

Roll No. ....

**ICS-500/501(B)**

**B. TECH. (FIFTH SEMESTER)**

**MID SEMESTER EXAMINATION, 2022**

**(All Branches)**

**CAREER SKILLS**

**Time : 1½ Hours**

**Maximum Marks : 50**

**SET-B**

**Instructions for students :**

- (i) This paper consists of 50 questions.
- (ii) All questions are compulsory.
- (iii) Use of calculator is not allowed.
- (iv) There is no negative marking for incorrect responses.
- (v) Each question carries equal marks.
- (vi) It is compulsory to write the set on the OMR.

**P. T. O.**

1. A teacher had certain number of chocolates which he wants to distribute among his students. If he divides it among 3 students, there are 2 chocolates that would remain. But if he divides it among his 5 students, there would be no chocolate left. How many possible values are there for the number of chocolates if it is known that those were between 10 and 98 ?
- (a) 5
  - (b) 6
  - (c) 7
  - (d) 9
2. The LCM of two numbers is 45 times their HCF. If one of the numbers is 125 and the sum of HCF and LCM is 1150, find the other number :
- (a) 215
  - (b) 220
  - (c) 225
  - (d) 235

3. What is the value of A if 27A63 is divisible by 3 but not by 9 ?
- (a) 0 or 9
  - (b) 3 or 9
  - (c) 3 or 6
  - (d) 0 or 6
4. What is the largest 3 digit number which gives remainder 3 when it is divided by 5, 7 and 10 ?
- (a) 983
  - (b) 977
  - (c) 993
  - (d) 999
5. What is the last digit of  $(28)^{72} \times (353)^{25}$  ?
- (a) 6
  - (b) 3
  - (c) 8
  - (d) 2

6.  $N$  is the smallest number greater than 600 which gives a remainder of 5 when divided by both 6 and 9. Find the remainder when  $N$  is divided by 5 :
- (a) 2
  - (b) 0
  - (c) 5
  - (d) None of the above
7. If  $853ab$  is divisible by 6, and both  $a$  and  $b$  are greater than 6, what is the value of  $a + b$  ?
- (a) 14
  - (b) 15
  - (c) 16
  - (d) 17
8. The five-digit number  $7500A8$  is divisible by 4, how many values of  $A$  are possible ?
- (a) 0
  - (b) 3
  - (c) 5
  - (d) 4

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9. Find the digit at unit's place of the number

$$(47^{278} * 38^{900}) - 62^{177} :$$

(a) 4

(b) 6

(c) 0

(d) 2

10. Find the HCF of  $3/15$ ,  $9/8$  and  $3/4$  :

(a)  $3/120$

(b)  $1/40$

(c)  $3/40$

(d) None of the above

11. What is the total number of even factors of 840 ?

(a) 24

(b) 15

(c) 18

(d) 20

*P. T. O.*

12. Find the sum of the digits of the largest 3 digit number which will give remainders of 3 and 5 when divided by 5 and 7 respectively :
- (a) 24
  - (b) 18
  - (c) 20
  - (d) 22
13. Find the largest number which will divide 93, 41 and 67 to give the same remainder 2 in each case :
- (a) 7
  - (b) 13
  - (c) 17
  - (d) 19
14. What is the value of the number which when diminished by 5 is completely divisible by 15, 18, 21 and 24 ?
- (a) 2525
  - (b) 2520
  - (c) 1715
  - (d) None of the above

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15. ABCD is a 4 digit number which gives a remainder of 5 when divided by 6. Find the remainder when ABCD is divided by 3 :
- (a) 0
  - (b) 1
  - (c) 2
  - (d) Cannot be determined
16. The difference of a 2-digit number and the number formed by interchanging its digits is 54. If the sum of the digits is 8, find the remainder when the number is divided by 7 :
- (a) 1
  - (b) 3
  - (c) 5
  - (d) 0
17. What is the value of Y if 39Y41Z is divisible by 88 ?
- (a) 2
  - (b) 4
  - (c) 6
  - (d) 8

18. What is the largest scale that can be used to measure 2.1 m, 1.5 m and 2.4 m ?
- (a) 70 cm
  - (b) 60 cm
  - (c) 50 cm
  - (d) 30 cm
19. What is the LCM of  $3/9$ ,  $10/16$  and  $22/77$  ?
- (a) 7
  - (b) 11
  - (c) 9
  - (d) 10
20. What is the remainder if  $98 \times 102 \times 99 \times 103 \times 101$  is divided by 100 ?
- (a) 88
  - (b) 12
  - (c) 24
  - (d) 44



21. The sum of a 2 digit number and the number obtained by reversing the digits is a multiple of 88. If the difference of the digits at the ten's place and that at the unit's place is 2, find the digit at the ten's place of the number :
- (a) 5
  - (b) 2
  - (c) 1
  - (d) 9
22. What is the total number of factors of 300 ?
- (a) 12
  - (b) 16
  - (c) 18
  - (d) 20
23. 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

24. How many pairs of numbers exist such that HCF is 8 and LCM is 480 ?
- (a) 1
  - (b) 2
  - (c) 3
  - (d) 4
25. 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

**Directions (Q. Nos. 26-30) :** Write the letter of the answer choice in which the underlined section of the sentence is written incorrectly. (The letter is marked before the part.)

26. 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.

27. There (a) are 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.
28. 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.
29. 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.
30. 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.

**Directions (Q. Nos. 31-40) :** Identify the error in the given sentences and mark the part containing the error as your option.

31. My mother taught me (a) / that one should respect the religions of others (b) / as much as his own. (c) / No error (d)

32. The new scheme which will be launched (a) / in the next two years (b) / need an additional investment of hundred crores from the investors. (c) / No error (d)
33. Even though Garcia has many friends (a) / who love their Chevrolets and Buicks, (b) / she has always believed that General Motors make lemons. (c) / No error (d)
34. My Bull dog Bruno, 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)
35. This is a strange world (a) / where each one pursues their own golden bubble (b) / and laughs at others for doing the same. (c) / No error (d)
36. 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)
37. Just before the race (a) / I asked him (b) / whom he thought was going to win. (c) / No error (d)

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

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

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

**Directions (Q. Nos. 41-46) :** Choose the part  
which, when written in a correct way will make the  
structure of the given sentence parallel.

41. Drunk drivers are thoughtless and take the  
lives of other people in their own hands, (a) /  
risking their own lives, think about only their  
own pleasure and fun (b) / and never  
considering the consequence of their action.  
(c) / No error (d)

42. Police enforcement should be responsible for  
service in the community (a) / by safeguarding  
the property of people who live in the  
community, (b) / in order to protect the  
innocent from crimes, (c) / and to ensure that  
all people have their constitutional rights  
getting respect. (d)

43. When my husband takes another job in California, (a) / I will be staying here in Texas to pack, (b) / let the children finish up their school year, fly out to find a house (while my mom comes here to take care of the kids), (c) / and begin my new life by driving with all the kids in the car to California while the moving van is taking all of our stuff. (d)
44. In order to convey the information correctly to the crowd, (a) / the police officer was speaking loudly, (b) / he told people where they should be standing, (c) / repeating information so they would remember and gesturing. (d)
45. My roommate and I, this afternoon are going to be eating lunch at my downtown favorite, a pizza place, (a) / then until our friend Sandy is out of work we will study in the library, meeting up at the dorm with our sorority sisters from tri-Delta is our plan, (b) / and then all of us will be eating the gourmet popcorn my mom just sent me (c) / and we are planning to binge-watch the latest Netflix episodes of our favorite show. (d)

46. Raoult's motivation to succeed (a) / in this program seems (b) / to be greater than his sister (c) / No error (d).

**Directions (Q. Nos. 47-50) :** Choose the correct option to make the sentence grammatically correct.

47. 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

48. If Mark and Peter \_\_\_\_\_ here, they would play in our Football team.

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

49. If he \_\_\_\_\_ my batch mate, I would invite him to my wedding reception.

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

50. If India played harder, it \_\_\_\_\_ better at the tournament.

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