**B.TECH. SEM -V (CHEMICAL/ CIVIL/ ELECTRICAL/ MECHANICAL/ PRODUCTION/ COMPUTER/ INFO. TECH./ ELECTRONICS / BIO MEDICAL / E & TC) 2014 COURSE (CBCS) : WINTER - 2017**

**SUBJECT : PROFESSIONAL SKILL DEVELOPMENT – V**

Day : **Tuesday** | Time : **02.30 PM TO 05.30 PM**

Date : **23/01/2018** | Max. Marks : 100

**W-2017-2119**

**N. B. :**

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

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## SECTION – I
## (QUANTITATIVE APTITUDE AND LOGICAL REASONING)

**Q. 1** Choose the right option from the following to write answer of the questions.

**a)** A and B can do a piece of work in 12 days and 16 days respectively. Both work for 3 days and then A goes away. Find how long will B take to complete the remaining work? **(02)**

**i)** 15 days **iii)** 10 days
**ii)** 12 days **iv)** 9 days

**b)** A can do a piece of work in 10 days. He works at it for 4 days and then B finishes it in a 9 days. In how many days can A and B together finish the work? **(02)**

**i)** 6 days **iii)** $8\frac{1}{2}$ days
**ii)** 8 days **iv)** $7\frac{1}{2}$ days

**c)** A work, which could be finished in 9 days, was finished 3 days earlier after 10 more men joined. The number of men employed was? **(02)**

**i)** 18 **iii)** 22
**ii)** 20 **iv)** 24

**d)** A and B can do a piece of work in 7 days with the help of C. They finish the work in 5 days. C alone can do that piece of work in? **(02)**

**i)** 1 day **iii)** 30 days
**ii)** 10 days **iv)** 32 days

**Q. 2** Answer the following questions.

**a)** A cyclist covers a distance of 750 meters in 2 minutes in 30 seconds. What is the speed in km/hr of cyclist? **(02)**

**i)** 16 km/hr **iii)** 17 km/hr
**ii)** 18 km/hr **iv)** 19 km/hr

**b)** How many minutes does Aditya take to cover a distance of 400 m. If he runs at a speed of 20 km/hr **(02)**

**i)** $1\frac{1}{5}$ min **iii)** $3\frac{1}{5}$ min
**ii)** $2\frac{1}{5}$ min **iv)** $4\frac{1}{5}$ min

c) An athlete runs 200 meters in 24 seconds. His speed is? **(02)**

i) 10 km/hr
ii) 17 km/hr
iii) 27 km/hr
iv) 30 km/hr

d) A train covers a distance in 50 minutes. If it runs at a speed of 48 km/hr on an average. Find the speed of which the train must run to reduce the time of journey to 40 minutes? **(02)**

i) 50 km/hr
ii) 60 km/hr
iii) 65 km/hr
iv) 70 km/hr

e) The simple interest on a certain sum of 2 years at 20 % per annum is Rs. 80. The corresponding compound interest is : **(02)**

i) Rs. 66
ii) Rs. 82
iii) Rs. 86
iv) Rs. 88

f) The compound interest on Rs. 20,480 at $6\frac{1}{4}$ % per annum for 2 years 73 days is? **(02)**

i) Rs. 2929
ii) Rs.2219
iii) Rs.3021
iv) Rs.3049

g) A sum amounts of Rs. 882 in 2 years at 14 % compound interest. Find the sum is? **(02)**

i) Rs.800
ii) Rs. 822
iii) Rs.840
iv) Rs.816

h) What sum invested for 2 years at 14 % compounded annually will grow to Rs. 5458.32? **(02)**

i) Rs. 4120
ii) Rs. 3300
iii) Rs. 4200
iv) Rs. 4420

**Q. 3** Study the given table carefully to answer the questions that follow:

| Sr. No. | Locality | Total No. of people | Percentage | | |
|---|---|---|---|---|---|
| | | | Men | Women | Children |
| 1 | F | 5640 | 55 | 35 | 10 |
| 2 | G | 4850 | 34 | 44 | 22 |
| 3 | H | 5200 | 48 | 39 | 13 |
| 4 | I | 6020 | 65 | 25 | 10 |
| 5 | J | 4900 | 42 | 41 | 17 |

a) Total number of people staying in locality J forms approximately what percent of the total number of people staying in locality F? **(02)**

i) 81
ii) 72
iii) 78
iv) 93
v) 87

b) What is the total number of children staying in localities H and I together? **(02)**

i) 1287
ii) 1278
iii) 1827
iv) 1728
v) None of these

c) The number of women staying in which locality is the highest? **(02)**

i) H
ii) J
iii) F
iv) G
v) None of these

**d)** What is the total number of men and children staying in locality I? **(02)**

**i)** 4115
**ii)** 4551
**iii)** 4515
**iv)** 4155
**v)** None of these

**e)** What is the respective ratio of number of men staying in locality F to the number of men staying in locality H? **(02)**

**i)** 517:416
**ii)** 403:522
**iii)** 416:517
**iv)** 522:403
**v)** None of these

**Q. 4** Directions:- In each of the questions below are given the statements followed by two conclusions numbered I and II. You have to take the given statements to be true, even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the following conclusions logically follows from the given statements disregarding the commonly known facts.
Answers options : ( choose from here)

**i)** If only conclusion I follows
**ii)** If only conclusion II follows
**iii)** If either conclusion I or II follows
**iv)** If neither conclusion I nor II follows
**v)** If both conclusion I and II follow

**a)** Statements : **1)** Some pencils are erasers **(02)**
**2)** All pencils are sharpners
**3)** All erasers are not sharpners
Conclusions : **I)** All erasers can be pencils
**II)** Some sharpners are erasers

**b)** Statements : **1)** All gases are solids **(02)**
**2)** All solids are liquids
Conclusions : **I)** All gases are liquids
**II)** At least some liquids are solids

**c)** Statements : **1)** Some notes are coins **(02)**
**2)** No coin is a card
Conclusions : **I)** All cards can be notes
**II)** Some notes are neither coins nor cards

**d)** Statements : **1)** some notes are coins **(02)**
**2)** All coins are cards
Conclusions : **I)** All notes are coins
**II)** Some coins are cards

**Q. 5** Directions: - Each of the questions below consist of a question and two statements numbered I and II given below it. You have to decide whether given data in the statements are sufficient to answer the questions or not?

Answers options : (choose from here)

**I)** If the data in statement I alone is sufficient to answer the question.
**II)** If the data in statement II alone is sufficient to answer the question.
**III)** If the data either in I or II alone is sufficient to answer the question.
**IV)** If the data in both statements are necessary to answer the question.
**V)** If the data in both the statements are not sufficient to answer the question.

**a)** How is the sure written in a code language? **(02)**
**i)** He is sure is written as Ja ha ma in that code language.
**ii)** Is he sure is written Ka, Ja, Ma in that code language.

**b)** What is R's position from the left end in the row? **(02)**
**i)** M is tenth from the left end of the row.
**ii)** There are sixteen children between M and R?

**c)** Town P is towards which direction of town T? **(02)**
**i)** Town T is towards south of town K which is towards west of town P.
**ii)** Town R is towards south of town v and towards east of town T.

**d)** Among P, Q, R, S and T each having different age who is the youngest among them? **(02)**
**i)** Q is younger than only P
**ii)** S is older than only R

## SECTION – II
## (VERBAL ABILITY)

**Q. 6** An idiom is used in a sentence. It is italicized. Pick the correct meaning of the idiom from the answer choices? **(10)**

**a)** The staff is *on edge ever* since they heard the rumor about retrenchment.
**i)** Unhappy **iii)** Irresistible
**ii)** nervous **iv)** Insolvent

**b)** I hope it will not *put you out* if I am late
**i)** Harm you **iii)** Please you
**ii)** Irritate you **iv)** Worry you

**c)** The cricket match proved to be *a big draw*
**i)** A keen contest **iii)** A lovely spectacle
**ii)** A huge attraction **iv)** A game without any result

**d)** Dowry is *a burning question* of the day?
**i)** A widely debated issue **iii)** A dying issue
**ii)** A relevant problem **iv)** An irrelevant issue

**e)** I have been betrayed by my *own flesh and blood*
**i)** Friends **iii)** Children
**ii)** Relatives **iv)** Acquaintances

**f)** The new economic policy is likely to *run into rough weather*
**i)** Create problems **iii)** Illustrate
**ii)** Encounter difficulties **iv)** Make things possible

**g)** It is *high time* that India did something about the population problem.
**i)** Already late **iii)** Desired occasion
**ii)** Appropriate time **iv)** Auspicious moment

**h)** The boy *turned a deaf ear* to the pleadings of all his well-wishers.
**i)** Listened carefully **iii)** Posed indifference
**ii)** Was deadly opposed **iv)** Did not pay any attention

i) He was asked to *accelerate* the pace of work?

i) Supervise iii) Control
ii) Slacken iv) Check

j) Her *vivacity* attracted everybody.

i) Humour iii) Beauty
ii) Truthfulness iv) Apathy

## SECTION – III
## (ENGLISH GRAMMAR)

**Q. 7** Spot the errors in the following sentences. **(10)**

**i)** a) Either you / b) or I are / c) responsible / d) for this mistake.

**ii)** a) The majority /b) believe that /c) the country/d) can progress.

**iii)** a) Vatsal and Santosh will / b) never find each /c) another at this /d) crowed fair.

**iv)** a) When they have/b) enough money, Karan / c) and her will probably /d) buy a lancer.

**v)** a) I have been informed/b) by Vibhor, Richa and /c) he about the Saturday/ d) evening dance.

**vi)** a) No sooner, we entered/b) than he got up/ c) and left/d) the room.

**vii)** a) This pond is flooded/b) with water because/ c) it is raining continuously for the / d) last three days.

**viii)** a) When I went/b) to his house/c) I found that /d) he had been died.

**ix)** a) Walking /b) across the street / c) a truck /d) knocked down him.

**x)** a) Last but not / b) the least /c) Ram is our/ d) most promising player.

**Q. 8** Describe a difficult problem you have solved? What was the problem? How did you analyze and solve it? What did learn from the experience? **(10)**

**Q. 9** Answer the following questions:

**a)** Explain the advantages of being a starter or a GD. **(05)**

**b)** What is meant by behavioral conflict? What steps should be used to solve it in professional workplace? **(05)**

**c)** What are some uncommon ways to work smarter instead of harder? Explain it in terms of time management? **(05)**

**d)** What business etiquettes should be followed while interacting with the seniors / superiors of the company? **(05)**