (C) 12 years   (D) 15 years

19. A sum of money doubles is 6 years in S.I. in how many years will it become three times itself?
    (A) 12 years   (B) 24 years
    (C) 8 years   (D) 6 years

20. In how many ways can 7 beads be arranged to form a necklace?
    (A) 6!/2   (B) 5!
    (C) 4!   (D) 8!

21. 240 men can consume 1200 kg of rise in 30 days. In how many days can 270 men consume 270 kg?
    (A) 18   (B) 12
    (C) 6   (D) 15

22. A jogger is running at a speed of 15 kmph. In what time he will cross a track of length 400 metres?
    (A) 96 sec
    (B) 100 sec
    (C) 104 sec
    (D) 110 sec

23. The ratio between the speeds of two boats is 5:8. If the first boat covers 200 km in s 2 hours, find the speed of the second boat?
    (A) 140 kmph
    (B) 150 kmph
    (C) 160 kmph
    (D) 170 kmph

24. Two dice are tossed. Find the probability of getting the total score a prime number?
    (A) 1/6
    (B) 5/12
    (C) 2/91
    (D) 7/9

25. A 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

26. A mixture of 20 liters of milk and water contains 90% milk. Hoe many liters of water should be added so that water becomes 40%?
    (A) 10 liters
    (B) 20 liters
    (C) 12 liters
    (D) 8 liters

27. The ratio of zinc and copper in a braes pieces is 13:7. How much zinc will be there in 100 kg of such a piece?
    (A) 20 kg
    (B) 35 kg
    (C) 55 kg
    (D) 65 kg

28. Pointing to a woman, a man said, "Her father is the only son of my father", how is the man related to the woman?
    (A) Brother
    (B) Grandfather
    (C) Father
    (D) Son

29. Find the missing term in the series RQP, ONM, _____,IHG, FED.
    (A) CDE
    (B) LKI
    (C) LKJ
    (D) BAC

30. In a certain code, ARMY is written as ASOB. How is JUDGE written in that code?
    (A) KVEHF
    (B) JVFJI
    (C) ITCFD
    (D) JWGKJ

31. Find the odd one out?
    (A) Inch
    (B) Kilogram
    (C) Centimeter
    (D) Yard

32. Find the wrong number in the series 2, 6, 15, 31, 56, 93.
    (A) 93
    (B) 15
    (C) 31
    (D) 56

Directions for Q.No 33 to Q35:

A team of three is to be selected from six persons – A, B, C, D, E and F under the following constraints:

    (i)   If A or B is selected, then C must not be selected

    (ii)   If C or D is selected, then atleast one of E and F must be selected

33. If D is selected, the who must not be selected?
    (A) A   (B) B
    (C) C   (D) None of these

34. If A is selected, then in how many ways the team can be selected?
    (A) 5   (B) 6
    (C) 4   (D) 7

35. If B is selected, then who must be selected?
    (A) D   (B) E
    (C) F   (D) Either B or C

Directions for Q.No 36 to 38:

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

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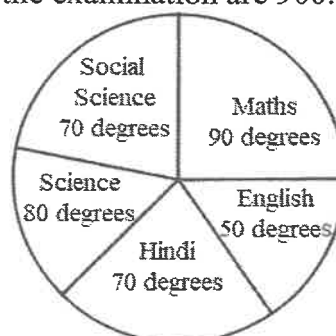
Mark (C) if the question can be answered by using both statements together, but cannot be answered by using either statement alone

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

36. What is the volume of the cylinder?
    I. Height is equal to the diameter
    II. Perimeter of the base is 352 cm

37. How many children does A have?
    I. B is the only daughter of P, who is the wife of A
    II. K and L are brothers of A

38. How much was the total sale of the company?
    I. The company sold 8000 units of product A each costing ₹ 25
    II. This company has no other product line

Directions for Q.No 39 and 40:

The given pie-chart shows the marks scored by a student in different subjects-English, Hindi, Maths, Science and Social Science in an examination. The values given are in degrees. Total marks obtained in the examination are 900.

39. If the total marks were 3000, then marks in Maths would be
   (A) 800
   (B) 750
   (C) 850
   (D) 900

40. If the marks scored by the student are 125 then the subject is
   (A) English
   (B) Hindi
   (C) Maths
   (D) Science

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 question below, four different ways of writing the underlined part are indicated. Choose the best ways of writing the underlines part.

41. A common disability in test pilots is hearing impairment, <u>a consequence of sitting too close to large jet engines for long periods of time</u>.
   (A) A consequence of stating too close to large jet engines for long periods of time
   (B) A consequence from sitting for long periods of times too near to large jet engines
   (C) A consequence which resulted from sitting to close to large jet engines for long periods of time
   (D) Damaged from sitting too near to large jet engines forlong periods of time

42. A huge flying reptile that dies out with the dinosaurs some 65 million years ago, the quetzalcoatius has a wingspan of 36 feet, <u>believed to be</u> the largest flying creature the world has ever seen.
   (A) Believed to be
   (B) And that is believed to be
   (C) And it is believed to have been
   (D) Which was, it is belived

43. A fire in an enclosed space burns with the aid of reflected radiation that preheats the fuel, making ignition much easier and <u>flames spreading</u> more quickly.
   (A) Flame spreading
   (B) Flame spreads
   (C) Flames are caused to spread
   (D) Causing flames to spread

44. <u>Although asprin irritates the stomach, it</u> can be avoided if the asprin tablet is given a coating that will not dissolve until the tablet reaches the intestine.
   (A) Although asprin irritates the stomach, it
   (B) The irritation of the stomach caused by asprin
   (C) The fact that asprin causes irritation of the stomach
   (D) Asprin causes stomach irritation, although it

45. Archaeologists in Ireland believe that a recently discovered chalice, which dates from the eighth century, was probably buried <u>to keep from</u> being stolen by invaders.
   (A) To keep from
   (B) To keep it from
   (C) In order that is would avoid
   (D) In order to keep from

Read the argument and answer the questions:

46. A new machine for harvesting corn will allow rows to be planted only fifteen inches apart, instead of the usual thirty inches. Corn planted this closely will produce lower yields per plant. Nevertheless, the new machine will allow corn growers to double their profits per acre because _____ .
    Which of the following most logically completes the argument?

    (A) With the closer spacing of the rows, the growing corn plants will quickly form a dense canopy of leaves, which will, by shading the ground, minimize the need for costly weed control and irrigation

    (B) With the closer spacing of the rows, corn plants will be forced to grow taller because of increased competition for sunlight from neighboring corn plants

    (C) With the larger number of plants growing per acre, more fertilizer will be required

    (D) With the closer spacing of the rows, the acreage on which corn in planted will be utilized much more intensively

47. The Americans with Disabilities Act (ADH) was designed to ensure that there is no discrimination against and unfair termination of differently-abled workers in the workplace. However, after the act was introduced, there has been a marked increase in unemployment among the differently-abled.
    Which of the following best explains this seeming discrepancy?

    (A) A number of differently-abled people chose not to work

    (B) Not willing to deal with the issues of workplace discrimination of the differently-abled, several companies recruited fewer of them in the first place

    (C) There was no act introduced that would guarantee a job for the differently-abled

    (D) The unemployment among the able-bodied has remained consistency high

48. Industrial and automobile pollution have long been through to contribute to global warming. However, researchers have identified that the carbon dioxide and carbon monoxide released into the atmosphere are not as potent as the methane emitted by cud-chewing animals such as cows when they fart or belch. Therefore, if you drive a hybrid electric car to the grocery, and favour that you would do to the environment would be offset if you end up buying beef.
    Which of the following best describes the author's reasoning?

    (A) The author establishes a point by drawing an analogy

    (B) The author disproves a popular notion by providing evidence that is contrary to it

    (C) The author presents a new theory in response to an existing well-established theory

    (D) The author uses an illustration to support a new school of thought that is contrary to popular school of thought

49. Because mining and refining nickels is costly, researchers have developed an alternative method for extracting nickels using streptanthus polygaloides, a plant that absorbs and stores nickel from the soil as if grows. The researchers incinerated a crop of streptanthus they grew in nickel-rich soil. By chemically extracting nickel from the ash, they produced 100 pounds of nickel per acre of land at a total cost per pound slightly above that of current mining.
    Which of the following, if true, most strongly supports the conclusion that the use of streptanthus to extract nickel will be commercially adopted.

(A) The season in which the researchers grew streptanthus was an unusually favorable one, with the right amount of precipitation to maximize the growth rate of streptanthus

(B) Because lowering the concentration of nickel in the soil can make land much better for agriculture in general, a plot in which streptanthus has been grown and harvested can be sold for substantially more than its cost

(C) More air pollution is generated for each pound of nickel produced by extracting it from streptanthus than is generated using conventional mining and refining

(D) The land on which the researchers planted streptanthus was unusually free of the various weeds that can compete with streptanthus for water, nutrients and sunlight

50. Early in the twentieth century, lake Konfa became very polluted. Recently fish populations have recovered as release of industrial pollutants has declined and the lake's waters have become cleaner. Fears are now being voiced that the planned construction of an oil pipeline across the lake's bottom might revive pollution and cause the fish population to decline again. However, a technology for preventing leaks is being installed. Therefore, provided this technology is effective, those fears are groundless.

Which of the following, if true, seriously weakness the argument?

(A) The pipeline's construction will disturb sediments at the bottom of the lake, dispersing into the water toxic pollutants that have settled there

(B) Changes in the land use and drainage patterns around the lake mean that the lake's waters are increasingly likely to be affected by agricultural runoff

(C) The leak preventing technology has been in use for several years without any pipeline in which it is installed developing serious leaks

(D) A major leak of oil from the pipeline would harm not only the lake's fish but also populations of other aquatic animals and plants

Choose the synonym of the underlined word:

51. It would be wise to curtail answers when one runs out of time.
(A) Reduce
(B) Shut
(C) Lengthen
(D) Write

52. The president's arrest precipitated the country into war.
(A) Falsified
(B) Triggered
(C) Abridged
(D) Checked

53. Your goal is to pique the reader's interest to get them read the rest of your resume.
(A) Irritate
(B) Resent
(C) Stimulate
(D) Convey

54. They have audacious plans for the new school.
(A) Plain
(B) Smart
(C) Old
(D) Bold

55. Fickle minded people cannot be trusted.
(A) Capricious
(B) Tasteless
(C) Boring
(D) Helpless

Choose the antonym of the underlined word:

56. The target is mostly still transparent to the probe light, although it is becoming <u>opaque</u> near the interaction region.
    (A) Furious
    (B) Turbid
    (C) Clear
    (D) Ambiguous

57. The wrestler's plan was to deliver a crushing blow which would <u>enervate</u> his opponent.
    (A) Contemplate
    (B) Evaluate
    (C) Necessitate
    (D) Empower

58. He felt his grip on reality was becoming increasingly <u>tenuous</u>.
    (A) Substantial
    (B) Unclaimed
    (C) Welcome
    (D) Light

59. She began to summarize the <u>salient</u> features of the proposal.
    (A) Arresting
    (B) Insignificant
    (C) Proper
    (D) Courageous

60. The justification seemed <u>spurious</u> when the innocent were punished.
    (A) Authentic
    (B) Fake
    (C) False
    (D) Misleading

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

61. The two brothers look so _____ that it is difficult to differentiate them.
    (A) Same
    (B) Like
    (C) Identical
    (D) Alike

62. Every week, in the office, one hour is _____ to games and sports.
    (A) Conferred
    (B) Give
    (C) Conceded
    (D) Devoted

63. My friend has good command _____ English and Hindi.
    (A) Of
    (B) In
    (C) Over
    (D) Upon

64. General Monsanto declared _____ the dictator of the country.
    (A) Him
    (B) Himself
    (C) They
    (D) Them

65. The city council _____ to form a committee.
    (A) Has decided
    (B) Have decided
    (C) Is decided
    (D) Are decided

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

66. Bouquet : Flower : :
    (A) Skin : Body
    (B) Chain : Link
    (C) Page : Book
    (D) Product : Factory

67. Germ : Disease : :
    (A) Man : Woman
    (B) War : Destruction
    (C) Doctor : Medicine
    (D) Owner : Shop

68. Gazzle : Swift : :
    (A) Horse : Slow
    (B) Swan : Graceful
    (C) Line : Roar
    (D) Lamb : Bleat

69. Wood : Carve : :
    (A) Clay : Mould
    (B) Pipe : Blow
    (C) Pqper : Burn
    (D) Trees : Sway

70. Helmet : Head : :
    (A) Pedal :Foot
    (B) Gun : Hand
    (C) Breastplate : Chest
    (D) Pendant : Neck

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

71. We discussed the problem (A)/ so thoroughly (B)/ that I found it easy to work it out (C)/ No error (D)/.

72. I could not put up in a hotel (A)/ because the boarding and lodging charges (B) / were exorbitant (C)/ No error (D).

73. If I had known (A) this yesterday (B)/ I will have helped him (C) / No error (D).

74. Do the roses in your garden (A) / smell more sweetly (B) / than those in ours? (C) / No error (D).

75. Block of residential flats (A) / are coming up (B)/ near our house (C)/ No error.

Read the passage and answer the questions that follow:

There is small fire station in town. At this station, the fire-fighters are volunteers. That means they are volunteers. That means they work for free. The fire station gets some money from the government to take case of the building and the fire truck. But the fire station has a problem. Last winter, a pipe in the fire station froze. Then it burst. Water went everywhere. There is a lot of damage. Now the building cannot be used. What is worse, the fire station does not have enough money for the repairs needed to fix the damage. The people in town are worried about what will happen if there is a fire and no working fire station. But they will figure out a way to solve the problem. They always do!

76. The main problem in the town is that
    (A) The fire fighters do not make any money
    (B) A pipe in the fire station froze last winter
    (C) People cannot fix the fire station
    (D) People in town are worried

77. As used in the passage, which accurately describes something that has a damage?
    (A) A library is closed on Sundays, people cannot check out books that day
    (B) A hose is used to water the garden the water goes all over the plants
    (C) An old washing machine still works it is almost 20 years old
    (D) A stack of books feel on a computer now it will not turn on

78. In the passage, the author writes "But they will figure out a way to solve the problem". In this sentence, the phrase "solve the problem" most likely means
    (A) Get more money
    (B) Fix the fire station
    (C) Make sure no fires happen
    (D) Make sure no pipes freeze

79. The feeling at the end of the passage can best be described as
    (A) Hopeful
    (B) Worried
    (C) Upset
    (D) Excited

80. Based on information in the passage, it can be understood that the people in town will be most likely to
    (A) Give money to the fire fighters
    (B) Build a new fire station
    (C) Help fix the fire station themselves
    (D) Ask the fire fighters to work for free

* * * * *

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