

A Manual For
SOFT SKILL-III
Second Year Degree in
Electronics & Telecommunication Engineering



Hindi Seva Mandal's (ESTD.-1950)

SHRI SANT GADGE BABA

COLLEGE OF ENGINEERING & TECHNOLOGY, BHUSAWAL. (M.S.)

AN ISO-9001:2008 Certified Institute

SHRI SANT GADGE BABA
COLLEGE OF ENGINEERING & TECHNOLOGY BHUSAWAL

Certificate

This is to certify that Mr./Ms. _____

Roll No. _____ of Second Year Degree in Electronics & Telecommunication has completed the term work satisfactorily in Soft Skill-III for the academic year 2014 -15 as prescribed in the curriculum.

Place : _____

Enrolment No: _____

Date: _____

Exam Seat No: _____

Subject Teacher

Head of the Department

Principal

Record of Progressive Assessment

Sr. No.	Name of the Experiment	Page No.	Date of Performance	Date of Assessment	Signature
01	Assignment No.- I				
02	Assignment No- II				
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07	Assignment No- VII				
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ASSIGNMENT NO.-I

Date:

Reference Unit-I

Q.1 Which of the following are prime numbers?

(i) 243 (ii) 337 (iii) 393

Q.2 Find the unit's digit in $(264)^{102} + (264)^{103}$

Q.3 Find the total number of prime factors in the expression $(4)^{11} \times (7)^5 \times (11)^2$.

Q.4 What least number must be subtracted from 2000 to get a number exactly divisible by 17?

Q.5 A number when divided by 342 gives a remainder 47. When the same number is divided by 19, what would be the remainder?

Q.6 How many numbers between 11 and 90 are divisible by 7?

Q.7 Find the sum of all 2 digit numbers divisible by 3.

Q.8 How many terms are there in 2,4,8,16.....1024?

Q.9 Find the L.C.M. of $2^2 \times 3^3 \times 5 \times 7^2$, $2^3 \times 3^2 \times 5^2 \times 7^4$, $2 \times 3 \times 5^3 \times 7 \times 11$

Q.10 Find the L.C.M. of 16, 24, 36 and 54.

Q.11 Find the smallest number of five digits exactly divisible by 16,24,36 and 54.

Q.12 Find the least number which when divided by 5,6,7, and 8 leaves a remainder 3, but when divided by 9 leaves no remainder

Q.13 Reduce $\frac{391}{667}$ to lowest terms to lowest terms.

Q.14 Find the least number which when divided by 6,7,8,9, and 12 leave the same remainder 1 each case

ASSIGNMENT NO.-II

Date:

Reference Unit-I &II

- Q.1. Find the average of all prime numbers between 30 and 50?**
- Q.2. The average of four consecutive even numbers is 27. Find the largest of these numbers?**
- Q.3. Nine persons went to a hotel for taking their meals 8 of them spent Rs.12 each on their meals and the ninth spent Rs.8 more than the average expenditure of all the nine. What was the total money spent by them?**
- Q.4. The average waight of A,B,C is 45 Kg. The avg wgt of A & B be 40Kg & that of B,C be 43Kg. Find the wgt of B.**
- Q.5. There were 35 students in a hostel. Due to the admission of 7 new students,he expenses of the mess were increased by Rs. 42 per day while the average expenditure per head diminished by Rs 1. What was the original expenditure of the mess?**

Q.6. A batsman makes a score of 87 runs in the 17th inning and thus increases his avg by 3. Find his average after 17th inning.

Q.7. How much water must be added to 60 litres of milk at $1\frac{1}{2}$ litres for Rs. 2 So as to have a mixture worth Rs. $10\frac{2}{3}$ a litre ?

Q.8. In what ratio must water be mixed with milk to gain 20 % by selling the mixture at cost price?

Q.9. Sixty five percent of a number is 21 less than four fifth of that number. What is the number?

Q.10. Express each of the following as a fraction :

(i) 56%

(ii) 4%

(iii) 0.6%

(iv) 0.008%

Q.11. Express each of the following as rate percent :

(i) $\frac{23}{36}$

(ii) $6\frac{3}{4}$

(iii) 0.004

Q.12. If 50% of $(x-y) = 30%$ of $(x+y)$ then what percent of x is y ?

ASSIGNMENT NO.-III

Date:

Reference Unit-II

- Q.1. A man buys an article for rs.27.50 and sells it for rs.28.50. Find his gain %.
- Q.2. Find S.P when (i) CP=56.25,gain=20%.
- Q.3. A person incures loss for by selling a watch for rs1140.at what price should the watch be sold to earn a 5% profit?
- Q.4. If the cost price is 96% of sp then whqt is the profit %
- Q.5. By selling 33 meters of cloth, one gains the selling price of 11 meters. Find the gain percent

Q.6. 12.A grocer purchased 80 kg of sugar at Rs.13.50 per kg and mixed it with 120kg sugar at Rs.16per kg. At what rate should he sell the mixer to gain 16%?

Q.7. Monika purchased a pressure cooker at $9/10^{\text{th}}$ of its selling price and sold it at 8% more than its S.P .find her gain percent.

Q.8. A man sells an article at a profit of 25%if he had bought it 20% less and sold it for Rs 10.50 less, he would have gained 30%find the cost price of the article.

ASSIGNMENT NO.-IV

Date:

Reference Unit-II

- Q.1. Worker A takes 8 hours to do a job. Worker B takes 10 hours to do the same Job. How long should it take both A and B, working together but independently, to do the same job?**
- Q.2. A and B can do a piece of work in 18 days; Band C can do it in 24 days A and C can do it in 36 days. In how many days will A, Band C finish it together and separately?**
- Q.3. A is twice as good a workman as B and together they finish a piece In 18 days. In how many days will A alone finish the work?**

- Q.4. A can do a certain job in 12 days. B is 60% more efficient than A. How many Days does B alone take to do the same job?**
- Q.5. A and B undertake to do a piece of work for Rs. 600. A alone can do it in 6 days while B alone can do it in 8 days. With the help of C, they finish it in 3 days. Find the share of each.**
- Q.6. 45 men can complete a work in 16 days. Six days after they started working, 30 more men joined them. How many days will they now take to complete the remaining work?**

ASSIGNMENT NO.-V

Date:

Reference Unit-III

Q.1. Find the value of (i) 6P_3 (ii) 4P_4

Q.2. How many words can be formed by using all letters of the word 'DAUGHTER' so that the vowels always come together?

Q.3. How many words can be formed from the letters of the word 'EXTRA' so that the vowels are never together?

Q.4. In how many ways can a cricket eleven be chosen out of a batch of 15 players?

Q.5. In how many ways, a committee of 5 members can be selected from 6 men and 5 ladies, consisting of 3 men and 2 ladies?

Q.6. Find the value of (i) ${}^{10}C_3$ (ii) ${}^{100}C_{98}$ (iii) ${}^{50}C_{50}$

ASSIGNMENT NO.-VI

Date:

Reference Unit- III

Q.1. Two unbiased coin are tossed .what is the probability of getting at most one head?

Q.2. A bag contains 6 white and 4 black balls .2 balls are drawn at random. Find the probability that they are of same color.

Q.3. Two dice are thrown together .what is the probability that the sum of the number on the two faces is divided by 4 or 6

Q.4. A cyclist covers a distance of 750 m in 2 min 30 sec. What is the speed in km/hr of the cyclist?

Q.5. Peter can cover a certain distance in 1 hr. 24 min. By covering two-third of the distance at 4 kmph and the rest at 5 kmph. Find the total distance.

Q.6. A man traveled from the village to the post-office at the rate of 25 kmph and walked back at the rate of 4 kmph. If the whole journey took 5 hours 48 minutes, find the distance of the post-office from the village.

Q.7. A and b are two stations 390 km apart. A train starts from a at 10 a.m. And travels towards b at 65 kmph. Another train starts from b at 11 a.m. And travels towards a at 35 kmph. At what time do they meet?

Q.8. An aeroplane files along the four sides of a square at the speeds of 200,400,600 and 800km/hr. Find the average speed of the plane around the field.

ASSIGNMENT NO.-VII

Date:

Reference Unit-IV

Q.1 Select a suitable figure from the Answer Figures that would replace the question mark (?).

Problem Figures:



(A) (B) (C) (D)

Answer Figures:



(1) (2) (3) (4) (5)

A. 1

B. 2

C. 3

D. 4

E.5

Reason:

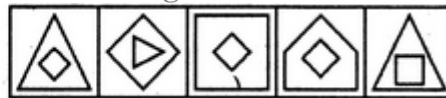
Q.2 Select a suitable figure from the Answer Figures that would replace the question mark (?).

Problem Figures:



(A) (B) (C) (D)

Answer Figures:



(1) (2) (3) (4) (5)

A. 1

B. 2

C. 3

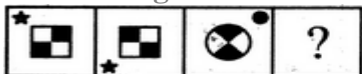
D. 4

E.5

Reason:

Q.3 Select a suitable figure from the Answer Figures that would replace the question mark (?).

Problem Figures:



(A) (B) (C) (D)

Answer Figures:



(1) (2) (3) (4) (5)

A. 1

B. 2

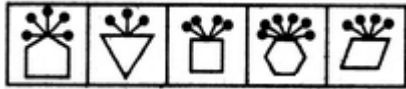
C. 3

D. 4

E.5

Reason:

Q.4 Choose the figure which is different from the rest.



(1) (2) (3) (4) (5)

A. 1

B. 2

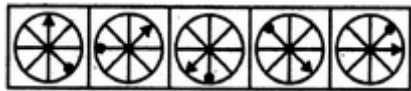
C. 3

D. 4

E.5

Reason:

Q. 5 Choose the figure which is different from the rest.



(1) (2) (3) (4) (5)

A. 1

B. 2

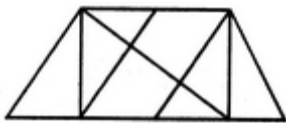
C. 3

D. 4

E.5

Reason:

Q. 6 Find the number of triangles in the given figure.



A. 8

B. 10

C. 12

D. 14

Reason:

Q.7 Statements: Some actors are singers. All the singers are dancers.

Conclusions:

1. Some actors are dancers.
 2. No singer is actor.
- A. Only (1) conclusion follows
- B. Only (2) conclusion follows
- C. Either (1) or (2) follows
- D. Neither (1) nor (2) follows

Reason:

Q.8 If A is the brother of B; B is the sister of C; and C is the father of D, how D is related to A?

- A. Brother
- B. Sister
- C. Nephew
- D. Cannot be determined

Reason:

Q. 9 A, P, R, X, S and Z are sitting in a row. S and Z are in the centre. A and P are at the ends. R is sitting to the left of A. Who is to the right of P ?

- A. A
- B. X
- C. S
- D. Z

Reason:

ASSIGNMENT-VIII

Date:

Reference Unit-V

Q.1 SCD, TEF, UGH, ____, WKL

- | | |
|--------|--------|
| A. CMN | B. UJI |
| C. VIJ | D. IJT |

Reason:-

Q.2 FAG, GAF, HAI, IAH, ____

- | | |
|--------|--------|
| A. JAK | B. HAL |
| C. HAK | D. JAI |

Reason:-

Q.3 Tanya is older than Eric. Cliff is older than Tanya. Eric is older than Cliff.
If the first two statements are true, the third statement is

- | | | |
|---------|---------|--------------|
| A. True | B. True | C. Uncertain |
|---------|---------|--------------|

Reason:-

Q.4 The temperature on Monday was lower than on Tuesday. The temperature on Wednesday was lower than on Tuesday. The temperature on Monday was higher than on Wednesday. If the first two statements are true, the third statement is

- | | | |
|---------|---------|--------------|
| A. True | B. True | C. Uncertain |
|---------|---------|--------------|

Reason:-

Q. 5) 36, 34, 30, 28, 24, ... What number should come next?

- | | |
|-------|-------|
| A. 20 | B. 22 |
| C. 23 | D. 26 |

Reason:-

Q.6) 53, 53, 40, 40, 27, 27, ... What number should come next?

A. 12

B. 14

C. 27

D. 53

Reason:-

Q. 7) V, VIII, XI, XIV, __, XX, ... What number should fill the blank?

A. IX

B. XXIII

C. XV

D. XVII

Reason:-

Q.8) 8, 43, 11, 41, __, 39, 17, ... What number should fill in the blank?

A. 8

B. 14

C. 43

D. 44

Reason:-

Q.9) Choose the word which is different from the rest.

A. Cap

B. Turban

C. Helmet

D. Veil

E. Hat

Reason:-