

Roll No.....

END TERM EXAMINATION, JUNE 2024
COURSE: B. Tech (All Branches) SEM - 6TH
SUBJECT: CAREER SKILLS

Maximum Marks: 100

TIME: 3 Hours

Instructions for candidates:

- (i) All questions are compulsory. Each question carries 1 mark.
- (ii) Use of calculator is not allowed.
- (iii) There is no negative marking for incorrect responses.
- (iv) Write the SET on the OMR sheet.

Directions : (Q1-Q5) Choose the grammatically correct option from among the four choices provided in each of the following questions.

- Q1: (a) We will drive no further tonight.
(b) We will drive no farther tonight.
(c) We would drive no further tonight.
(d) We drive no further tonight.
- Q2: (a) I don't want to lose the job.
(b) I don't want to loose the job.
(c) I don't want to lost the job.
(d) I don't want to loosen the job.
- Q3: (a) He could not illicit the meaning from the passage.
(b) He could not elicit the meaning from the passage.
(c) He could not be illicit the meaning of the passage.
(d) He could not being elicit the meaning of the passage.
- Q4: (a) That was the best compliment I had ever received.
(b) That was the best complement I had ever received.
(c) That was the better compliment I had ever received.
(d) That was the better complement I had ever received.
- Q5: (a) Jack is wiser than strong.
(b) Jack is more wiser than strong.
(c) Jack is more wise than strong.
(d) Jack is the wiser than strong.

Directions: (Q6-Q10) In each of the following questions find the grammatically correct option out of a, b, c, and d and mark it as your answer on OMR sheet.

- Q6: (a) He is delivering the lecture for two hours now.
(b) He has been delivering the lecture for two hours now.
(c) He had been delivering the lecture for two hours now.
(d) He has delivered the lecture for two hours now.
- Q7: (a) The printer had been working well before that moment.
(b) The printer has been working well before that moment.
(c) The printer was been working well before that moment.
(d) The printer is being working well before that moment.

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- Q8: (a) By the time he would join school, she would have been serving there for five years.
(b) By the time he would join school, she had been serving there for five years.
(c) By the time he enters school, she has been serving there for five years.
(d) By the time he enters school, she is being serving there for five years.

- Q9: (a) Had you been preparing sincerely, you could have got the desired result.
(b) Have you been preparing sincerely, you could have got the desired result.
(c) Had you been preparing sincerely, you could have get the desired result.
(d) Would you been preparing well, you had got the desired result.

- Q10: (a) "You have jeopardized my position in the office", she said.
(b) "You are jeopardized my position in the office", she said.
(c) "You have been jeopardized my position in the office", she said.
(d) "You have jeopardy my position in the office", she said.

Directions : (Q11-Q15) Identify the correct sentence in each of the following questions and mark it as your answer.

- Q11: (a) I would travel around the world if I get a high salaried job.
(b) I would travel around the world if I got a high salaried job.
(c) I would travel around the world if I have got a high salaried job.
(d) I would travel around the world if I will get a high salaried job.

- Q12: (a) When people smoke cigarettes, their health deteriorates.
(b) When people smoke cigarettes, their health deteriorated.
(c) When people smoke cigarettes, their health may deteriorates.
(d) When people smoke cigarettes, their health should deteriorates.

- Q13: (a) If I am the prime minister, I would free the country from taxes..
(b) If I were the prime minister, I would free the country from taxes.
(c) If I can become the prime minister, I will free the country from taxes.
(d) If I am going to become the prime minister, I would free the country from taxes.

- Q14: (a) I would not have to face humiliation, if I had studied.
(b) I would not have been facing humiliation, if I had studied.
(c) I would not have faced humiliation, if I had studied.
(d) I would not face humiliation, if I had studied.

- Q15: (a) When you boil water to 100 degree centigrade, it does evaporates.
(b) When you will boil water to 100 degree centigrade, it evaporates.
(c) When you boil water to 100 degree centigrade, it evaporates.
(d) When you will boil water to 100 degree centigrade, it will evaporate.

Directions: (Q16-Q20) In each of the following questions four options are provided. Choose the option that has correct grammatical construction & mark it as your answer.

- Q16: (a) Not only the guitar player but the drummer were also soaked in sweat.
(b) Not only the guitar player but the drummer was also soaked in sweat.
(c) Not only the guitar player but the drummer are also soaked in sweat.
(d) Not only the guitar player but the drummer are being soaked in sweat.

- Q17 (a) The players, as well as the captain, wants to win.
(b) The players, as well as the captain, want to win.
(c) The players, as well as the captain, wanting to win.
(d) The players, as well as the captain, is wanting to win.

- Q18 (a) A lot of the pies have disappeared.
(b) A lot of the pies has disappeared.
(c) A lot of the pies is disappeared..
(d) A lot of the pies was disappeared.

- Q19: (a) The committee members lead very different lives in private.
(b) The committee members leads very different lives in private.
(c) The committee members are lead very different lives in private.
(d) The committee members does lead very different lives in private.

- Q20: (a) Time and Tide wait for none.
(b) Time and Tide waits for none.
(c) Time and Tide have wait for none.
(d) Time and Tide have been waiting for none.

Directions: (Q21-Q25) Read the following paragraph carefully and answer the questions that follow.

The city will be enforcing winter parking rules from December 1 through March 31, according to City Street Manager Joseph Parks. This includes alternate-side parking regulations, as well as tow-away zones and handicap exceptions. Cars are to be parked on the south and east sides of streets between the hours of 8 a.m. and midnight; and on the north and west sides of streets between midnight and 8 a.m. This is to permit snow plows and emergency vehicles access to all neighborhoods, as well as to keep rush-hour traffic to a minimum. Vehicles that do not follow these guidelines will be towed at the owner's expense, Parks said, with the exception of those vehicles displaying handicapped parking permits.

- Q21: What is the style of writing of this paragraph?
(a) Narrative (b) Descriptive (c) Analytical (d) Propaganda

- Q22: What is the central idea of the passage?
(a) Cars should be parked on the street.
(b) Snow plows can bury cars under snow.
(c) Winter parking regulations will be put into effect.
(d) Winter parking regulations are good for the environment.

- Q23: When should cars be parked on the west side of the street?
(a) between 8 a.m. and midnight
(b) between midnight and 8 a.m.
(c) between December 1 and March 31
(d) not stated

- Q24: Which of the following is NOT a reason for these parking regulations to be followed?
(a) They prevent excessive traffic.
(b) It's good for the cars to be moved frequently in cold weather.
(c) It allows snow plows to get through.
(d) They enable emergency vehicles to gain access to all neighborhoods.

- Q25: Choose the synonym of the underlined word in the passage.
(a) Volunteering (b) Administering (c) Neglecting (d) Disregarding

Direction: (Q26-Q30) Read the following paragraph carefully and answer the questions that follow.

Opera refers to a dramatic art form, originating in Europe, in which the emotional content is conveyed to the audience as much through music, both vocal and instrumental, as it is through the lyrics. By contrast, in musical theater an actor's dramatic performance is primary, and the music plays a lesser role. The drama in opera is

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presented using the primary elements of theater such as scenery, costumes, and acting. However, the words of the opera, or libretto, are sung rather than spoken. The singers are accompanied by a musical ensemble ranging from a small instrumental ensemble to a full symphonic orchestra.

Q26: One of the major ideas from the paragraph is that:

- (a) Opera has developed under the influence of musical theater.
- (b) Opera is a drama sung with the accompaniment of an orchestra.
- (c) Opera is the most complex of all performing arts.
- (d) Opera is most often performed in Europe.

Q27: What is the central idea of the passage?

- (a) People are captivated more by opera than by musical theatre.
- (b) Drama in opera is more important than music.
- (c) A comparison is drawn between opera and musical theatre.
- (d) The size of orchestra in opera can vary.

Q28: The paragraph makes it clear that:

- (a) acting and costumes are secondary to music in musical theater.
- (b) opera doesn't have any properties in common with musical theater.
- (c) an opera requires a huge orchestra as well as a large choir.
- (d) music in musical theater is not as important as it is in opera.

Q29: Choose a synonym of the underlined word from the paragraph.

- (a) Incompleteness
- (b) Partiality
- (c) Fraction
- (d) Collection

Q30: Select the antonym of "refer" from the given options.

- (a) Refuse
- (b) Mention
- (c) Cite
- (d) Allude

Direction: (Q31-Q35) Read the following paragraph and answer the questions based on it.

Erosion of America's farmland by wind and water has been a problem since settlers first put the prairies and grasslands under the plow in the nineteenth century. By the 1930s, more than 282 million acres of farmland were damaged by erosion. After 40 years of conservation efforts, soil erosion has accelerated due to new demands placed on the land by heavy crop production. In the years ahead, soil erosion and the pollution problems it causes are likely to replace petroleum scarcity as the nation's most critical natural resource problem.

Q31. As we understand from the reading, today, soil erosion in America ____

- a) causes humans to place new demands on the land.
- b) is worse than it was in the nineteenth century.
- c) happens so slowly that it is hardly noticed.
- d) is the most critical problem that the nation faces.

Q32. The author points out in the passage that erosion in America ____

- a) has damaged 282 million acres ever since settlers over the years.
- b) has been so severe that it has forced people to abandon their settlements.
- c) occurs only in areas with no vegetation.
- d) can become a more serious problem in the future.

Q33. One of the major ideas of the paragraph is that:

- a) petroleum is causing heavy soil erosion and pollution problems.
- b) heavy crop production is necessary to meet the demands and to prevent a disaster.
- c) soil erosion has been hastened due to the overuse of farming lands.
- d) water is undoubtedly the largest cause of erosion.

Q34: What is the tone of this paragraph?

- a) Assertive
- b) Laudatory
- c) Analytical
- d) Nostalgic

Q35. Choose a synonym of the underlined word from the passage.

- a) Destruction
- b) Squandering
- c) Neglect
- d) Preservation

Direction: (Q36-Q40) Read the following passage carefully and answer the questions based on it.

Creativity is at once our most precious resource and our most inexhaustible one. As anyone who has ever spent any time with children knows, every single human being is born creative; every human being is innately endowed with the ability to combine and recombine data, perceptions, materials and ideas, and devise new ways of thinking and doing. What fosters creativity? More than anything else: the presence of other creative people. The big myth is that creativity is the province of great individual geniuses. In fact creativity is a social process. Our biggest creative breakthroughs come when people learn from, compete with, and collaborate with other people.

Cities are the true fonts of creativity... With their diverse populations, dense social networks, and public spaces where people can meet spontaneously and serendipitously, they spark and catalyze new ideas. With their infrastructure for finance, organization and trade, they allow those ideas to be swiftly actualized. As for what stanches creativity, that's easy, if ironic. It's the very institutions that we build to manage, exploit and perpetuate the fruits of creativity — our big bureaucracies, and sad to say, too many of our schools. Creativity is disruptive; schools and organizations are regimented, standardized and stultifying.

The education expert Sir Ken Robinson points to a 1968 study reporting on a group of 1,600 children who were tested over time for their ability to think in out-of-the-box ways. When the children were between 3 and 5 years old, 98 percent achieved positive scores. When they were 8 to 10, only 32 percent passed the same test, and only 10 percent at 13 to 15. When 280,000 25-year-olds took the test, just 2 percent passed. By the time we are adults, our creativity has been wrung out of us.

I once asked the great urbanist Jane Jacobs what makes some places more creative than others. She said, essentially, that the question was an easy one. All cities, she said, were filled with creative persons; that's our default state as people. But some cities had more than their shares of leaders, people and institutions that blocked out that creativity. She called them "squelchers."

Creativity (or the lack of it) follows the same general contours of the great socio-economic divide — our rising inequality — that plagues us. According to my own estimates, roughly a third of us across the United States, and perhaps as much as half of us in our most creative cities — are able to do work which engages our creative faculties to some extent, whether as artists, musicians, writers, techies, innovators, entrepreneurs, doctors, lawyers, journalists or educators — those of us who work with our minds. That leaves a group that I term "the other 66 percent," who toil in low-wage rote and rotten jobs — if they have jobs at all — in which their creativity is subjugated, ignored or wasted.

Creativity itself is not in danger. It's flourishing all around us — in science and technology, arts and culture, in our rapidly revitalizing cities. But we still have a long way to go if we want to build a truly creative society that supports and rewards the creativity of each and every one of us.

Q36: In the author's view, cities promote human creativity for all the following reasons EXCEPT that they:

- a) Contain spaces that enable people to meet and share new ideas.
- b) Expose people to different and novel ideas, because they are home to varied groups of people.
- c) Provide the financial and institutional networks that enable ideas to become reality.
- d) Provide access to cultural activities that promote new and creative ways of thinking.

Q37: The author uses 'ironic' in the third paragraph to point out that:

- a) People need social contact rather than isolation to nurture their creativity.
- b) Institutions created to promote creativity eventually stifle it.
- c) The larger the creative population in a city, the more likely it is to be stifled.
- d) Large bureaucracies and institutions are the inevitable outcome of successful cities.

Q38: The central idea of this passage is that

- a) Social interaction is necessary to nurture creativity.
- b) Creativity and ideas are gradually declining in all societies.
- c) The creativity divide is widening in societies in line with socio-economic trends.
- d) More people should work in jobs that engage their creative faculties.

Q39: Jane Jacobs believed that cities that are more creative:

- a) Have to struggle to retain their creativity.
- b) Have to 'squell' unproductive people and promote creative ones.
- c) Have leaders and institutions that do not block creativity.
- d) Typically do not start off as creative hubs.

Q40: The 1968 study is used here to show that:

- a) As they get older, children usually learn to be more creative.
- b) Schooling today does not encourage creative thinking in children.
- c) The more children learn, the less creative they become.
- d) Technology today prevents children from being creative.

Direction: (Q41-Q45) Read the below given passage carefully and answer the questions.

Grove snails as a whole are distributed all over Europe, but a specific variety of the snail, with a distinctive white-lipped shell, is found exclusively in Ireland and in the Pyrenees mountains that lie on the border between France and Spain. The researchers sampled a total of 423 snail specimens from 36 sites distributed across Europe, with an emphasis on gathering large numbers of the white-lipped variety. When they sequenced genes from the mitochondrial DNA of each of these snails and used algorithms to analyze the genetic diversity between them, they found that... a distinct lineage (the snails with the white-lipped shells) was indeed endemic to the two very specific and distant places in question.

Explaining this is tricky. Previously, some had speculated that the strange distributions of creatures such as the white-lipped grove snails could be explained by convergent evolution—in which two populations evolve the same trait by coincidence—but the underlying genetic similarities between the two groups rules that out. Alternately, some scientists had suggested that the white-lipped variety had simply spread over the whole continent, then been wiped out everywhere besides Ireland and the Pyrenees, but the researchers say their sampling and subsequent DNA analysis eliminate that possibility too. "If the snails naturally colonized Ireland, you would expect to find some of the same genetic type in other areas of Europe, especially Britain. We just don't find them," Davidson, the lead author, said in a press statement.

Moreover, if they'd gradually spread across the continent, there would be some genetic variation within the white-lipped type, because evolution would introduce variety over the thousands of years it would have taken them to spread from the Pyrenees to Ireland. That variation doesn't exist, at least in the genes sampled. This means that rather than the organism gradually expanding its range, large populations instead were somehow moved en masse to the other location within the space of a few dozen generations, ensuring a lack of genetic variety.

"There is a very clear pattern, which is difficult to explain except by involving humans," Davidson said. Humans, after all, colonized Ireland roughly 9,000 years ago, and the oldest fossil evidence of grove snails in Ireland dates to roughly the same era. Additionally, there is archaeological evidence of early sea trade between the ancient peoples of Spain and Ireland via the Atlantic and even evidence that humans routinely ate these types of snails before the advent of agriculture, as their burnt shells have been found in Stone Age trash heaps. The simplest explanation then is "Boats". These snails may have inadvertently traveled on the floor of the small, coast-hugging skiffs these early humans used for travel, or they may have been intentionally carried to Ireland by the seafarers as a food source. "The highways of the past were rivers and the ocean—as the river that flanks the Pyrenees was an ancient trade route to the Atlantic, what we're actually seeing might be the long lasting legacy of snails that hitched a ride...as humans travelled from the South of France to Ireland 8,000 years ago," Davidson said.

Q41: All of the following evidence supports the explanation of sea travel/trade EXCEPT:

- a) Archaeological evidence of early sea trade between the ancient peoples of Spain and Ireland via the Atlantic Ocean.
- b) The oldest fossil evidence of white-lipped grove snails in Ireland dates back to roughly 9,000 years ago, the time when humans colonized Ireland.
- c) Absence of genetic variation within the white-lipped grove snails of Ireland and the Pyrenees, whose genes were sampled.
- d) The coincidental existence of similar traits in the white-lipped grove snails of Ireland and the Pyrenees because of convergent evolution.

Q42: In paragraph 4, the evidence that "humans routinely ate these types of snails before the advent of agriculture" can be used to conclude that:

- a) 9,000 years ago, during the Stone Age, humans traveled from the South of France to Ireland via the Atlantic Ocean.
- b) white-lipped grove snails may have inadvertently traveled from the Pyrenees to Ireland on the floor of the small, coast-hugging skiffs that early seafarers used for travel.
- c) The seafarers who traveled from the Pyrenees to Ireland might have carried white-lipped grove snails with them as edibles.
- d) Rivers and oceans in the Stone Age facilitated trade in white-lipped grove snails.

Q43: Which one of the following makes the author eliminate convergent evolution as a probable explanation for why white-lipped grove snails are found in Ireland and the Pyrenees?

- a) The absence of genetic similarities between white-lipped grove snails of Ireland and snails from other parts of Europe, especially Britain.
- b) The distinct lineage of white-lipped grove snails found specifically in Ireland and the Pyrenees.
- c) The absence of genetic variation between white-lipped grove snails of Ireland and the Pyrenees.
- d) The coincidental evolution of similar traits (white-lipped shell) in the grove snails of Ireland and the Pyrenees.

Q44: The passage outlines several hypotheses and evidences related to white-lipped grove snails to arrive at the most convincing explanation for:

- a) How the white-lipped variety of grove snails independently evolved in Ireland and the Pyrenees.
- b) How the white-lipped variety of grove snails might have migrated from the Pyrenees to Ireland.
- c) Why the white-lipped variety of grove snails are found only in Ireland and the Pyrenees.
- d) Why the white-lipped varieties of grove snails were wiped out everywhere except in Ireland and the Pyrenees.

Q45: What was the sample size and location of the research on the white lipped snails?

- a) a total of 432 snail specimens from 36 sites distributed across France.
- b) a total of 423 snail specimens from 36 sites distributed across Europe.
- c) A total of 423 snail specimens from 63 sites distributed across Spain.
- d) a total of 324 snail specimens from 36 sites distributed across Pyrenees.

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Direction: (Q46-Q50) Pick the one sentence out of the four given options that has a synonym of the word given in the bold letters.

Q46: Helped

- (a) She unknowingly abetted the burglar by holding open the elevator doors.
- (b) She unknowingly coerced the burglar by holding open the elevator doors.
- (c) She unknowingly solicited the burglar by holding open the elevator doors.
- (d) She unknowingly proclaimed the burglar by holding open the elevator doors.

Q47: Copy

- (a) He failed in his research work because he authorized material from another author.
- (b) He failed in his research work because he stimulated material from another author.
- (c) He failed in his research work because he plagiarized material from another author.
- (d) He failed in his research work because he meditated material from another author.

Q48: Threatened

- (a) Her back injury advanced his prospects for a gold medal at the championship.
- (b) Her back injury jeopardized his prospects for a gold medal at the championship.
- (c) Her back injury expounded his prospects for a gold medal at the championship.
- (d) Her back injury compelled his prospects for a gold medal at the championship.

Q49: Arouse

- (a) She would advocate her little sister into an argument by teasing her.
- (b) She would lament her little sister into an argument by teasing her.
- (c) She would expunge her little sister into an argument by teasing her.
- (d) She would provoke her little sister into an argument by teasing her.

Q50: Plays

- (a) The fraudster used his malleability to convince her to sign over her savings to him.
- (b) The fraudster used his wife to convince her to sign over her savings to him.
- (c) The fraudster used his attentiveness to convince her to sign over her savings to him.
- (d) The fraudster used his vulnerability to convince her to sign over her savings to him.

Q51. A man travels the first 50 km at 25 kmph, the next 40 km at 20 kmph, and the remaining 90 km at 15 kmph. His average speed for the whole journey in kmph-

- a) 18 b) 20 c) 25 d) 32

Q52. Deepak goes to the school at the speed of 3kmph and returns at the speed of 2kmph. If he takes 10 hours in all, then the distance between the village and the school is-

- a) 15km b) 16km c) 17km d) 12km

Q53. In a km race, P beats Q by 100 m and Q beats R by 200 m. By how many meters does P beat R in the same race?

- a) 280 m b) 300 m c) 301 m d) 250 m

Q54. P and Q start simultaneously from two different places and proceed towards each other at a speed of 20 km/h and 30 km/h respectively. By the time they meet each other, Q has covered 36km more than that of P. The distance (in km.) between the two places is

- a) 144 b) 162 c) 180 d) 108

Q55. On a river, Q is the mid-point between two points P and R on the same bank of the river. A boat can go from P to Q and back in 12h and from P to R in 16 h 40 min. How long would it take to go from R to P?

- a) 4 h b) 4.33h c) 3.5h d) 7.33h

Q56. Rahul rows a boat against a stream flowing at 2kmph for 9km and then turns around and rows back with the current. If the whole trip last 6 h, find his rowing speed in still water-

- a) 4kmph b) 5kmph c) 6kmph d) 8kmph

Q57. A 200 metre long train is running at a speed of 72 km/h. How long will it take to cross an 800 metre long bridge?

- a) 50 seconds b) 40 seconds c) 60 seconds d) 30 seconds

Q58. A train passes two bridges of lengths 500 metres and 250 metres in 10 seconds and 6 seconds respectively. What is the length of the train?

- a) 152 metres b) 125 metres c) 250 metres d) 120 metres

Q59. A train passes two persons walking in the same direction at speeds of 3 km/h and 5 km/h respectively in 10 seconds and 11 seconds. What is the speed of the train?

- a) 28 km/h b) 27 km/h c) 25 km/h d) 24 km/h

Q60. A passenger train 350 metres long is travelling at a speed of 30 km/h. If a man is cycling in the direction of the train at 9 km/h, how long will it take for the train to pass the man?

- a) 40 seconds b) 45 seconds c) 58 seconds d) 60 seconds

Q61. The speed of a boat in still water is 25 kmph and the speed of the stream is 4 kmph. If the boat travels a distance of 84 kms while going upstream, find the distance covered by the boat in the same time while going downstream?

- a) 29 kms b) 116 kms c) 168 kms d) 140 kms

Q62. 2 people A and B start at the same point of a 400 m circular track at speeds of 40 m/sec and 25 m/sec and move in the same direction. After how much time since the start will they meet for the first time?

- a) 20 sec b) 35 sec c) 26.66 sec d) None of These

Q63. Two pipes can fill a tank in 15 hours and 20 hours respectively, while the third pipes can empty it in 30 hours. If all the pipes are opened simultaneously, the empty tank will be filled in -

- a) 10 hours b) 12 hours c) 15 hours d) 15.5 hours

Q64. Two pipes A and B can fill a cistern in 15 hours and 10 hours respectively. A tap can empty the full cistern in 30 hours. All the three taps were open for 2 hours, when it was remembered that the emptying tap had been left open. It was then closed. How many hours more would it take for the cistern to be filled?

- a) 4hr 30 min. b) 4hr 12 min. c) 4 hr24 min. d) 4hr 35 min.

Q65. Ravi and Radhe work together to finish a project in 12 days. If Ravi alone can finish the project in 20 days, how many days will it take for Radhe and Ravi working together if Radhe works only half a day daily?

- a) 10 days b) 12 days c) 15 days d) 18 days

Q66. Four men can complete a task in 5 days, which takes 20 women 20 days to finish. How long will it take for 6 men and 40 women to complete the task together?

- a) 1/2 day b) 2 days c) 2(1/2) days d) 2/3 days

Q67. Mohan can finish a job in 20 days, and Sohan in 30 days. If Mohan leaves after working for six days, how many more days will it take for Sohan to finish the remaining work?

- a) 8 b) 12 c) 13 d) 15

- Q68. M takes ten days more than N to complete a piece of work. If together they finish the work in $6\frac{2}{3}$ days, how many days will it take for M to complete the work alone?
a) 12 b) 15 c) 20 d) 22
- Q69. Four boys can complete a task in six days, and five girls can finish it in eight days. In how many days will six boys and five girls complete the task together?
a) $5\frac{1}{2}$ days b) $3\frac{1}{2}$ days c) $2\frac{2}{3}$ days d) $5\frac{1}{3}$ days
- Q70. A pipe can fill a tank in 6hrs. After half the tank is filled, three more similar pipes are opened. What is the total time taken to fill the tank completely?
a) 3hrs b) 3hrs 45 min c) 4hrs 45 min d) 4hrs
- Q71. Three taps J, K, and L can fill a tank in 12, 15, and 20 minutes respectively. If tap J is opened all the time and pipes K and L are opened for one hour alternatively. The tank will be full in (approx)
a) 8hr b) 4hr c) 6hr d) 5hr
- Q72. If A can do $\frac{1}{4}$ of a work in 3 days and B can do $\frac{1}{6}$ of the same work in 4 days, how much will A get if both work together and are paid Rs. 180 in all?
a) Rs 80 b) Rs 160 c) Rs 150 d) Rs 120
- Q73. The efficiency of A is twice of B and $\frac{1}{3}$ rd of C. If B alone can finish a job in 48 days, in how many days can the three of them do it together?
a) 5.33 days b) 7 days c) 5 days d) none of these
- Q74. A can do a work in 16 days and B alone in 24 days. They started together but A left 2 days before the completion of the work. In how much time was the work completed?
a) 15 days b) 8.8 days c) 10.8 days d) none of these
- Q75. If six persons are selected out of ten, in how many ways will a particular person be included among those six?
a) 124 b) 126 c) 144 d) 84
- Q76. From a group of persons, the number of ways of selecting 5 persons is equal to that of 10 persons. How many persons are there in the group?
a) 13 b) 40 c) 18 d) 15
- Q77. From 4 gentlemen and 6 ladies, a committee of five is to be formed. The number of ways in which the committee can be formed so that the gentlemen are in majority is:
a) 66 b) 156 c) 60 d) None of these
- Q78. Two out of six paper sets for an examination are of mathematics. What is the number of ways in which the papers can be set so that the two mathematics papers are not together?
a) 580 b) 520 c) 480 d) 512
- Q79. A certain code consists of 5 variables, with each variable having 4 different constant values possible. What is the total number of coded messages that can be sent with 5 constants, one from each variable?
a) $1024 \times 5!$ b) $1024 \times 4!$ c) $1024 \times 3!$ d) $1024 \times 2!$
- Q80. How many words can be formed out of the letters of the word 'article' so that the vowels occupy the even places?
a) 72 b) 144 c) 288 d) 36^6

Q81. In how many ways can the letters of the word 'Lucknow' be arranged so that the two vowels do not come together?

- a) 720 b) 1440 c) 3600 d) None of these

Q82. How many different words can be formed with the letters of the word 'Vice Chancellor' so that the vowels are together?

- a) $10 \times 5!$ b) $10! \times 5!$ c) $5 \times (10!/2)$ d) $5 \times 10!$

Q83. How many new words can be formed from the letters of the word 'Circle' taken together?

- a) 720 b) 719 c) 372 d) 359

Q84. How many numbers between 100 and 1000 can be formed using the digits 0, 2, 4, 6, 8, and 5, if repetition of digits in a number is not allowed?

- a) 99 b) 82 c) 100 d) 120

Q85. How many different numbers greater than 5000 can be formed with the digits 0, 1, 5, 6, and 9, with no digit being repeated?

- a) 48 b) 72 c) 124 d) 96

Q86. There are 5 men and 3 women. In how many ways can a committee of 3 members be made such that 2 particular men are always excluded?

- a) 50 b) 20 c) 24 d) 48

Q87. In how many ways can 3 prizes be given away to 12 students when each student is eligible for all the prizes?

- a) 1234 b) 1728 c) 5314 d) 1331

Q88. Total number of ways in which 10 identical sweets can be distributed among 3 persons such that everyone will get at least 1 sweet?

- a) $9C2$ b) $10C2$ c) $12C2$ d) $35! / 5!$

Q89. In how many ways can 7 beads be strung into a necklace?

- a) 2520 b) 5040 c) 1024 d) 360

Q90. Find the number of 3-digit numbers such that at least one of the digits is 6 (with repetitions)?

- a) 252 b) 345 c) 648 d) 560

Q91. One number is selected at random from the first 40 natural numbers. What is the probability that it is a multiple of either 5 or 7?

- a) $13/40$ b) $3/10$ c) $5/18$ d) $3/7$

Q92. A bag contains 6 green apples and 7 red apples. If two apples are drawn from that bag, then what is the probability that one is red and the other is green?

- a) $6/7$ b) $7/13$ c) $5/13$ d) $6/13$

Q93. The probability of a problem being solved by Rohan is $1/3$ and by Mohan is $1/4$. If they try independently, then what is the probability that the problem is solved?

- a) $3/5$ b) $1/20$ c) $2/7$ d) $5/12$

Q94. Probability of hitting a target by Aman is $4/5$, by Rohit is $3/4$, and by Sohail is $2/3$. Find the probability that none of them will hit the target.

- a) $1/60$ b) $3/5$ c) $1/12$ d) $2/3$

Q95. In a class, there are 15 boys and 10 girls. Five students are selected at random. What is the probability that 2 girls and 3 boys are selected?

- a) $\frac{221}{346}$ b) $\frac{211}{435}$ c) $\frac{195}{506}$ d) Can't be determined

Q96. A and B sit in a ring arrangement with 10 persons. What is the probability that A and B will sit together?

- a) $\frac{2}{11}$ b) $\frac{3}{11}$ c) $\frac{4}{11}$ d) $\frac{5}{11}$

Q97. Find the probability that in a random arrangement of the letters of the word 'PROBABILITY', the two B's do not come together.

- a) $\frac{1}{11}$ b) $\frac{2}{11}$ c) $\frac{9}{11}$ d) $\frac{4}{11}$

Q98. A five-digit number is formed with the digits 0, 1, 2, 4, and 6 without repetition. Find the chance that the number is divisible by 5.

- a) $\frac{3}{5}$ b) $\frac{1}{4}$ c) $\frac{3}{5}$ d) $\frac{2}{5}$

Q99. Three coins are tossed. What is the probability of the appearance of at most one head?

- a) $\frac{1}{2}$ b) $\frac{1}{3}$ c) $\frac{2}{3}$ d) $\frac{3}{4}$

Q100. Q. A box contains 25 articles out of which 5 are defective. 3 articles are to be delivered to a customer. What is the probability that he get one defective article?

- a) $\frac{19}{46}$ b) $\frac{25}{55}$ c) $\frac{44}{77}$ d) $\frac{22}{46}$