

**END SEMESTER EXAMINATION, June 2024**  
**B. TECH FOURTH SEMESTER (ALL BRANCHES)**  
**CAREER SKILLS (XCS 400/401)**

TIME: 3 HRS.  
 M.M. 100

**INSTRUCTIONS FOR STUDENTS:**

1. This question paper consists of 100 questions (50 Verbal Ability 50 Logical Reasoning).
2. Each question is of 1 mark.
3. Use of calculator is not permitted.
4. There is no negative marking for an incorrect answer.
5. It is mandatory to write the correct SET in your OMR sheet.

**Direction (Q1-Q10):** In the following questions, choose the option which has the same relationship with the word before the question mark as the first two words have with each other.

Q1. Pen: Paper :: Brush: ?

- A. Canvas    B. Color    C. Palette    D. Notebook

Q2. Tremor: Earthquake :: Wind: ?

- A. Hurricane    B. Tsunami    C. Calamity    D. Disaster

Q3. Marathon: Race :: Sonnet: ?

- A. Preface    B. Poem    C. Phrase    D. Prose

Q4. Blend: Mix :: Abode: ?

- A. Detach    B. Abide    C. Dwelling    D. Depart

Q5. Flow: River:: Stagnant: ?

- A. Canal    B. Stream    C. Rain    D. Pool

Q6. Ecology: Environment :: Cytology: ?

- A. Fossils    B. History    C. Cells    D. Hormones

Q7. Major: Lieutenant :: Squadron Leader: ?

- A. Pilot Officer    B. Flying Officer    C. Flying Attendant    D. Air Marshal

Q8. Fox: Cunning :: Rabbit: ?

- A. Ferocious    B. Dangerous    C. Courageous    D. Timid

Q9. Matricide: Mother :: Filicide: ?

- A. Human    B. Daughter/Son    C. Father    D. Apes

Q10. Secretive: Reticent :: Snide: ?

- A. Lawlessness    B. Hidden    C. Taciturn    D. Derogatory

**Direction (Q11-Q20):** In each of following questions, four words have been given, of which three are alike in some way and one is different. Find the odd one out.

Q11. A. Rude    B. Insolent    C. Courteous    D. Ungrateful

Q12. A. Cytology    B. Zoology    C. Anthropology    D. Misogyny

Q13. A. Censorship    B. Disseminate    C. Broadcast    D. Propagate

Q14. A. Bicker    B. Wrangle    C. Inveigle    D. Quarrel

Q15. A. Manipur    B. Sikkim    C. Lakshadweep    D. Maharashtra

- Q16. A. Irate                      B. Angry                      C. Furious                      D. Pleased
- Q17. A. Connoisseur              B. Maestro                      C. Whiz                      D. Amateur
- Q18. A. Cerebrum              B. Cerebellum                      C. Medulla Oblongata                      D. Pericardium
- Q19. A. Axe                      B. Shovel                      C. Sword                      D. Saw
- Q20. A. Autocracy              B. Diplomacy                      C. Bureaucracy                      D. Theocracy

**Direction (Q21-Q30): Applying the rules of parallelism, choose the option which replaces the underlined part to make the sentence meaningful and correct.**

Q21. To protect his voice, Frank will not drink cold water, speak loudly, or refused to eat outside food.

- A. refuses to eat outside food  
B. won't eat outside food  
C. eat outside food  
D. None of the above

Q22. Not only did Raju despise the way Arya dressed, but also he hated finding her clothes strewn all over the bed.

- A. but also hated  
B. but also hating  
C. but he also hated  
D. but he has also hated

Q23. The speech was clear, funny and it taught the audience a lot.

- A. and educational  
B. and it has taught the audience a lot  
C. and it is teaching the audience a lot  
D. None of the above

Q24. His story was neither confusing nor did it bore me.

- A. His story was neither confusing nor did it bore me.  
B. His story was neither confusing nor boring.  
C. His story was neither confused or bored.  
D. None of the above.

Q25. I do not know who you are, what do you want or the reason you are here.

- A. I do not know who are you, what you want or the reason you are here.  
B. I do not know who you are, what you want or why you are here.  
C. I do not know who you are, what you want or why you are here.  
D. I do not know who are you, what do you want or why you are here.

Q26. Mr. Eagleton reads mysteries, listens to classical music, and he watches television.

- A. Mr. Eagleton reads mysteries, listens to classical music, and watches television.  
B. Mr. Eagleton reads mysteries, he listens to classical music, and watches television.  
C. Mr. Eagleton reads mysteries, he listens to classical music, and he watches television.  
D. Mr. Eagleton reads mysteries, listens to classical music, and also he watches television.

Q27. The movie starts with a boy stepping into the room and is scared.

- A. The movie starts with a boy stepping into the room and scared.  
B. The movie starts with a boy stepping into the room and getting scared.  
C. The movie starts with a boy stepping into the room and gets scared.  
D. The movie starts with a boy stepped into the room and scared.



Q28. The gang stepped into the house patiently and with silence.

- A. The gang stepped into the house patiently and silently.
- B. The gang stepped into the house with patience and with silence.
- C. The gang stepped into the house with patience and silently.
- D. The gang stepped into the house patiently and with silence.

Q29. The audience cheered, laughed, and was crying too.

- A. The audience cheered, laughed, and cried too.
- B. The audience cheered, laughed, and was crying too.
- C. The audience cheered, was laughing and crying too.
- D. The audience was cheering, laughing and cried too.

Q30. He decide to quit his job and travelling the world.

- A. He decided quitting his job and travel the world.
- B. He decided to quit his job and travel the world.
- C. He decided quit his job and travelling the world.
- D. He decided to quit his job and to travel the world.

**Direction (Q31-Q35): Choose the sentence that appears to be in the correct form of tense.**

Q31. A. When Bill Gates founded Microsoft, he was only 20 years old. He had already written his first computer program.

- B. When Bill Gates found Microsoft, Bill Gates was only 20 years old. He wrote his first computer program.
- C. When Bill Gates founded Microsoft, he was only 20 years old. He has written his first computer program.
- D. When Bill Gates founded Microsoft, Bill Gates was only 20 years old. He was writing his first computer program.

Q32. A. My car broke down when I was driving home from work. I would have fix it if I knew what was wrong.

- B. My car breaks down when I drove home from work. I would have fixed it if I had known what was wrong.
- C. My car was broken down when I was driving home from work. I would fix it if I knew what went wrong.
- D. My car breaks down when I was driving home from work. I would fix it if I knew what went wrong.

Q33. A. She had fallen asleep before the clock strikes 8.

- B. She fells asleep before the clock had struck 8.
- C. She had fallen asleep before the clock struck 8.
- D. She had fallen asleep before the clock has stricken 8.

Q34. A. I used to ski when I was at the University but I broke a leg five years ago and since then I have not skied any more.

- B. I use to ski when I was at the University but I had broken a leg five years ago and since then I have not skied any more.
- C. I have used to ski when I was at the University but I broke a leg five years ago and since then I have not skied any more.
- D. I used to ski when I was at the University but I have broke a leg five years ago and since then I have not skied any more.

Q35. A. You have been doing your homework for two hours. Have not you finished yet?

- B. You have been doing your homework since two hours. Have not you finish yet?
- C. You had been doing your homework for two hours. Have you not finished yet?
- D. You have been doing your homework for two hours. Had not you finished yet?

**Direction (Q36-Q40): The given sentence is in active voice. From the given options, choose the one which best expresses the given sentence in passive voice.**

Q36. His mother made a stew the day before.

- A. A stew was made by his mother the day before.
- B. A stew made by his mother the day before.

- C. A stew is made by his mother the day before.  
D. A stew has been made by his mother the day before.

- Q37. My father had already sent the parcel.  
A. The parcel has already been sent by my father.  
B. The parcel had already been sent by my father.  
C. The parcel was sent by my father.  
D. The parcel was being sent by my father.

- Q38. A friend of mine is repairing the fuse.  
A. The fuse is being repaired by a friend of mine.  
B. The fuse has been repaired by a friend of mine.  
C. The fuse had been repaired by a friend of mine.  
D. The fuse have been repaired by a friend of mine.

- Q39. You should post this letter.  
A. This letter had to be posted by you.  
B. This letter needs to be posted by you.  
C. This letter should be posted by you.  
D. This letter has to be posted by you.

- Q40. Who has done this?  
A. By whom has this been done?  
B. By whom had this been done?  
C. By who has done this done?  
D. By whom have this been done?

**Direction (Q41-Q45): The given sentence is in passive voice. From the given options, choose the one which best expresses the given sentence in active voice.**

- Q41. Suhana will have taken the medicine  
A. The medicine took by Suhana.  
B. The medicine will have been taken by Suhana.  
C. Suhana would have taken the medicine.  
D. The medicine will be taken by Suhana.
- Q42. The patient was examined by the doctor.  
A. The doctor examined the patient.  
B. The doctor was examining the patient.  
C. The doctor had examined the patient.  
D. The patient was being examined by the doctor.
- Q43. He was made captain by his members of the team  
A. The members of the team made the man captain.  
B. His team members made him the captain.  
C. The members of the team made him their captain.  
D. He was the captain to his team members.
- Q44. Show kindness to your parents.  
A. One must show kindness to one's parents.  
B. Kindness should be shown to one's parents.  
C. One's parents must be shown kindness.  
D. Kindness must be shown to parents.

- Q45. I am being helped by my sister.  
A. My sister is helping me.  
B. My sister will be helping me.



- C. I am helped by my sister.
- D. My sister has helped me.

**Direction (Q46-Q50): Read through the text and choose the correct answer for each question.**

Post-traumatic stress disorder (PTSD) is a severe anxiety disorder that affects millions of people around the world. Individuals can develop PTSD after experiencing any event that results in psychological trauma. Symptoms of PTSD involve flashbacks to the traumatic event, nightmares, obsessive behaviour, anger, insomnia, difficulty concentrating, and hypervigilance. Individuals who suffer from PTSD can experience significant difficulties in social relationships, have lower self-esteem, and have trouble maintaining employment. People with PTSD experience a higher risk of committing suicide, developing a drug addiction, and suffering from alcoholism. Although PTSD can affect any individual, military veterans are especially susceptible to this debilitating affliction. Furthermore, within this population, women are more than twice as likely as men to develop PTSD. Studies have also shown that former service women who do develop PTSD experience more severe symptoms than their male counterparts. Recent changes made by the United States Department of Veterans Affairs have improved treatment options for female veterans living with PTSD, but there is still more that needs to be done.

Although studies investigating precisely why women are more likely than men to experience PTSD have not yet been completed, some experts have theorized that low unit cohesion is a major factor. Unit cohesion, defined as the mutual bonds of friendship and support among members of a military unit, is thought to be helpful in reducing the incidence of developing PTSD. According to recent surveys compiled by U.S. Army researchers, increased unit cohesion emerged as the most important factor determining whether soldiers developed suicidal thoughts. Women are more likely than men to experience low unit cohesion for a variety of reasons. One of the most obvious factors is the relative paucity of females in the military; currently, women make up only 20% of the armed forces. Pervasive male prejudice against women is another factor that can diminish unit cohesion for female soldiers. Because women are less likely than men to experience unit cohesion while serving in the military, women are less likely to develop the social support structures that will help prevent them from developing PTSD, depression, or other serious mental health problems.

Another issue at play is the stigma amongst military personnel that asking for help for mental health issues makes one "weak." A recent Department of Defense study of returning combat troops shows that only 1 in 6 veterans acknowledged themselves to be suffering from symptoms of PTSD, and 3 out of 5 veterans were convinced that their comrades and commanding officers would lose confidence in them if they sought treatment for mental health issues. For women, this hesitation to self-identify as a sufferer of PTSD could be even greater; historically, female soldiers have struggled to be counted as equals to men on the battlefield. Women, stereotypically considered to possess less emotional fortitude than men, may be unwilling to admit that they are suffering from PTSD lest they appear to conform to this stereotype. Unfortunately for those who do not seek help, when PTSD goes untreated it is very likely to worsen over time.

Another challenge is that until very recently, treatment for PTSD has been more difficult for women than men to obtain. Before rule changes were enacted in 2010, only veterans who encountered direct combat experience qualified to receive disability payments for PTSD. Because very few women are placed on the front lines, very few were eligible to receive free treatment for PTSD. However, recent regulation changes have ended these stipulations, allowing women who serve in any capacity to be eligible for benefits.

Even if female veterans are eligible for these benefits, the quality of the care a wartime PTSD sufferer receives can vary widely. The United States Department of Veterans Affairs (VA) pays disability benefits to service men and women who have been diagnosed with PTSD and provides these individuals with free health care. But while mental health counselling that comes directly from VA doctors is completely free to veterans, there are often long waiting lists for those who need to be evaluated or treated. Therapy provided by non-VA professionals may not be covered by health insurance. Mental health professionals who have been specially trained to treat wartime PTSD is often difficult for those not living near major urban centres.

Perhaps the biggest impediment to achieving quality treatment for women suffering from wartime PTSD is a lack of research. While both the VA and independent agencies have completed hundreds of studies researching the prevention of and treatment for PTSD amongst general military populations, there have been no studies completed that solely target women. Before adequate care can be provided, there must be greater



understanding about the root causes of this issue as it affects women specifically. On both the research level and the policy level, more must be done to help the women who have sacrificed so much for their country.

Q46. The primary purpose of the passage is to

- A. educate readers about the problem of insufficient treatment available for female veterans.
- B. persuade government officials to increase funding for PTSD treatment centres in non-urban areas.
- C. denounce the United States military for the way they have handled veterans' mental health problems.
- D. inform readers about the likely warning signs of PTSD among military veterans.

Q47. According to the passage, all the following are reasons why females develop PTSD more frequently than males except

- A. males tend to develop stronger social bonds during their time of service than females do.
- B. women can face negative stereotypes in the military.
- C. women are more likely than men to suffer from depression.
- D. males in the military greatly outnumber females.

Q48. As used in paragraph 2, which is the best antonym for **paucity**?

- A. Certainty
- B. Abundance
- C. Deference
- D. Contentment

Q49. Based on information in the passage, which of the following statements best reflects the author's opinion about the mental health care provided for female veterans?

- A. Although the VA has not done nearly enough, state, and independent agencies have made up for government deficiencies.
- B. The government has done almost nothing to help; the way we treat our female veterans is a national disgrace.
- C. The VA and other government agencies have attempted to provide mental health care for female veterans, but most of them refuse to seek treatment.
- D. The amount of care provided has improved over the past few years, but it is still insufficient.

Q50. Based on information in the passage, it can be inferred that the author is most likely someone who

- A. believes that advocating for others can lead to change.
- B. is a mental health care professional.
- C. has conducted studies on PTSD among veterans.
- D. believes that advocating for others can lead to change.

Q51. A clock is set right at 1 pm. If it gains one minute an hour, what is the true time when the clock indicates 6 pm the same day?

- A. 5(7/61) min past 5    B. 55(8/61) min past 5    C. 55(8/61) min past 5    D. 56(5/61) min past 5

Q52. When the time is 6:32, then what is the angle b/w the hour hand & the minute hand of a clock?

- A. 2°    B. 4°    C. 8°    D. 12°

Q53. A watch which gains 5 seconds in 3 minutes was set right at 7:00 a.m. In the afternoon of the same day, when the watch indicated quarter past 4 o'clock, the true time is

- A. 4:00 p.m.    B. 4:08 p.m.    C. 3:58 p.m.    D. None of these

Q54. A clock shows 08:00. When it is 14:00, by what degree the hour hand rotates?

- A. 145°    B. 160°    C. 180°    D. 175°

Q55. On what dates of April, 2001 did Wednesday fall?

- A. 1<sup>st</sup>, 8<sup>th</sup>, 15<sup>th</sup>, 22<sup>nd</sup>, 29<sup>th</sup>    B. 2<sup>nd</sup>, 9<sup>th</sup>, 16<sup>th</sup>, 23<sup>rd</sup>, 30<sup>th</sup>    C. 3<sup>rd</sup>, 10<sup>th</sup>, 17<sup>th</sup>, 24<sup>th</sup>    D. 4<sup>th</sup>, 11<sup>th</sup>, 18<sup>th</sup>, 25<sup>th</sup>

Q56. What will be the day of the week on 15<sup>th</sup> August, 2010?

- A. Sunday    B. Monday    C. Tuesday    D. Friday

Q57. Today is Wednesday, what will be the day after 91 days?

- A. Monday      B. Tuesday      C. Sunday      D. Wednesday

Q58. Today is career skills exam which falls on Sunday, the next career skills exam will take place after a fortnight. On which day the next career skills exam will take place?

- A. Monday      B. Tuesday      C. Sunday      D. Wednesday

**Direction(Q59-Q68):** In each of the following questions, a few statements have been given. Analyse the given statements and answer whether the data given in the statements are sufficient to answer the question or not.

Q59. How many students are there between Ram and Aditya a row of 40 students ?

I. Ram is 7th from the left end, Aditya is 17th from the right end.

II. Ram is 6 places away from Jeni, who is 20th from the left end.

- A. If data in the statement I alone is sufficient to answer the question.  
B. If data in the statement II alone is sufficient to answer the question.  
C. If data either in the statement I alone or statement II alone are sufficient to answer the question.  
D. If data given in both I & II together are not sufficient to answer the question.

Q60. Madan's flat is on which floor of 5 floor apartments ?

I. Harish flat, which is adjacent to Madan, is exactly below Karan's flat which is on fifth floor

II. Madan's flat is exactly above Gopal's flat, whose flat is exactly above Nitin's first floor flat.

- A. If data in the statement I alone is sufficient to answer the question.  
B. If data in the statement II alone is sufficient to answer the question.  
C. If data either in the statement I alone or statement II alone are sufficient to answer the question.  
D. If data in both statements I & II together are necessary to answer the question.

Q61. On which day of the week did Raman leave for Dubai ?

I. Raman didn't leave for Dubai during the weekend.

II. Raman's brother left for Dubai on Friday 2 days after Raman left for Dubai

- A. If data in the statement I alone is sufficient to answer the question.  
B. If data in the statement II alone is sufficient to answer the question.  
C. If data either in the statement I alone or statement II alone are sufficient to answer the question.  
D. If data given in both I & II together are not sufficient to answer the question.

Q62. What is the code for 'is' in the code language?

Statements:

I. In the code language, 'shi tu ke' means 'pen is blue'.

II. In the same code language, 'ke si re' means 'this is wonderful'.

- A. I alone is sufficient while II alone is not sufficient  
B. II alone is sufficient while I alone is not sufficient  
C. Neither I nor II is sufficient  
D. Statement I and II together are sufficient to answer.

Q63. Which direction is Anshu facing now ?

Statements:

I. If Anshu turns to her right and again turns to her right, she will be facing North.

II. If Anshu walks some distance and turns left and again walks some distance, then her face will be towards left of Abhinav who is facing South.

- A. I alone is sufficient while II alone is not sufficient  
B. II alone is sufficient while I alone is not sufficient  
C. Either statement I alone or II alone is sufficient to answer.  
D. Neither I nor II is sufficient.

Q64. Among Neelam, Geetika, Sakshi, Nupur and Sulekha, who came last for the programme ?

Statements:

I. Neelam came after Geetika but not after Sulekha.

II. Nupur came after Sulekha but not after Sakshi.

- A. I alone is sufficient while II alone is not sufficient



- B. II alone is sufficient while I alone is not sufficient  
 C. Neither I nor II is sufficient  
 D. Statement I and II together are sufficient to answer.

Q65. Question: How is Sulekha related to Nandini ?

Statements:

- I. Sulekha's husband is the only son of Nandini's mother.  
 II. Sulekha's brother and Nandini's husband are cousins.  
 A. I alone is sufficient while II alone is not sufficient  
 B. II alone is sufficient while I alone is not sufficient  
 C. Either statement I alone or II alone is sufficient to answer.  
 D. Statement I and II together are sufficient to answer.

Q66. How many students in a class play football ?

Statements:

- I. Only boys play football.  
 II. There are forty boys and thirty girls in the class.  
 A. I alone is sufficient while II alone is not sufficient  
 B. II alone is sufficient while I alone is not sufficient  
 C. Neither I nor II is sufficient  
 D. Statement I and II together are sufficient to answer.

Q67. On a T.V. channel, four serials A, B, C and D were screened, one on each day, on four consecutive days but not necessarily in that order. On which day was the serial C screened ?

Statements:

- I. The first serial was screened on 23rd, Tuesday and was followed by serial D.  
 II. Serial A was not screened on 25th and one serial was screened between serials A and B.  
 A. I alone is sufficient while II alone is not sufficient  
 B. II alone is sufficient while I alone is not sufficient  
 C. Neither I nor II is sufficient  
 D. Statement I and II together are sufficient to answer.

Q68. How is Tanya related to the man in the photograph ?

Statements:

- I. Man in the photograph is the only son of Tanya's grandfather.  
 II. The man in the photograph has no brothers or sisters and his father is Tanya's grandfather.  
 A. I alone is sufficient while II alone is not sufficient  
 B. II alone is sufficient while I alone is not sufficient  
 C. Either statement I alone or II alone is sufficient to answer.  
 D. Statement I and II together are sufficient to answer.

**Direction (Q69-Q71):** In questions 69, 70 & 71, two statements are given followed by two conclusions numbered I and II. Consider the two given statements to be true even if they seem to be at variance from commonly known facts and then choose the correct option.

Q69. Statements:

1. All Bags are Mobiles
2. Some Mobiles are not chargers

Conclusions:

- I. No bag is charger
  - II. Some bags are chargers
- A. If only conclusion I follows. B. If only conclusion II follows. C. If either conclusion I or II follows D. If neither conclusion I nor II follows

Q70. Statements:

1. Some Books are not Tables
2. No Table is Truck

Conclusions:



- I. Some trucks are books  
 II. Some books are not trucks

A.If only conclusion I follows. B.If only conclusion II follows. C.If both conclusion I and II follows D. If neither conclusion I nor II follows

Q71. Statements:

1. Some Cars are Cycles  
 2. All cycles are Trains

Conclusions:

- I. Some trains are cars  
 II. All cars are trains

A.If only conclusion I follows. B.If only conclusion II follows. C.If both conclusion I and II follows D.If neither conclusion I nor II follows

**Direction (Q72-Q74):** Three statements are given which are followed by three conclusions numbered I, II and III. Consider the given statements to be true even if they seem to be at variance from commonly known facts and then choose the correct option.

Q72. Statements:

1. No Black is Green  
 2. No Green is Brown  
 3. Some Brown is Pink

Conclusions:

- I. No Brown is Black  
 II. Some Green is Pink  
 III. Some Black is not Pink

A. Only I follow B. Only II follows C. I and III follow D. None of these follow

Q73. Statements:

1. All engineers are doctors  
 2. Some doctors are lawyers  
 3. All lawyers are managers

Conclusions:

- I. Some engineers are managers  
 II. Some managers are doctors  
 III. All managers are engineers

A. Only I follow B. Only II follows C. I and III follow D. None of these follow

Q74. Statements:

1. Some rats are cats.  
 2. Some cats are dogs.  
 3. No dog is cow.

Conclusions:

- I. No cow is cat.  
 II. No dog is rat.  
 III. Some cats are rats.

A. Only (I) follow B. Only (I) and (II) follow C. Only (I) and (III) follow D. Only (III) follow

**Direction (Q75-Q76):** Three statements are given which are followed by four conclusions numbered I, II, III and IV. Consider the given statements to be true even if they seem to be at variance from commonly known facts and then choose the correct option.

Q75. Statements:

1. Some Cats are Rats.  
 2. All bats are tables.  
 3. All Rats are bats.

Conclusion: I. Some Cats are bats  
 II. All bats are rats

III. All tables are cats

IV. All bats are cats

A. Only I &amp; II follow

B. Only II follows

C. Only I &amp; IV follow

D. None follow

Q76. Statements:

1. Some ships are boats.

2. All boats are submarines.

3. Some submarines are yatches.

Conclusion:

I. Some yatches are boats.

II. Some submarines are boats.

III. Some submarines are ships.

IV. Some yatches are ships

A. All follow

B. Only II and III follow

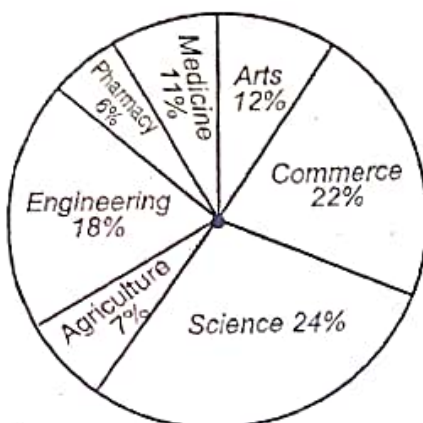
C. Only III follows

D. Only IV follows

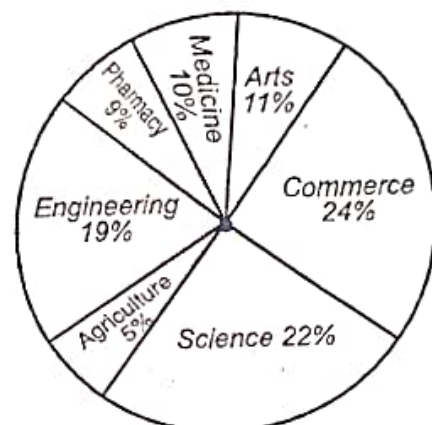
Direction (Q77-Q80): Study the following pie-diagrams carefully to answer these questions

Number of students studying in different faculties in the years 2008 and 2009 from State X

Year-2008  
Total students = 35000



Year-2009  
Total students = 40000



Q77. In which of the following faculties the percentage increase in the number of students was minimum from 2008 to 2009?

- A. Science    B. Commerce    C. Arts    D. Medicine

Q78. In the year 2008, the number of students studying Arts and Commerce together is what per cent of the number of studying these subject together in 2009?

- A. 76    B. 79    C. 82    D. 85

Q79. What is the ratio between the number of student studying Pharmacy in the years 2008 and 2009 respectively?

- A. 4 : 3    B. 5 : 7    C. 7 : 12    D. 8 : 13

Q80. In which faculty there was decrease in the number of students from 2008 to 2009?

- A. Arts    B. Agriculture    C. Pharmacy    D. None of these



**Direction (Q81-84):**

The tables below give the data for the vehicles sold in India in the month of December 2019. While the first table is the total vehicles sold including exports the second table gives the number of vehicles sold by the makers excluding exports. For questions 81-84 assume that these were the only makers who sold vehicles in the market in December 2018 and December 2019 respectively.

**India - New Vehicle Sales****By type (Including Exports)**

Type	Dec. 2019	Dec. 2018
Passenger Vehicles	235,786	238,692
Commercial Vehicles	66,622	75,984
<b>Grand Total</b>	<b>302,408</b>	<b>314,676</b>

**India - New Vehicle Sales by Makers (excluding export sales)**

Make	Dec. 2019	Dec. 2018
Maruti Suzuki	124,375	121,479
Tata	44,254	50,440
Mahindra & Mahindra	30,870	30,628
Hyundai	37,953	42,093
Toyota	6,544	11,836

Answer the questions based on the following information:

Q81: What is the total number of vehicles exported in December 2019?

- a. 45,275      b. 58,412      c. 62,344      d. cannot be determined

Q82: What percentage of the total vehicles sold in December 2019 were commercial vehicles (approximately)?

- a. 25%      b. 27%      c. 19%      d. 22%

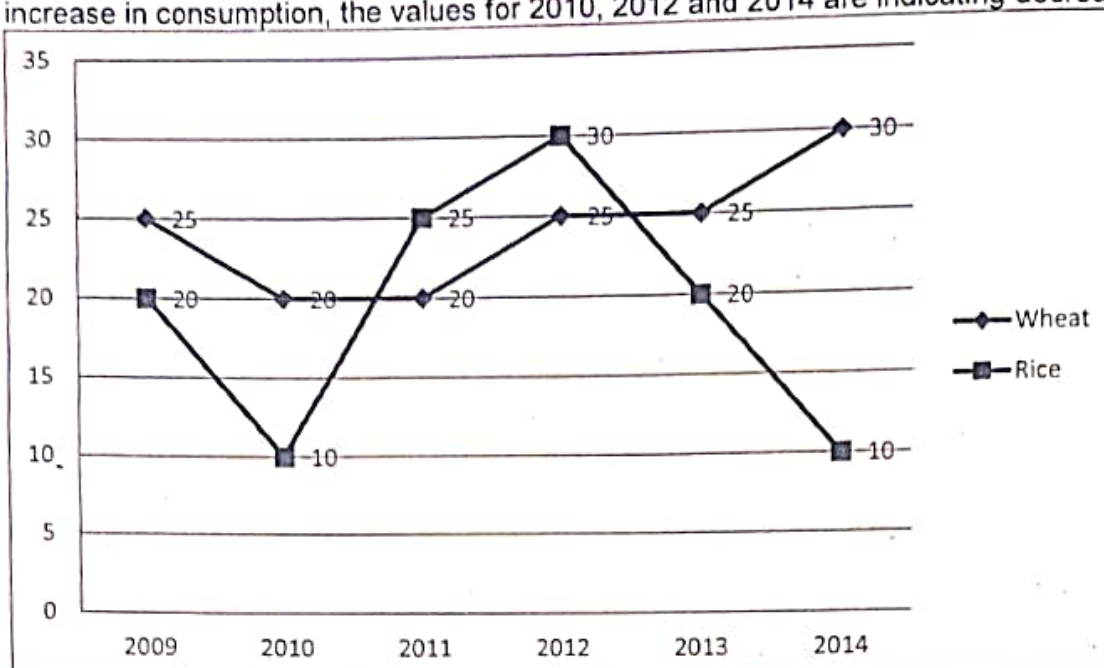
Q83: If it is known that Hyundai exported 10% of the total vehicles manufactured in December 2018, find the total number of vehicles sold by Hyundai in the month of December 2018?

- a. 46770      b. 45600      c. 44820      d. none of these

Q84: By what percentage approximately is the total vehicles sold in December 2019 more or less than the number of vehicles sold in December 2018?

- a. 6%      b. 8%      c. 3%      d. 4%

**Direction (Q85-Q88):** The following line graph gives the percentage change in the consumption of wheat and rice in the city of Dehradun from 2009 to 2014. While the values for 2009, 2011 and 2013 are indicating increase in consumption, the values for 2010, 2012 and 2014 are indicating decrease in consumption.



For all the questions in this set if the actual consumption in a year is asked, you need to consider all the given percentage changes prior to that year.

Q85. If the ratio of the consumption of Wheat to the consumption of Rice in 2008 was 2:3, find the ratio of their consumption in the year 2011?

- A. 7:9      B. 4:9      C. 50:81      D. none of these

Q86. If the ratio of the consumption of Wheat to the consumption of Rice in the year 2015 is 3:5 and the consumption of Rice is 70,000 kg, find the consumption of wheat in the year 2014?

- A. 64000      B. 48000      C. 55000      D. 60000

Q87. If the consumption of Wheat in Dehradun in the year 2008 was 90,000 kg, find the consumption of Wheat in Dehradun in the year 2011?

- A. 90,000      B. 85,000      C. 1,00,000      D. none of these

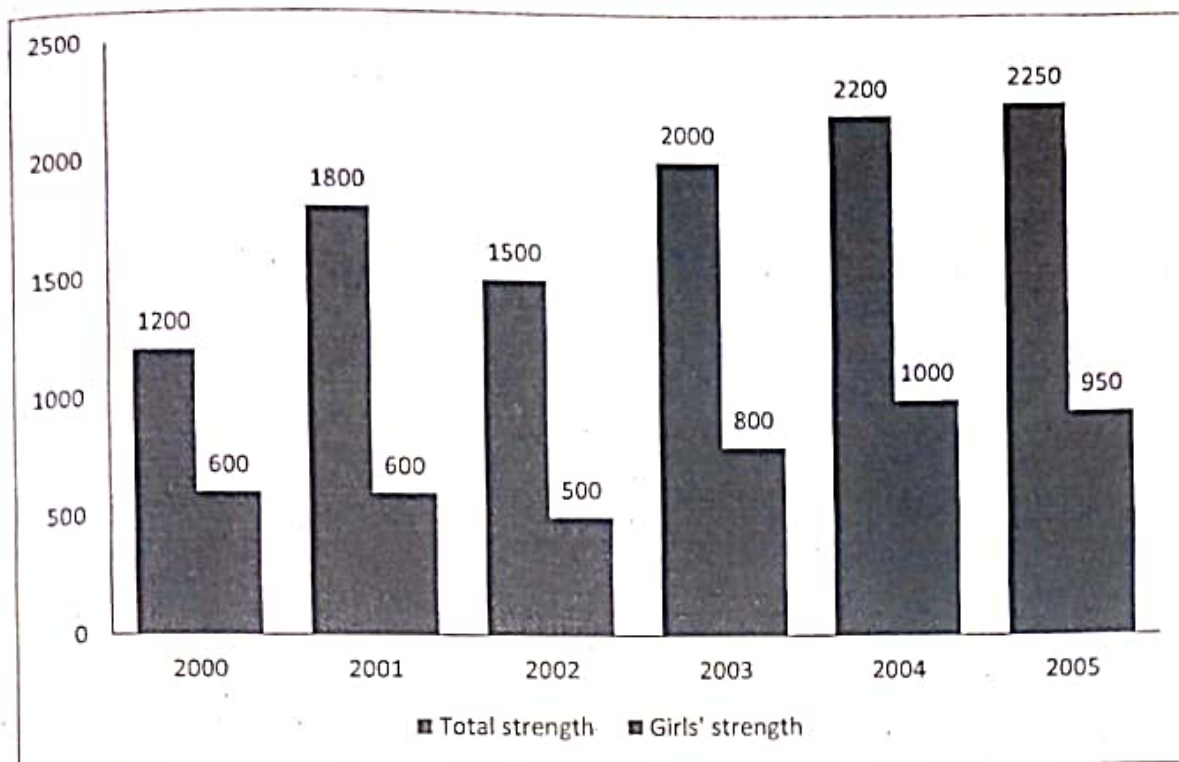
Q88. In the year 2012, the total consumption of Wheat and Rice together in the Dehradun market was 1,50,000 kg. If it is known that the consumption of Wheat in 2012 was 36.36% of the consumption of Rice, find the total consumption of Wheat and Rice together in Dehradun in the year 2013?

- A. 1,07,000 Kg      B. 1,40,000 Kg      C. 1,10,000 Kg      D. 1,50,000 Kg

**Direction (Q89-Q92):** The following bar graph shows the data related to the number of students in a college. While the first bar gives the value of the total strength in a year, the second bar shows the number of girls in the college in that year.

Study the data carefully and answer the questions that follow:





Q89. Find the year in which the percentage of boys in the college was the minimum?  
 A. 2003                      B. 2005                      C. 2004                      D. 2000

Q90. If 50% of the boys studying in the college in 2002 shifted to another college while the increase in girls is entire due to new admissions, find the ratio of the number of new admissions among boys to the number of new admissions among girls in 2003?  
 A. 8:5                      B. 10:3                      C. 7:3                      D. none of these

Q91. If it known that 150 new girls joined the college in the year 2005, find the number of girls who left the college in 2004 as a percentage of the total college strength of 2004?  
 A. 9.09%                      B. 12%                      C. 22.22%                      D. 10%

Q92. Find the approximate percentage change in the number of boys studying in the college from the year 2001 to the year 2005?  
 A. 10%                      B. 9.09%                      C. 8.33%                      D. 12.5%

**Direction (Q93-Q96):** Here is the information given below. Based on this information answer the questions.  
 I. A cube has six sides, each of which has a different color: black, brown, green, red, white, and blue.  
 II. The red side is opposite the black.  
 III. The green side is between the red and the black.  
 IV. The brown side is adjacent to the blue.  
 V. The blue side is adjacent to the white.  
 VI. The red side is the bottom face.

Q93. What are four colours that are adjacent to the green?  
 A. Black, blue, brown, white                      B. Black, blue, brown, red                      C. Black, blue, red, white                      D. None of these

Q94. Which of the information can be deduced from the information given in statement I, II, and V?  
 A. Black is on the top                      B. Blue is on the top                      C. Brown is on top                      D. Brown is opposite to black

Q95. Which of the following statements given above adds no information?  
 A. II                      B. III                      C. V                      D. All are required

Q96. If the red side is exchanged for the green side and the blue is swapped for black, then which of the following is false?  
A. Green is opposite to blue B. White is adjacent to blue C. None of these D. cannot be determined

**Direction (Q97-Q100):** A cube of side 7 cm is taken and is divided into 343 identical cubes of side 1 cm each. Each cut is made parallel to some surface of the cube. But before doing that the cube is coloured with green colour on one set of adjacent faces, red on the second and blue on the third set.

Q97. The total number of 2 face painted cubes formed?  
A. 50 B. 60 C. 70 D. none of these

Q98. How many cubes are there whose at least 1 face is painted?  
A. 216 B. 217 C. 218 D. none of these

Q99. How many cubes are there whose at the most 2 faces are painted?  
A. 333 B. 343 C. 335 D. none of these

Q100. How many cubes have zero face painted?  
A. 125 B. 124 C. 123 D. cannot be determined