

(12)

XCS-500(A)

48. In a family, the father ate half of a cake while the remaining half was divided equally among the 4 children. By what % was the father's share more than any of the children's share ?

- (a) 200%
- (b) 400%
- (c) 300%
- (d) 100%

49. The Government increased the price of a commodity by 25% in a particular month. By what % should the price be decreased in the subsequent month in order to bring it back to its original value ?

- (a) 80%
- (b) 50%
- (c) 25%
- (d) 20%

50. The number of seats in an auditorium is decreased by 20% and the price of a ticket is increased by 10%. If the auditorium has a capacity of 500 seats after the change, find the % change in the total collection per show :

- (a) 12% decrease
- (b) 2% decrease
- (c) 10% decrease
- (d) No change

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Roll No.

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**B. TECH. (FIFTH SEMESTER)
MID SEMESTER EXAMINATION, 2019**

(ALL BRANCHES)

CAREER SKILLS

Time : 1 : 30 Hours

Maximum Marks : 50

Note : (i) This question paper has 50 questions.
Attempt all questions. Each question carries equal marks.

(ii) It is compulsory to write the SET on the OMR.

(iii) Calculator is not allowed.

SET—A

Directions : Identify the error in the given sentences and mark the part containing the error as your option.

1. Every pale tomato slice (a) / wilted pickle and brown lettuce leaf cost (b) / an extra 25 cents at Bernie's Burger Emporium. (c) No error (d)

2. The Smiths, along with Tisha (a) / has to avoid indigestion (b) / after eating these weird muffins. (c) No error (d)
3. On the sidewalk (a) / many little lizard (b) / are sunning themselves on the hot concrete. (c) No error (d)
4. Even though Antonio has many friends (a) / who love their Chevrolets and Buicks, (b) / he has always believed that General Motors make lemons. (c) No error (d)
5. My dog Rio, together with Bruni the cat (a) /, like to play with money; (b) / the cat swats crumpled bills onto the floor where the dog shreds them to pieces (c) No error (d)
6. Latoya isn't going to Daytona Beach (a) / for spring break because fourteen dollars is (b) all that she has in her vacation fund (c). No error (d)
7. Even though Johnson and Johnson warn (a) / consumers not to insert Q-tips into their ears, (b) / people refuse to read directions and frequently puncture their eardrums. (c) No error (d)
8. One should (a) / do your duty (b) / honestly and sincerely. (c) / No error (d)
9. Good students (a) / like you and he (b) / should study regularly. (c) / No error (d)

- (b) 25%
- (c) 33.33%
- (d) 60%
45. The population ratio of Villages A and B in a certain year is 3 : 4. In the next year, the population of Village B increased by 20% and became equal to 72000. What was the total population of the 2 villages together in the first year ?
 (a) 105000
 (b) 60000
 (c) 90000
 (d) None of these
46. If the radius of the base and the height of a right circular cylinder increase by 20% and decrease by 10% respectively, find the percentage change in the volume of the cylinder :
 (a) 8% increase
 (b) 29.6% increase
 (c) 44% increase
 (d) None of these
47. By what % is 30% of 50% of a number more than 45% of 20% of the same number ?
 (a) Both are equal
 (b) 6%
 (c) 66.66%
 (d) 40%

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- (b) 12.5%
- (c) 16.66%
- (d) 20%

42. If the diameter of a circle decreases by 10%, what will be the % change in the area of the circle ?

- (a) 21% decrease
- (b) 10% decrease
- (c) 19% decrease
- (d) 20 % decrease

43. The price of petrol was first increased by 40% in the month of November and subsequently decreased by 25% in the month of December. If the Price after the decrease in December was ₹ 63, find the price of petrol before the increase in November :

- (a) ₹ 70
- (b) ₹ 55
- (c) ₹ 57
- (d) ₹ 60

44. The ratio of the boys to girls in a class of 72 students is 5 : 4. If 75% of the boys and 18 girls qualified for an exam, what % of the class did not qualify for the exam ?

- (a) 66.66%

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10. You, he and I (a) / are (b) / in the wrong. (c) / No error (d)

11. Only (a) / you and him (b) / can do this work fast. (c) / No error (d)

12. If I were him, (a) / I would not misbehave (b) / like this. (c) / No error (d)

13. Those two (a) / companies always (b) / help one another. (c) / No error (d)

14. The committee were (a) / divided in its opinion (b) / regarding this issue. (c) / No error (d)

Write the letter of the answer choice in which the underlined section of the sentence is written incorrectly.

15. Beaming satellite images (a) from Jupiter, a planet (b) notoriously difficult to photograph, (c) was a remarkable feat for a team of scientists, who, for the first (d) time ever, were able to depict parts of the planet's atmosphere that were hitherto unknown.

16. There (a) is many benefits to running because it is both a rigorous (b) form of exercise and a natural (c) stress-reducer; not only (d) do runners experience heart health, but lung functioning increases, too.

17. The spread of the sea turtle to (a) many reaches of the world's oceans (b) do not show (c) much as signal that the sea turtle has become a more robust species as (d) it does the effects of climate change.

18. Although blessed with a strong economy, everyone, (a) including the president and her family (b) are giving up luxury (c) goods in order (d) to donate more money to charity.

19. Careful analysis of pictures of the moon (a) reveal that parts of the Moon's surface (b) are (c) markedly similar to parts of the (d) Earth's.

Choose the correct option to make the sentence grammatically correct :

20. If Maria and Sharon for another 20 minutes, they would have seen the movie.

- (a) would wait
- (b) waited
- (c) had waited
- (d) would have waited

21. If I got the reports earlier, I the article for the magazine.

- (a) will prepare
- (b) would prepare
- (c) had prepared
- (d) would have prepared

22. If we studied in Rome, we Italian.

- (a) learnt
- (b) would have learnt
- (c) will learn
- (d) would learn

38. $P = ABC$ is a 3 digit natural number while Q is the number formed by reversing the digits of P . Then which of the following is definitely true ?

- (a) P is divisible by 9.
- (b) $P + Q$ is divisible by 11.
- (c) $Q - P$ is a multiple of 9.
- (d) $(P + Q)/2$ is a multiple of 9.

39. In an Exam, a candidate got 35% marks and failed by 12 marks. If he had got 48% marks instead, he would have got 14 marks more than the passing marks. Find the passing marks :

- (a) 96
- (b) 82
- (c) 200
- (d) None of these

40. If all the mentioned values are increases, which among the following will lead to the maximum percentage change ?

- (a) 10%, 10%
- (b) 19%, 1%
- (c) 17%, 3%
- (d) All of them are equal

41. The price of a commodity increases by 14.28%. By what % should the consumption be reduced so that the overall expenditure is constant ?

- (a) 14.28%

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34. The LCM of 2 numbers is 105 and their HCF is 7. If one of the numbers is 21, find the difference between the 2 numbers :

- (a) 14
- (b) 35
- (c) 5
- (d) 21

35. How many numbers exist from 1 to 200 such that the remainder when divided by either 5 or 7 is 4 ?

- (a) 5
- (b) 7
- (c) 4
- (d) 6

36. Find the LCM of $2/3$, $6/5$ and $4/7$?

- (a) 12
- (b) $6/105$
- (c) $2/105$
- (d) 6

37. What is the largest scale that can be used to measure 1 m and 5 cms, 2 m and 40 cms and 75 cms ?

- (a) 7 cms
- (b) 5 cms
- (c) 15 cms
- (d) 3 cms

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23. If Mark and Peter _____ here, they would play in our Football team.

- (a) had been
- (b) will be
- (c) were
- (d) would have been

24. If he _____ my batch mate, I would invite him to my wedding reception.

- (a) was
- (b) had been
- (c) were
- (d) is

25. If India played harder, it _____ better at the tournament.

- (a) would have been
- (b) were
- (c) would be
- (d) will be

26. Find the largest 3 digit number which gives a remainder of 2 when divided by 3, 4 and 5 :

- (a) 902
- (b) 962
- (c) 992
- (d) None of these

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27. Find the last digit of $23^{729} \times 78^{900}$:

- (a) 7
- (b) 3
- (c) 0
- (d) 8

28. A boy had certain number of candies. If he divides it between himself and his 2 siblings, there are 2 toffees that would remain. But if he also includes his parents, there would be no candies left. Given that the number of candies is a 2 digit number, how many values can it assume ?

- (a) 5
- (b) 7
- (c) 6
- (d) 9

29. The sum of a 2 digit number and the number obtained by reversing the digits is 55. If the digit in the ten's place is one more than the digit in the unit's place, find the remainder when the number is divided by 4 :

- (a) 0
- (b) 1
- (c) 2
- (d) 3

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30. Find the Remainder when $1457 \times 2968 \times 1379$ is divided by 4 :

- (a) 0
- (b) 1
- (c) 2
- (d) 3

31. A number when divided by 15, gives a remainder of 11. Find the remainder when twice the number is divided by 3 ?

- (a) 0
- (b) 1
- (c) 2
- (d) Cannot be determined

32. Find the total number of factors of 72 :

- (a) 12
- (b) 10
- (c) 8
- (d) 6

33. The value of a 2 digit number like 12 increases by 9 when the digits are reversed. How many other such 2 digit numbers exist ?

- (a) 6
- (b) 7
- (c) 8
- (d) 9

F. No. : c-47

P. T. O.