

**B.TECH. SEM -VI (CHEMICAL/ CIVIL/ ELECTRICAL/
MECHANICAL/ PRODUCTION/ COMPUTER/ INFO. TECH./
ELECTRONICS / BIO MEDICAL / E & TC) 2014 COURSE (CBCS)
: SUMMER - 2018**

SUBJECT : PROFESSIONAL SKILLS DEVELOPMENT – VI

Day : **Wednesday**
Date : **13/06/2018**

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

S-2018-2393

N.B.

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

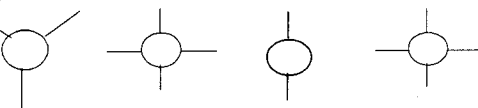
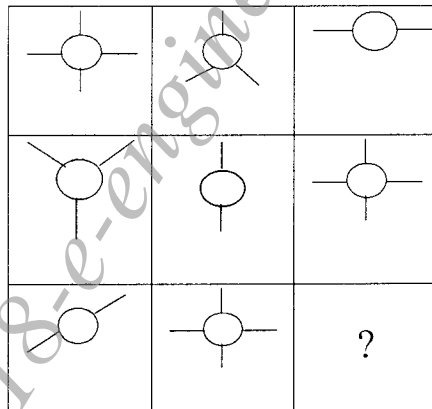
**SECTION – I
(Quantitative Aptitude & Logical Reasoning)**

- Q.1**
- a) How many number of 3 digits can be formed with the digits 1,2,3,4,5 (02)
(repetition of digits not allowed)
i) 125 ii) 120 iii) 60 iv) 150
 - b) In how many ways can a person send invitation cards to 6 of his friends if he (02)
has four servants to distribute the cards?
i) 64 ii) 46 iii) 24 iv) None of these
 - c) In how many ways can the letter of the word PATNA be rearranged? (02)
i) 60 ii) 120 iii) 119 iv) 59
 - d) A captain and vice- captain are to be chosen out of a team having 11 players. (02)
How many ways are there to achieve this?
i) 10×9 ii) $11C_2$ iii) 110 iv) 109!
 - e) In how many ways can Ram choose a vowel and a consonant from the letter (02)
ALLAHABAD?
i) 4 ii) 6 iii) 9 iv) 5
- Q.2**
- a) In a simultaneous toss of two coins, find the probability of 2 tails. (02)
i) $\frac{1}{2}$ ii) $\frac{1}{4}$ iii) $\frac{3}{4}$ iv) $\frac{1}{3}$
 - b) In a single throw of two dice, find the probability of getting a total of 12. (02)
i) $\frac{1}{36}$ ii) $\frac{1}{9}$ iii) $\frac{1}{18}$ iv) $\frac{35}{36}$
 - c) From a bag containing 4 white and 5 black balls a man draws 3 at random. (02)
What are the odds against these being all black?
i) $\frac{5}{37}$ ii) $\frac{37}{5}$ iii) $\frac{11}{13}$ iv) $\frac{13}{37}$
 - d) Two balls are to be drawn from a bag containing 8 grey and 3 blue balls. Find (02)
the chance that they will both be blue.
i) $\frac{1}{5}$ ii) $\frac{3}{55}$ iii) $\frac{11}{15}$ iv) $\frac{14}{45}$
 - e) What is the chance that a leap year, selected at random will contain 53 Sunday? (02)
i) $\frac{1}{7}$ ii) $\frac{2}{7}$ iii) $\frac{3}{7}$ iv) $\frac{4}{7}$

P.T.O.

- Q.3**
- a) If Sunday falls on fifth day after from today i.e. 6th January. What was the day on 1st December of last year? (02)
 i) Monday ii) Tuesday iii) Thursday iv) Friday
- b) My brother is 352 days older to me. While my sister is 65 weeks older to him. (02)
 If my sister was born on Saturday, on which day was I born?
 i) Sunday ii) Monday iii) Tuesday iv) Wednesday
- c) 'A' remembers that his uncle had visited them after 13th but before 18th of a month while B remembers that the uncle had visited them after 16th but before 20th. On which date did their uncle visit A and B? (02)
 i) 14 ii) 16 iii) 15 iv) 17
- d) An accurate clock shows 8 o' clock in the morning. Through how many degrees will the hour hand rotate when the clock shows 2 o' Clock in the afternoon? (02)
 i) 144 ii) 150 iii) 168 iv) 180
- e) A watch which gains uniformly is 2 minutes low at noon on Monday and is 4 minute 48 second fast at 2 p.m. on the following Monday when was it correct? (02)
 i) 2 P.M. on Tuesday ii) 2 P.M. on Wednesday
 iii) 3 P.M. on Thursday iv) 1 P.M. on Friday

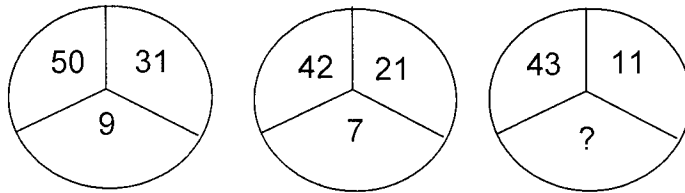
- Q.4**
- a) Five people A, B, C, D and E live in five storeys in the same building B lives above C and D. E live in the middle. D lives between B and E. A lives in the lower most storey. Who lives in the second storey from above? (02)
 i) A ii) B iii) C iv) D
- b) Select a suitable figure from the four alternatives that would complete the figure matrix. (02)



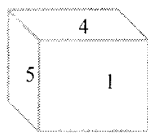
a) b) c) d)

- c) A train speeds past a pole in 15 seconds and a platform 100 m. in 25 seconds. (02)
 Its length is..?
 i) 200 m ii) 150 m iii) 50 m iv) Data inadequate

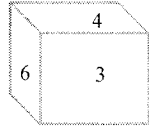
- d) Which number will replace the question marks? (02)



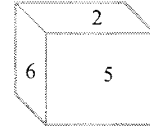
- e) A dice with its face numbered 1 to 6 is shown in three different positions X, Y and Z. Find opposite faces of 6, 4, 3 numbers. (02)



(X)



(Y)



(Z)

- Q.5 Direction (Q.a-e) study the following information carefully to answer the given questions. (10)

A word and number arrangement machine when given an input line of words and number rearranges them following a particular rule in each step. The following is an illustration of input and its rearrangement.

Input:- then 23 each 31 second 25 left 36

Step 1:- left the 23 each 31 second 36 25

Step 2:- the left 23 each 31 second 25 36

Step 3:- each the left 31 second 25 36 23

Step 4:- second each the left 25 36 23 31

And step 4 is the last step of above input. As per the rules followed in the above step. Find out the appropriate step for the given out put.

Input:- be 11 all 25 main 47 81 equal 49 earn 16 ant.

- a) How many steps will be required to complete the arrangement of the above input?
 i) Five ii) Six iii) Eight iv) None of the above
- b) How many elements are there between 'ant' and '16' in step 4?
 i) One ii) Two iii) Four iv) None of the above
- c) The following output will be in which step? main earn to ant all 47 equal 16 25 49 81 11
 i) III ii) IV iii) V iv) VI
- d) What is the position of 'be' in step IV?
 i) Third from the left ii) Sixth from the right
 iii) Second from the left iv) Seventh from the left
- e) Which of the following words/numbers would be at the 7th position from right end in the second last step?
 i) Equal ii) 47 iii) 16 iv) None of the above

P.T.O.

SECTION – II
(English Grammar and Verbal Ability)

- Q.6** Put in correct Prepositions (in, at, on, with, by) (05)
- a) Rajesh's wife died recently _____ the age of 30.
 - b) We had a lunch _____ the airport while we were waiting for our plane.
 - c) _____ the back page.
 - d) The meeting is _____ quarter past one _____ the afternoon next Monday.
 - e) I was delighted _____ the present you gave me.
- Q.7** Spot the error part in the following sentences: (05)
- a) **i)** The number of students/ **ii)** who appear/ **iii)** at the written examination/
iv) increase every year / **v)** No error.
 - b) When he come/ **ii)** to see us/ **iii)** and put it/ **iv)** on the table / **v)** No error .
 - c) He picked up/ **ii)** to see us / **iii)** he usually / **iv)** will bring something with
him / **v)** No error
 - d) When he had got/ **ii)** what he wanted / **iii)** he has gone / **iv)** home / **v)** No error.
 - e) **i)** He left/ **ii)** as soon as / **iii)** he got/ **iv)** the news / **v)** No error.
- Q.8** Each of the following sentences has a word or phrases underlined. Choose (05)
one word or phrase, which should not change the meaning of the original
sentences.
- a) The inspector was a vigilant young man.
i) intelligent **ii)** ambitious **iii)** watchful **iv)** smart
 - b) That young dean is quite sanguine about the result of the competitive
examination.
i) depressed **ii)** pessimistic **iii)** anxious **iv)** optimistic
 - c) He was warned at the outset of his career.
i) end **ii)** beginning **iii)** middle **iv)** entrance
 - d) A rapture in relationship of the two brothers is quite apparent.
i) break **ii)** damage **iii)** breach **iv)** gap
 - e) Murder of King
i) infanticide **ii)** matricide **iii)** genocide **iv)** regicide
- Q.9** Write the meaning of the following pair of words that are often confused and (05)
use each of them in your own sentences **ANY FIVE:**
- i)** capital-capitol **ii)** coarse – course
 - iii)** wage – wedge **iv)** weather–whether
 - v)** amiable – amicable **vi)** accept – except **vii)** advice –advise

SECTION – III
(Soft Skills)

- Q.10** What is stress? Can stress be avoided? (05)
- Q.11** Explain the general guidelines to be followed while preparing a resume. (05)
- Q.12** What are the aims of conducting a Group Discussion? (05)
- Q.13** Explain the important tips for presenting oneself well in an interview. (05)
- Q.14** What is the importance of written communication? (05)
- Q.15** Explain the points to be kept in mind while writing a Job Application. (05)