

**B.Tech. SEM -VI (Chemical/ Civil/ Electrical/ Mechanical/  
Production/ Computer/ Info. Tech./ Electronics / Bio Medical / E & TC)  
2014 Course (CBCS) : SUMMER - 2019  
SUBJECT: PROFESSIONAL SKILLS DEVELOPMENT - VI**

Day: Monday  
Date: 03/06/2019

S-2019-2713

Time: 02.30 PM TO 05.30 PM  
Max. Marks: 100

**N.B. :**

- 1) All the questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answer to **ALL** sections should be written in the **SAME** answer book.

**SECTION - I  
(Quantitative Aptitude and Logical Reasoning)**

**Q.1** Solve the following questions. **(10)**

- a) 'A' speaks truth in 75% of cases and 'B' in 80% of cases. In what percent of cases are they likely to contradict each other in narrating the same event?  
i) 35%      ii) 5%      iii) 45%      iv) 22.5%
- b) Two cards are drawn from a pack of well shuffled cards. Find the probability that one is a club and other is king.  
i)  $\frac{1}{13}$       ii)  $\frac{4}{13}$       iii)  $\frac{1}{52}$       iv)  $\frac{1}{26}$
- c) The odds against an event are 5:3 and the odds in favour of another independent event are 7:5. Find the probability that at least one of the two events will occur.  
i)  $\frac{52}{96}$       ii)  $\frac{69}{96}$       iii)  $\frac{71}{96}$       iv)  $\frac{13}{96}$
- d) You toss a coin and roll a dice. What is the probability of getting a tail and a 4 on the dice?  
i)  $\frac{1}{2}$       ii)  $\frac{1}{6}$       iii)  $\frac{1}{8}$       iv)  $\frac{1}{12}$
- e) An urn contains 6 red, 5 blue and 2 green marbles. If three marbles are picked at random. What is the probability at least one is blue?  
i)  $\frac{28}{143}$       ii)  $\frac{115}{197}$       iii)  $\frac{28}{197}$       iv)  $\frac{115}{143}$

**Q.2** Solve the following questions of permutation and combination. **(10)**

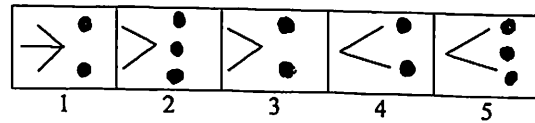
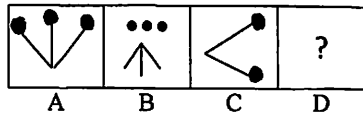
- a) In how many ways can the letters of the word "LEADER" be arranged?  
i) 72      ii) 144      iii) 360      iv) 720
- b) In how many different ways can the letters of the word "CORPORATION" be arranged so that the vowels always come together?  
i) 810      ii) 1440      iii) 2880      iv) 50400
- c) 6 parallel lines are intersected by 5 other parallel lines. The total number of parallelogram formed is-  
i) 130      ii) 150      iii) 170      iv) 190
- d) How many permutations of 3 different digits are three, chosen from the ten digits 0 to 9 inclusive?  
i) 84      ii) 120      iii) 720      iv) 504
- e) How many three letter words are formed using the letters of the word "TIME"?  
i) 12      ii) 20      iii) 16      iv) 24

**P.T.O.**

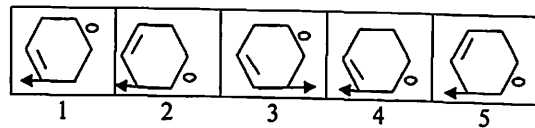
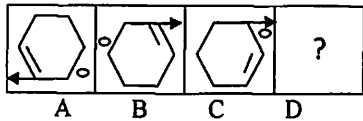
Q.3 Solve the following questions.

(10)

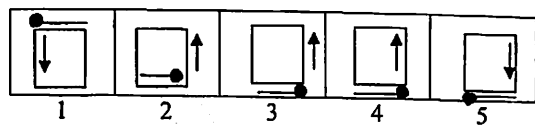
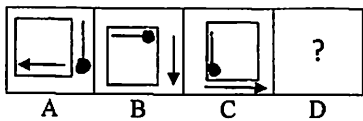
a)



b)



c)



d) Complete the series:

45, 54, 47,  $\underline{?}$  49, 56, 51, 57, 53

e) Complete the series:

66, 36, 18,  $\underline{?}$

Q.4 Solve the following questions.

(10)

- a) How much does a watch gain or lose per day if its hands coincide every 64 minutes of the correct time?
- i) Loses 90 minutes                      ii) Gains 90 minutes  
 iii) Loses  $32\frac{8}{11}$  minutes                  iv) Gains  $32\frac{8}{11}$  minutes
- b) A clock is set right at 9 a.m. The clock gains 30 seconds per hour. What will be the true time when the clock indicates 3:39 p.m. on the 3<sup>rd</sup> day afternoon?
- i) 4 p.m.              ii) 3 p.m.              iii) 1 p.m.              iv) 2 p.m.
- c) 8<sup>th</sup> December, 2007 was Saturday. What day of the week was it on 8<sup>th</sup> December, 2006?
- i) Sunday              ii) Tuesday              iii) Friday              iv) Wednesday
- d) How many years had 29 days in February from 2001 to 2100?
- i) 26              ii) 25              iii) 23              iv) 24
- e) At what time, between 3'o clock and 4' o clock, both the hour hand minute hand coincide each other?
- i) 3:30              ii)  $3:16\frac{4}{11}$               iii)  $3:16\frac{11}{4}$               iv)  $3:16\frac{7}{11}$

...2...

**Q.5** Study the following information carefully and answer the given questions. (10)

When a word and number arrangement machine is given an input: Line of words and numbers. It arranges them following a particular rule. The following is an illustration of input and rearrangement (All the numbers are in two digits.)

Input : Light 19 weight 37 for 27 motor 43 bikes 51

Step - I : bike 18 light weight 37 for 27 motor 43 51

Step - II : for 36 bike 18 light weight 27 motor 43 51

Step - III : light 42 for 36 bike 18 weight 27 motor 51

Step - IV : Motor 28 light 42 for bike 18 weight 51

Step - V : Weight 52 motor 28 light 42 for 36 bike 18

Input: set 23 taken 9 for 41 hard 33 work 59

- a) Which element is exactly between 10 and 58 in step - IV?  
i) 22 ii) 40 iii) Hard iv) Step v) None of these
- b) What is the difference between the number which is second from left-end in Step - IV and the number which is second from the right-end in Step - III?  
i) 22 ii) 40 iii) Hard iv) Step v) None of these
- c) How many steps are required to complete the above arrangements?  
i) Four ii) Seven iii) Three iv) Six v) five
- d) In which step the elements "22 23 work" found in the same order?  
i) Step - IV ii) Step - V iii) Step - II iv) Step - I v) Step - III
- e) In Step - III "step is related to 58" and "hard is related to 40". In the same way taken is related to?  
i) For ii) Work iii) 33 iv) 9 v) None of these

## SECTION - II

### (Verbal Ability and English Grammar)

**Q.6 A)** Spot the error part in the following sentences. (05)

- i) I am hearing a lot (a) / about the problem (b) / of AIDS theses days (c) / no error (d)
- ii) Because of his innocence (a) / he can not distinguish (b) / a cheat for an honest person (c) No error (d)
- iii) He did (a) / nothing else (b) / than play (c) / no error (d)
- iv) To make him succeed (a) the correct thing to do is to punish (b) / him until he does not try (c) / no error (d)
- v) How do you say that (a) / neither he or Ramesh (b) / has qualified in the examination (c) / no error (d)
- B)** The sentences given below are incorrect. There is a mistake in the use of prepositions. Correct the sentences by using right prepositions. (05)
- a) With the least hesitation, he gave the cap to the beggar.
- b) She was plunged in the depths of sorrow.
- c) He lived all alone in a hut by the end of the town.
- d) You can see both these wonders fairly comfortably with two days.
- e) Seeta is suffering with cold.

**Q.7** Write the meanings of the following pairs of words that are often confusing (10) and form a sentence for each of them in your own words.

- |                    |                    |
|--------------------|--------------------|
| i) Bite, Bight     | vi) Boar, Bore     |
| ii) Censer, Sensor | vii) Chaff, Chap   |
| iii) Dawn, Don     | viii) Dean, Din    |
| iv) Dale, Dwell    | ix) Colon, Colonel |
| v) Deem, Dim       | x) Deign, Den      |

### SECTION – III

#### (Soft Skills)

- Q.8** a) State the different causes of stress. How could one manage stress at a workplace? (05)
- b) What are different limitations of business letters? (05)
- c) What qualities are tested in a group discussion for getting selected in a company? (05)
- d) List down four goals of business communication and explain how to achieve each. (05)
- e) What are differences between a tender and a notice? (05)
- f) State different types of reports and their importance in the corporate world. (05)

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