

**B.TECH. (SIXTH SEMESTER)
END SEMESTER EXAMINATION,
June 2022
CAREER SKILLS (XCS-600/601)- EC/ME/CE**

Time: 3 Hours

MAX.MARKS-100

Instructions for students:

1. This paper consists of 100 questions.
2. All questions are compulsory.
3. Each question carries equal marks.
4. Calculator is not allowed.
5. There is no negative marking.

PASSAGE 01

Let us go then, you and I, When the evening is spread out against the sky Like a patient etherized upon a table; Let us go, through certain half-deserted streets, The muttering retreats Of restless nights in one-night cheap hotels And sawdust restaurants with oyster-shells: Streets that follow like a tedious argument Of insidious intent To lead you to an overwhelming question. . . Oh, do not ask, "What is it?" Let us go and make our visit. In the room the women come and go Talking of Michelangelo.

The yellow fog that rubs its back upon the window-panes
The yellow smoke that rubs its muzzle on the window-panes Licked its tongue into the corners of the evening Lingered upon the pools that stand in drains, Let fall upon its back the soot that falls from chimneys, Slipped by the terrace, made a sudden leap, And seeing that it was a soft October night Curled once about the house, and fell asleep.

And indeed there will be time For the yellow smoke that slides along the street, Rubbing its back upon the window-panes; There will be time, there will be time To prepare a face to meet the faces that you meet; There will be time to murder and create, And time for all the works and days of hands That lift and drop a question on your plate; Time for you and time for me, And time yet for a hundred indecisions And for a hundred visions and revisions Before the taking of a toast and tea.

In the room the women come and go Talking of Michelangelo .And indeed there will be time To wonder, "Do I dare?" and, "Do I dare?"

To turn back and descend the stair, With a bald spot in the middle of my hair— [They will say: "How his hair is growing thin!"] My morning coat, my collar mounting firmly to the chin, My necktie rich and modest, but asserted by a simple pin— [They will say: "But how his arms and legs are thin!"] Do I dare Disturb the universe? In a minute there is time for decisions and revisions which a minute will reverse.

For I have known them all already, known them all; Have known the evenings, mornings, afternoons, I have measured out my life with coffee spoons; I know the voices dying with a dying fall Beneath the music from a farther room. So how should I presume?

Directions (Q 1-5): Based on the passage, answer the following questions and for each question, mark the correct option as your answer.

Q1. Which of the following meanings can be inferred from the lines "Do I dare Disturb the universe?"

- A. The author is referring to his bright future.
- B. The author fears that he will cause some major upheaval in world.
- C. The author refers to the 'status quo' in which he is in.
- D. The author expresses his feeling of being pinned against a wall.

Q2. What, according to the passage, is the reason for the author's optimism?

- A. That the women are talking of Michelangelo.
- B. That the yellow fog rubs upon the window-panes.
- C. That it was an October night.
- D. That there will be moments for everything.

Q3. In the first ten lines of the passage the author embodies which of the following with human attributes?

- A. toast
- B. restaurants
- C. intent
- D. retreats

Q4. In the passage, evening is compared to:

- A. The spreading sky
- B. The anesthetized patient
- C. Wicked people
- D. The deserted streets

Q5. Choose the correct meaning of the word 'insidious' used in the passage.

- A. surreptitious
- B. gullible
- C. innocuous
- D. undesigned

PASSAGE 02

Two recent publications offer different assessments of the career of the famous British nurse Florence Nightingale. A book by Anne Summers seeks to debunk the idealizations and present a reality at odds with Nightingale's heroic reputation. According to Summers Nightingale's importance during the Crimean War has been exaggerated: not until near the war's end did she become supervisor of the female nurses. Additionally, Summers writes that the contribution of the nurses to the relief of the wounded was at best marginal. The prevailing problems of military medicine were caused by army organizational practices, and the addition of a few nurses to the medical staff could be no more than symbolic. Nightingale's place in the national pantheon, Summers asserts, is largely due to the propagandistic efforts of contemporary newspaper reporters.

By contrast, the editors of a new volume of Nightingale's letters view Nightingale as a person who significantly influenced not only her own age but also subsequent generations. They highlight her ongoing efforts to reform sanitary conditions after the war. For example, when she learned that peacetime living conditions in British barracks were so horrible that the death rate of enlisted men far exceeded that of neighboring civilian populations, she succeeded in persuading the government to establish a Royal Commission on the Health of the Army. She used sums raised through public contributions to found a nurses' training hospital in London. Even in administrative matters, the editors assert her practical intelligence was formidable: as recently as 1947 the British Army's medical services were still using the cost-accounting system she had devised in the 1860's.

I believe that the evidence of her letters supports continued respect for Nightingale's brilliance and creativity. When counseling a village schoolmaster to encourage children to use their faculties of observation she sounds like a modern educator. Her insistence on classifying the problems of the needy in order to devise appropriate treatments is similar to the approach of modern social workers. In sum, although Nightingale may not have

achieved all other goals during the Crimean War, her breadth of vision and ability to realize ambitious projects have earned her an eminent place among the ranks of social pioneers.

Directions (Q.6-12): Based on the passage, answer the following questions and for each question, mark the correct option as your answer.

Q6. The passage is primarily concerned with evaluating

- A. the importance of Florence Nightingale's innovations in the field of nursing
- B. contrasting approaches to the writing of historical biography
- C. contradictory accounts of Florence Nightingale's historical significance
- D. the quality of health care in nineteenth-century England.

Q7. According to the passage, the editors of Nightingale's letters credit her with contributing to which of the following?

- A. Improvement of the survival rate for soldiers in British Army hospitals during the Crimean War
- B. The development of a nurses' training curriculum that was far in advance of its day
- C. The increase in the number of women doctors practicing in British Army hospitals
- D. The creation of an organization for monitoring the peacetime living conditions of British soldiers

Q8. The passage suggests which of the following about Nightingale's relationship with the British public of her day?

- A. She was highly respected, her projects receiving popular and governmental support.
- B. She encountered resistance both from the army establishment and the general public.
- C. She was supported by the working classes and opposed by the wealthier classes.
- D. She was supported by the military establishment but had to fight the governmental bureaucracy.

Q9. The passage suggests which of the following about sanitary conditions in Britain after the Crimean War?

- A. While not ideal, they were superior to those in other parts of the world.
- B. Compared with conditions before the war, they had deteriorated.
- C. They were more advanced in rural areas than in the urban centers.
- D. They were worse in military camps than in the neighboring civilian populations.

Q10. With which of the following statements regarding the differing interpretations of Nightingale's importance would the author most likely agree?

- A. Summers misunderstood both the importance of Nightingale's achievements during the Crimean War and her subsequent influence on British policy.
- B. The editors of Nightingale's letters made some valid points about her practical achievements but they still exaggerated her influence on subsequent generations.
- C. Although Summers' account of Nightingale's role in the Crimean War may be accurate, she ignored evidence of Nightingale's subsequent achievement that suggests that her reputation as an eminent social reformer is well deserved.
- D. The editors of Nightingale's letters mistakenly propagated the outdated idealization of Nightingale that only impedes attempts to arrive at a balanced assessment of her true role.

Q11. Which of the following is an assumption underlying the author's assessment of Nightingale's creativity?

- A. Educational philosophy in Nightingale's day did not normally emphasize developing children's ability to observe.
- B. Nightingale was the first to notice the poor living conditions in British military barracks in peacetime.

- C. No educator before Nightingale had thought to enlist the help of village schoolmasters in introducing new teaching techniques.
- D. Until Nightingale began her work, there was no concept of organized help for the needy in nineteenth-century Britain.

- Q12. In the last paragraph, the author is primarily concerned with
- A. summarizing the arguments about Nightingale presented in the first two paragraphs
 - B. refuting the view of Nightingale's career presented in the preceding paragraph
 - C. analyzing the weaknesses of the evidence presented elsewhere in the passage
 - D. citing evidence to support a view of Nightingale's career

DIRECTION (Qs. 13-22): Fill in the blanks with the most appropriate option to make the sentences meaningful

Q13. Lorelai is a _____ personality; drab but harmless and noble in her ideals.

- A. innocuous
- B. charlatan
- C. euphemism
- D. staid

Q14. As Maria is so _____, she will be able to finish the race in no time.

- A. bellicose
- B. complacent
- C. agile
- D. arbitrary

Q15. When the _____ odour of H₂S gas filled the room, I started throwing up.

- A. intrepid
- B. bland
- C. acrid
- D. aromatic

Q16. She hadn't eaten all day, and by the time she got home she was _____.

- A. blighted
- B. confutative
- C. ravenous
- D. ostentatious

Q17. The movie offended many of the parents of its younger viewers by including unnecessary _____ in the dialogue.

- A. vulgarity
- B. verbosity
- C. vocalizations
- D. Garishness

Q18. His neighbors found his _____ manner bossy and irritating, and they stopped inviting him to backyard barbeques.

- A. insentient
- B. magisterial
- C. reparatory
- D. restorative

Q19. Nair is always _____ about showing up for work because he feels that tardiness is a sign of irresponsibility

- A. legible
- B. tolerable
- C. punctual
- D. literal

Q20. Martha would _____ her little sister into an argument by teasing her and calling her names.

- A. advocate
- B. provoke
- C. perforate
- D. lament

Q21. As _____ beings we live each day conscious of our shortcomings and victories.

- A. sensational
- B. sentient
- C. sentimental
- D. static

Q22. The curious crowd gathered to watch the irate customer _____ about the poor service he received in the restaurant.

- A. antiquate
- B. trivialize
- C. rant
- D. placate

DIRECTIONS (Qs 23 -30) In the following questions ,some part of the sentence is underlined. Choose the best option which can replace the underlined part and mark that as your answer.

Q 23.The sense of elitism in the art world is deepened by the fact that the determination of the authenticity of long-lost works of reputed renaissance-era painters such as Da Vinci is usually not possible by just scientific analysis and forensics but need the expert 'eye' of the connoisseurs.

- A. painters such as Da Vinci is usually not possible by just scientific analysis and forensics but need
- B. painters like Da Vinci is usually not possible by just scientific analysis and forensics but also needs
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Q 24.In the U.S., German luxury brands have succeeded in getting people who might have once thought the cars were out of their league in buying and leasing some snazzy rides.

- A. has succeeded in getting people who might have once thought the cars were out of their league in buying and leasing some snazzy rides
- B. have succeeded in getting people who might have once thought the cars were out of their league to buy and lease some snazzy rides
- C. have succeeded in getting people who once might have thought the cars were out of their league to buy and lease some snazzy rides
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Q25.Reporting a 90 percent drop in net income during the second quarter, dragged down by restructuring charges and weak sales, the earnings guidance for the year was withdrawn by Best Buy Co.

- A. Reporting a 90 percent drop in net income during the second quarter, dragged down by restructuring charges and weak sales, the earnings guidance for the year was withdrawn by Best Buy Co.
- B. Best Buy Co. is reporting a 90 percent drop in net income during the second quarter, dragged down by restructuring charges and weak sales; the company also withdrew its earnings guidance for the year.
- C. Reporting a 90 percent drop in net income during the second quarter and dragged down by restructuring charges and weak sales, Best Buy Co. withdrew the earnings guidance for the year.
- D. Best Buy Co. has reported a 90 percent drop in net income during the second quarter, dragged down by restructuring charges and weak sales; the company has also withdrawn its earnings guidance for the year.

Q 26Recently, hopes that the European Central Bank will reach a deal to help Spain and Italy borrow at cheaper rates has nudged financial markets higher.

- A. Spain and Italy borrow at cheaper rates has nudged financial markets higher
- B. Spain and Italy borrow at cheaper rates have nudged financial markets to higher levels
- C. Spain and Italy borrow at cheaper rates has nudged financial markets to higher levels
- D. Spain and Italy borrow at cheaper rates nudged financial markets to higher levels

Q 27.In addition to being convenient, affordable, and versatile, legumes are also full of fiber, vitamins, key minerals and plant protein, plus their antioxidant levels rival berries.

- A. In addition to being convenient, affordable, and versatile, legumes are also full of fiber, vitamins, key minerals and plant protein, plus their antioxidant levels rival berries
- B. Legumes are not only convenient, affordable, and versatile but are also rich in fiber, vitamins, minerals, plant protein, and levels of antioxidants that rival those of berries

- C. No educator before Nightingale had thought to enlist the help of village schoolmasters in introducing new teaching techniques.
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between God and man itself cannot be safely entrusted to humans. This is my contention and it has time and again been proved in the course of history, not only to the detriment of the common people, but also to that of the priests, who, having no option open, may misuse their sacred office.

Q33. The tone in the paragraph is:

- A. Judgmental B. Regret C. Defensive D. Critical

(Paragraph for Q34) It is often said that God made man in his image; it is also true that man makes God in his own image. Both may be right; and you are perfectly right in thinking of your God as a super tiger. Also it may be true. What we must not forget is that He reveals himself in a mighty terrifying form which pervades the whole universe in every form of life and action. Remember also He is within every one of us and we derive our strength from Him.

Q34. Identify the tone of the author in the above paragraph.

- A. Didactic B. Condescending C. Argumentative D. Glorifying

(Paragraph for Q35) Some medical beast had revived tar-water in those days as a fine medicine, and Mrs. Joe always kept a supply of it in the cupboard; having a belief in its virtues correspondent to its nastiness. At the best of times, so much of this elixir was administered to me as a choice restorative that I was conscious of going about, smelling like a new fence.

Q35. Identify the tone of the author in the above paragraph.

- A. Commiserating B. Ironical C. Sarcastic D. Humorous

DIRECTIONS (Qs 36-50): Read the given questions carefully and identify the part which contains an error. Mark that part as your answer.

Q36. The number of Indians living in rural areas have decreased to unprecedented levels, (A)/ with most farmers saying that (B)/ their days in the country is numbered. (C)/ No error.(D)

Q37. Beaming satellite images from Jupiter, a planet (A)/ notoriously difficult to photograph, was a remarkable feat for a team of scientists, who, for the first (B)/ time ever, was able to depict parts of the planet's atmosphere that were hitherto unknown. (C)/ No error.(D)

Q38. The spread of the sea turtle to many reaches of the world's oceans (A)/ does not show much as signal that the sea turtle has become(B)/ a more robust species as it does the effects of climate change. (C)/ No error .(D)

Q39. Although blessed with a strong economy, everybody, (A)/ including the Home Minister and his family, Is giving up luxury (B)/ good in order to donate more money to charity. (C)/ No error.(D)

Q40. Careful examination of the pictures of the moon (A)/ revealsthat parts of the Moon's surface (B)/ ismarkedly similar to parts of the Earth's. (C) /No error.(D)

Q41. Of the two options, neither the system of appointing doctors not the process(A)/ of nominating doctors (B)/ is entirely satisfactory. (C)/ No error(D).

Q42. He would not be (A)/ so happy if he did not have(B)/ a very good life.(C)/ No error. (D)

Q43. If the weather lasted (A)/for one more week, the farmers will not be (B)/ able to bring in the harvest (C)/No error (D).

Q44. If he does n't meet a certain patient,(A)/ he would not understand that the hospitals in this city rob people without (B)/ giving any proper treatment.(C)No error (D)

Q45. If she finished her assignment in time, (A)/she will attend the function (B)/ and dance with you. (C)/No error.(D)

Q46. Had I known about this competition (A)/yesterday itself, (B)/I would have participated in it. (C)/ No error. (D)

Q47. If she performed in a similar manner(A)/ she would have definitely (B)/ win the gold medal (C)/No error. (D)

Q48. What if this change in agreement (A)/ was informed to us earlier (B)/ we could have given it a second thought.(C)No error. (D)

Q49. If I knew(A)/ he was in trouble,(B)/ I would do (C)/ something to bail him out(D).

Q50. If you did not message her (A)/ we would have never found (B)/ out what was happening(C)/No error. (D)

Q51. The probability that Zubeida will qualify the Gate is 0.9 and the probability that she will qualify the Cat is 0.9. what is the probability that she will qualify at least one of these exams?

- A. 0.9 B. 0.99 C. 0.999 D. 0.9999

Q52. One card is drawn from a pack of 52 cards. What is the probability that the card drawn is an ace card of red colour?

- A. 1/52 B. 1/26 C. 1/13 D. None of these

Q53. What is probability of getting a sum more than 10 if two fair dice were rolled simultaneously?

- A. 1/36 B. 1/18 C. 1/12D. 1/6

Q54. A Train crosses a pole in 10 seconds while moving with speed of 72 km/h. It crosses a man (on a platform) moving in the same direction in 20 sec. What is the speed of the man?

- A. 18 km/h B.54 km/h C. 72 km/h D. 36 km/h

Q55. Rajesh's office starts at 10:00 am. He normally starts at 6:00 am from his home. Today he was late by 1 hr to start from his home in the morning. By how much percentage more speed he must travel towards his office if he still wants to reach on time?

- A. 16.66% B. 20% C. 25% D. 33.33%

Q56. A boat running downstream covers a distance of 8 km in 2 hours while for covering the same distance upstream, it takes 4 hours. What is the speed of the boat in still water?

- A. 4 kmph B. 3 kmph C. 2 kmph D. Data Inadequate

Q57. Two taps A and B can fill a tank in 12 and 15 hours respectively. There is also an outlet pipe which can empty the completely filled pipe in 20 hours. A is open all the time and B and C are open for one hour each alternately. How much time is needed to fill the tank completely?

A. 11 hours

B. 7 hours

C. 15 hours

D. 5 hours

Q58. A can give B 5 points in a 40 point game and can give C 10 points in a 60 point game. In a 105 point game between B and C who will beat whom and by how many points?

A. C will beat B by 10 points

C. B will beat C by 5 points

B. C will beat B by 5 points

D. B will beat C by 10 points

Q59. A,B and C enter into a partnership. A invests 3 times as much as B while B invests 3 times as much as C invests. At the end of the year the profit earned is Rs.26,000. What is the share of C?

A. Rs. 2,000

B. Rs. 6,000

C. Rs. 18,000

D. Rs. 12,000

Q60. There are 11 boys and 9 girls in a class. How many total gifts were exchanged if each student gave gift to every other student?

A. 99

B. 182

C. 274

D. 380

Q61. The ratio of the number of boys and girls is 7:11 in a class. If there are 28 more girls than boys, what is the total number of students in the class?

A. 77

B. 216

C. 126

D. 84

Q62. In how many ways can the letters of the word MOBILE be arranged such that all the vowels always appear together?

A. 144

B. 128

C. 120

D. 720

Q63. In how many ways can 5 numbers be selected from the first 25 natural numbers such that exactly 3 of them are multiples of 3?

A. 25C5

B. 22C2

C. 17C2 + 8C3

D. 17C2 x 8C3

Q64. Ajay covered the distance between 2 cities P and Q such that he travelled half the distance with speed 20km/hr and the other half with speed 30 km/hr. What is Ajay's average speed for the entire journey?

A. 25 km/hr

B. 24 km/hr

C. 26 km/hr

D. 27 km/hr

Q65. If 6 Men and 14 women can do a job in 12 days, in how many days can 9 men and 21 Women do the same job?

A. 10 days

B. 8 days

C. 15 days

D. 9 days

Q66. Two trains start from A and B respectively and travel toward each other at a speed of 60 kmph and 45 kmph respectively. When they meet, the 1st train has travelled 90 km more than the second train. What is the distance between A and B?

A. 525 km

B. 630 km

C. 735 km

D. 840 km

Q67. A can do 3/4th of a work in 36 days. Working at half his normal efficiency, in how many days can A finish the work alone?

A. 48 days

B. 72 days

C. 96 days

D. None of These

Q68. 12 men can complete a work in 9 days. How many days are required to complete 50% of the work by 18 men?

A. 3 days

B. 4 days

C. 5 days

D. 6 days

Q69. A person covers a journey in 3 parts. One third of the journey is covered at 20 km/h, half of the remaining distance at 30 km/h and the remaining distance is travelled at 40 km/h. Find the average speed of the journey?

- A. 40 km/h B. $360/11$ km/h C. 35 km/h D. $360/13$ km/h

Q70. In how many ways can 8 boys and 5 girls be arranged in a straight line such that the boys and girls are alternate?

- A. $8! \times 5!$ B. $2 \times 8! \times 5!$ C. $8! \times 9C5$ D. $8! \times 9P5$

Q71. From a pack of 52 cards, two cards are drawn together at random. What is the probability of both the cards being kings?

- A. $1/221$ B. $1/26$ C. $1/169$ D. $2/169$

Q72. Akshay speaks truth in $2/3$ cases and Sunil lies in $1/4$ cases. What is the probability that both Akshay and Sunil will contradict each other in stating a fact?

- A. $1/3$ B. $1/6$ C. $5/12$ D. $13/24$

Q73. A alone can do a work in 5 days while B's efficiency is 25% of the efficiency of A. If they both work on alternate days, when will the work get completed?

- A. 12 days B. 8 days C. 10 days D. Cannot be Determined

Q74. Pipe A can fill the tank alone in 10 hours while pipe B can empty it in 6 hours. If both the pipes are opened, how long will it take to empty or fill the tank completely if it was initially $2/5$ th full?

- A. 6 hours to empty B. 6 hours to fill C. 9 hours to empty D. 9 hours to fill

Q75. Manoj can do a work in 24 days, Vikram in 9 days and Tarun in 12 days. Manoj and Vikram start the work but leave after 5 days. The remaining work will be done by Manoj in

- A. 6 days B. 5 days C. 4 days D. 3 days

Q76. 24 engineers can complete a work in 18 days. After they have worked for 10 days, 16 engineers left the work while 8 engineers joined them. How many days will they take to complete the remaining work?

- A. 22 days B. 16 days C. 12 days D. 10 days

Q77. If 30 Men working for 9 hours per day can finish a work in 16 days, in how many days can 27 Men working for 10 hours per day do a work which is 100% more than the first one?

- A. 16 days B. 24 days C. 32 days D. 40 days

Q78. The respective time taken by Ajay and Vikas for covering same distance is in ratio 3:5. What is the ratio of their respective speeds?

- A. 3:5 B. 5:3 C. 7:9 D. cannot be determined

Q79. Reena is 50% faster than Dipali and 20% faster than Garima. By what percentage is Garima faster than Dipali?

- A. 10% B. 30% C. 5% D. 25%

Q80. Rakesh starts from city A towards B and at the same time Arun starts from city B towards A. Their speeds are in the ratio 9:7. If they meet exactly 1.5 hrs after they start, which of the following cannot be the distance AB?

- A. 320 kms B. 240 kms C. 192 kms D. 216 kms.

Q81. There are 8 parallel horizontal lines and 7 parallel vertical lines in a plane. What is the total number of rectangles formed by these horizontal and vertical lines?

- A. $8C2 + 7C2$ B. $8C2 \times 7C2$ C. $15C2$ D. None of these

Q82. What is the probability of arranging letters of the word LETTER such that L and R are always together?

- A. $1/3$ B. $1/4$ C. $2/5$ D. $1/6$

Q83. A student appears for an exam in which he has to attempt 7 questions in total. There are 2 sections given. Section 1 has 6 questions in which 2 particular questions have to be definitely attempted. Section 2 has 6 questions. In how many ways can the student attempt the paper?

- A. $6C2 \times 6C5$ B. $6C2 + 6C5$ C. $10C5$ D. $5C2$

Q84. Neeraj had 1 rupee, 2 rupee and 5 rupee coins in the ratio $7 : 5 : 3$ respectively. If he had total 225 number of coins, what is the value of all 5 rupee coins he had?

- A. Rs. 105 B. Rs. 150 C. Rs. 225 D. Rs. 400

Q85. Three fair coins were tossed simultaneously. What is the probability of getting exactly 1 tail?

- A. $1/8$ B. $3/8$ C. $5/8$ D. $7/8$

Q86. In how many ways can 6 friends be seated around a circular table?

- A. 720 B. 120 C. 144 D. 108

Q87. Salman can do a work in 12 days while Arshad can do the work alone in 15 days. In how many days can the work get completed if they work simultaneously?

- A. 3 days B. 4 days C. 5 days D. 7 days

Q88. How many 3 digit even numbers can be formed using the digits 0, 1, 2, 3 and 4 if repetition of digits is not allowed?

- A. 30 B. 48 C. 60 D. 72

Q89. Rs. 750 is divided between P, Q and R such that if Rs. 20, 30 and 50 are subtracted from their shares, the remaining amount with each one in that order is in the ratio $1/2 : 1/3 : 1/4$. Find the difference between the original shares of P and R?

- A. Rs. 140 B. Rs. 120 C. Rs. 180 D. Rs. 200

Q90. Sarthak starts from a point at 11 am at a speed of 40 Km/h. Kishore started from the same point at a speed of 60 km/h at 2:00 pm. How far from the starting point will Kishore overtake Sarthak?

- A. 120 km B. 240 km C. 360 km D. 480 km

Q91. If $a/b = 7/3$, $b/c = 5/7$ and $c/d = 3/11$ then what is the value of d/a ?

- A. $5/7$ B. $3/7$ C. $9/11$ D. $5/11$

Q92. Two numbers A and B are in the ratio 3:5. If 9 is subtracted from each, the new numbers are in the ratio 12:23. Find the sum of numbers A and B?

- A. 88 B. 35 C. 49 D. 17

Q93. The odds against the team RCB winning the IPL 2023 is 11:3. What is the probability of RCB winning the IPL 2023?

A. 3/11

B. 3/14

C. 8/11

D. 4/7

Q94. The probability that India wins a hockey match against Australia is 0.6. Both played 4 games which are independent to each other. What is the probability that India will win exactly 3 games?

A. 3/125

B. 3/625

C. 108/125

D. 216/625

Q95. A two-digit natural number less than 50 is to be chosen randomly. What is the probability that this chosen number is a multiple of 3?

A. 13/40

B. 1/3

C. 11/27

D. 8/9

Q96. A Train travelling with speed of 72 km/h overtakes another train of same length travelling in the same direction with speed 36 km/h in 40 seconds. In how much time will the Train cross a Platform 160 m long?

A. 20 sec

B. 22 sec

C. 18 sec

D. 16 sec

Q97. The team of 5 students is to be formed out of 7 boys and 5 girls for the upcoming college fest. In how many ways this can be done If at least 3 girls are included?

A. 982

B. 246

C. 492 D. 792

Q98. Samantha can do a work in 30 days and Archanan can do the same work in 40 days. In how many days the work is completed if they work on alternate days?

A. 35 days

B. 18 days

C. 17 days

D. 43 days

Q99. Arvind can do a work in 15 days while Brijesh can destroy the complete work in 30 days. If Arvind and Brijesh are working simultaneously, in how many days the work gets completed?

A. 20 days

B. 30 days

C. 60 days

D. 90 days

Q100. The speed of a boat is 6 km/h and the speed of river stream is 1 km/h. How much distance it will cover in 3 hours while moving upstream?

A. 18 km

B. 4.5 km

C. 10.5 km

D. 15 km