PURBANCHAL UNIVERSITY
2011

Bachelor in Information Technology (B.I.T.)/First Semester/Back

Time: 03:00 hrs. Full Marks: 80 /Pass Marks: 32

BIT116CS: Computer Programming-I

Candidates are required to give their answers in their own words as far as practicable.

Figure in the margin indicate full marks.

Group A

Answer TWO questions. **2×12=24**

1(a) Explain call by value and call by reference with example. 6

(b) Write a program to generate Fibonacci series upto N terms using functions. 6

2(a) How will you use pointer with structure? Explain with example. 6

(b) Write a program using pointer to find transpose of a given square matrix. 6

3(a) Discuss nested structure with an example. 6

(b) Differentiate structure and union. 3

(c) Write a program to input records of N books and display those records in alphabetical order on the basis of book name. Book id, name and price are data members of structures. 6

Group B

Answer EIGHT questions. **8×7=56**

4. Discuss C tokens. 7

5. Write an algorithm and flowchart to find reverse of a given number. 7

6. Write a program to generate following patterns: 7

```
    1
   1 2 1
  1 2 3 2 1
 1 2 3 4 3 2 1
1 2 3 4 5 4 3 2 1
```

Contd. ...

7. Discuss advantages of data file. Write a program to copy content of one file into another file. 2+5

8. Discuss increment and decrement operator with example. Write program to swap given two variables. 3+4

9. Write a program to draw the following figures without overlap:
   (a) an ellipse 3.5
   (b) two concentric circles. 3.5

10. Define looping. Differentiate entry controlled loop and exit controlled loop with flowchart. 2+5

11. Discuss the importance of C programming language. Differentiate compiler and interpreter. 4+3

12. Write a program to determine whether the given string () palindrome or not, without using strrev () function. 7

13. Write short notes on any TWO; 3.5+3.5
   (a) Logical operator
   (b) Recursion
   (c) DMA

PURBANCHAL UNIVERSITY
2012

Bachelor in Information Technology (B.I.T.)/First Semester/*Final*
Time: 03:00 hrs. Full Marks: 80 /Pass Marks: 32
BIT175CO: Computer Programming in C

Candidates are required to give their answers in their own words as far as practicable.

Figure in the margin indicate full marks

Group A

Answer TWO questions. 2×12=24

1(a) What are the advantages of using function? Discuss local and global variables with example. 2+3

(b) Write a program to determine whether the given number is palindrome or not using function. 7

2(a) Discuss chain of pointer with example. Why do we require DMA? Explain. 2+3

(b) Write a program to count number of vowels and constants in a given sentence using pointer. 7

3(a) How does an array differ from a structure? 3

(b) Discuss the importance of data file. 3

(c) Write a program to count number of characters, words, and new lines present in a file. 6

Group B

Answer EIGHT questions. 8×7=56

4. Define data type. Discuss fundamental data type. 1+6

5. Write a program to multiply given two matrices. 7

6. Define preprocessor directive. Differentiate compiler and interpreter. 2+5

7. Define ternary operator, increment, and sizeof () operator with example. 7

Contd. ...

8. Write a program to draw: 3.5+3.5
   (a) three concentric circles
   (b) a right-angled triangle

9. Write a program to solve a quadratic equation, considering all possible cases. 7

10. Write a program using structure to read the following information of 100 students: 7
    - Student name, student Roll Number and marks count of 100.
    - The program should print the name, roll number of students who have obtained more than 60 marks.

11. Explain memory management functions with example. 7

12. Define Escape Sequence. Write a program to swap content of two variables using function and pointer. 7

13. Write short notes on any TWO: 2×3.5
    (a) Unconditional control statements
    (b) Unformatted I/O functions
    (c) Bitwise operators

PURBANCHAL UNIVERSITY
2013 (New)

Bachelor in Information Technology (B.I.T.)/First Semester/*Final*

Time: 03:00 hrs. Full Marks: 80 /Pass Marks: 32

BIT175CO: Computer Programming in C

Candidates are required to give their answers in their own words as far as practicable.

Figure in the margin indicate full marks.

Group A

Answer TWO questions. **2×12=24**

1(a) Define recursion. Differentiate local and global variables. 2+3

(b) Write a program to compute ${}^nC_r$ using function. 7

2(a) Define a pointer. Why is it used? Discuss. 2+3

(b) Write a program to find the smallest and largest numbers in a given array using ~~pointer~~. 7

3(a) Differentiate an array and a structure. 3

(b) How nested structure is defined and initialized? Explain with an example. 3

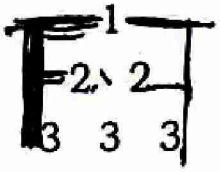
(c) Write a program, using structure, to input records of 10 students. Members include name, roll number, and marks obtained in math, C program and English Display the records of students who have passed in C programming. 6

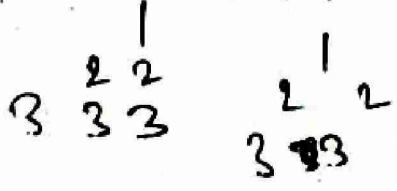
Group B

Answer SEVEN questions. **7×8=56**

4. Write an algorithm, flowchart, and program to determine in which quadrant a given point lies. 2+2+4

5. Describe break and continue with examples. Write a program to generate the following output: 4+4





Contd. ...

7. Discuss advantages of data file. Write a program to copy content of one file into another file. 2+5

8. Discuss increment and decrement operator with example. Write program to swap given two variables. 3+4

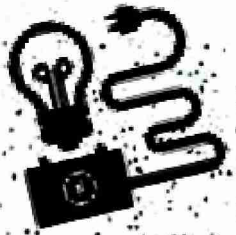
9. Write a program to draw the following figures without overlap:
   (a) an ellipse 3.5
   (b) two concentric circles 3.5

10. Define looping. Differentiate entry controlled loop and exit controlled loop with flowchart. 2+5

11. Discuss the importance of C programming language. Differentiate compiler and interpreter. 4+3

12. Write a program to determine whether the given string () palindrome or not, without using strrev () function. 7

13. Write short notes on any TWO: 3.5+3.5
   (a) Logical operator
   (b) Recursion
   (c) DMA



PURBANCHAL UNIVERSITY

2014 (New)

Bachelor in Information Technology (B.I.T.)/First Semester/*Final*

Time: 03:00 hrs. Full Marks: 80 /Pass Marks: 32

BIT175CO: Computer Programming in C

Candidates are required to give their answers in their own words as far as practicable.

Figure in the margin indicate full marks.

Group A

Answer TWO questions. **2×12=24**

1. Explain the difference between structure and union. Define a structure data type called time-struct containing three members integer hour, integer minute and integer second. Develop a program that would assign values to the individual members and display the time in the form: 16:40:51.

2. How can you pass pointers to a function? Write a program to illustrate the difference between ordinary arguments, which are passed by value, and pointer arguments, which are passed by reference. 5+7=12

3. Illustrate arrays and its types with example. Write a program to read a list of 'n' numbers and sort them in increasing order. 4+8=12

Group B

Answer SEVEN questions. **7×8=56**

4. Differentiate between local and global variables. Write a program to find the largest of three integer quantities using function.

5. Write a program to multiply two m×n matrices. 3+5

6. Write a program to generate Pascal's triangle. 8

```
        1
      1 2 1
    1 2 3 2 1
  1 2 3 4 3 2 1
```

Contd. ...

7. List out the different types of operators. Illustrate bitwise operator with example. 3+5=8

8. Write a program to print the following series:
1, 1, 2, 3, 5, 8, 13, 21, ...

9. Illustrate I/O operation with example. Write a program to read and write a line of text and convert to Uppercase. 4+4=8

10. Explain opening and closing of file in C. Write a program to draw square, ellipse using graphics function. 4+4=8

11. Write a program to print prime numbers between 1 and 20.

11. Write short notes on (any TWO): 4+4=8
(a) Algorithm and flowchart
(b) Data files
(c) Dynamic memory allocation

PURBANCHAL UNIVERSITY
2015

Bachelor in Information Technology (B.I.T.)/First Semester/*Final*

Time: 03:00 hrs. Full Marks: 80 /Pass Marks: 32

BIT175CO: Computer Programming in C *(New Course)*

Candidates are required to give their answers in their own words as far as practicable.

Figure in the margin indicate full marks.

Group A

Answer TWO questions. **2×12=24**

1. Write a program to input 10 employee records (Emp_id, Emp_name, and Emp_salary) and store them in a data file named "Emp.dat". Display the employee information who gets highest salary. 12

2. What is a function? Elaborate the differences between user-defined and library functions. Contrast and explain with suitable examples, the difference between iteration and recursion. 2+4+6

3. Describe pointers and arrays. WAP to take n numbers and display the sum of even numbers and odd numbers separately. 2+2+8

Group B

Answer SEVEN questions. **7×8=56**

4. Discuss the differences between Local, Global and Static variables with suitable examples. 8

5(a) What do you mean by variables and keywords? Give examples. 3

(b) Explain the use of ternary operator with example. 5

6. WAP to perform matrix multiplication using array and pointers. 8

7. Explain in detail about memory management in C. 8

8. Write a C program to display: 8

(a) a rectangle whose height is 200 pixels and width is 400 pixels.

(b) a circle whose diameter is 200 pixels.

9. WAP to generate the following output. 8

```
    *
   * *
  * * *
 * * * *
* * * * *
```

10 Define goto statement. When can we use goto statement? Write a program to determine whether an input number is prime number or not. 3+5

11. WAP to read a character from keyboard and convert it into uppercase if it is in lowercase and vice versa. 8

12. Write short notes on any TWO: 2×4=8
    (a) Call by reference
    (b) Continue statement and break statement
    (c) History of C

PURBANCHAL UNIVERSITY

2016

Bachelor in Information Technology (B.I.T.)/First Semester/*Final*

Time: 03:00 hrs. Full Marks: 80 /Pass Marks: 32

BIT175CO: Computer Programming in C *(New Course)*

Candidates are required to give their answers in their own words as far as practicable.

Figure in the margin indicate full marks.

Group A

Answer TWO questions. **2×12=24**

1(a) Discuss an ordinary and a pointer variable with an example. 3

(b) Write a program, using pointer to sort N integer numbers of an array in descending order. 9

2(a) Mention the importance of a data file. 2

(b) What are the differences between a standard function and a user defined function? 3

(c) A college needs to maintain following information for the records of its students:

Student code (Integer)
Student name (maximum 40 characters)
Age (Integer)
Total Fee (Integer)
Address (maximum 100 characters)
Age (Integer)

Write a program using structure, to input records of N students and arrange these records in alphabetical order and display these records. 7

3. What do you mean by memory allocation? Why is it necessary? Discuss about the various types of memory allocation in C. Also explain the various memory allocation functions. 1+1+5+5

Contd. ...

Group B

Answer SEVEN questions. **7×8=56**

4. Differentiate between structure and union. Discuss unformatted input/output functions. 3+5

5. Write a program to draw rectangle and circle using suitable graphics functions. 8

6. What is string? Discuss various string handling functions. 2+6

7. Write a program to input a line of text and store it in a data file and display number of vowels and white spaces from the given text stored in a data file. 8

8. Why does it make sense to keep certain block of codes inside a function? Differentiate between call by vale and call by reference. 2+6

9. Explain the various types of bitwise and logical operators used in C language with proper examples. 8

10. Discuss about the various data types in C. Also explain about the typical structure of a C program. 4+4

11. Define various types of statements. Define loops and explain the difference between for and while loop. 2+6

12. Write a program to generate the prime numbers from 100 to 200. 8

PURBANCHAL UNIVERSITY
2017

Bachelor in Information Technology (B.I.T.)/First Semester/*Final*

Time: 03:00 hrs. Full Marks: 80 /Pass Marks: 32

BIT175CO: Computer Programming in C *(New Course)*

Candidates are required to give their answers in their own words as far as practicable.

Figure in the margin indicate full marks.

Group A

Answer TWO questions. **2×12=24**

1(a) What are the different rules for naming variables? Write an Algorithm and flowchart to find the greatest number among three numbers. 3+4

(b) Write a program to generate Fibonacci series upto N terms. 5

2(a) Why do we need to store data into the file? Write a program to draw a Right Angle Triangle and set the line color as RED. 2+4

(b) Define pointer with syntax. Write a program, using pointer, to find transpose of a given matrix. 1+5

3(a) Discuss structure with syntax. 2

(b) Write a program using structure to read Name, Age, Address and Telephone number of N persons and sort them in ascending order by Name and display all the person's detail whose age is greater than 25. 10

Group B

Answer SEVEN questions. **7×8=56**

4. What is operator? List different types of operators supported in C. Explain in detail the basic Structure of 'C' programming. 1+2+5

5. Write a program to input average marks of student and show the grade as the following conditions. 8

Marks	Grade
0-39	F
40-49	D
50-59	C
60-79	B
80-100	A

Contd. ...

6. Differentiate between call by value and call by reference. Write program to swap two variables showing the example of call by reference. 4

7. Write a program to determine whether the given number is palindrome or not. 4

8. Explain primary data types. Discuss unformatted input functions. 4

9. Discuss memory management functions. Write a program to find the sum of elements of a given array, using DMA. 3

10. Define and list the different types of Array with syntax. Write program to the following pattern: 3

```
1
1 2
1 2 3
1 2 3 4
1 2 3 4 5
1 2 3 4 5 6
```

11. Write short notes on any TWO: 4×2

(a) String handling functions

(b) Difference between Structure and Array

(c) Opening Modes of File

6. Discuss file opening modes. Write a program to create a source file and then copy its content into another file. 4+4

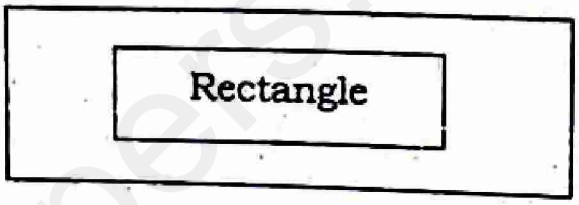
7. List out the differences between an interpreter and complier. Write a program to determine whether a given number is palindrome or not. 3+5

8. Define backslash character constant. Discuss unformatted input/output functions with syntax. 2+6

9. Discuss conditional operator with an example. Write a program to find the sum of digits of a given integer number. 3+5

10. Define multidimensional array. How is it declared and initialized? Write a program search a given element in an array consisting of N elements. 1+2+5

11(a) Write a program to draw following: 5



(b) Write a program to reverse to string using string function. 3

12. Write short notes on any TWO: 2×4=8
(a) Preprocessor directive
(b) Data type
(c) Terneary operator

PURBANCHAL UNIVERSITY
2011

Bachelor in Information Technology (B.I.T.)/First Semester/*Final*

Time: 03:00 hrs. Full Marks: 80 /Pass Marks: 32

BIT114CE: Basic Electrical System and Circuits

Candidates are required to give their answers in their own words as far as practicable.

Figure in the margin indicate full marks.

Group A:

Answer TWO questions. **2×12=24**

1. Give suitable reasons. 3×4=12

(a) Current can't change instantaneously in a system of constant inductance.

(b) Induction motor can't rotate at synchronous speed.

(c) Ammeter is connected in series while voltmeter is connected in parallel.

2(a) Explain in brief about laws of resistance and hence define resistivity and conductivity. 4+1+1

(b) ABCD is a square of 3cm side. Charges of 1μC, 3μC, -5μC and 2μC are placed in vertices A, B, C and D respectively. Find the resultant force on charge at B. 6

3(a) Write down the working principle of permanent magnet moving coil instrument with its advantages and disadvantages. 6

(b) A dc shunt generator with armature winding resistance of 0.25Ω and field resistance of 125Ω is supplying power to load resistance of 50Ω. The magnitude of field current is 2 A. Calculate generator terminal voltage, armature current and emf generated by armature. 3+3

Group B:

Answer EIGHT questions. **8×7=56**

4. Explain the terms waveform, cycle, time period, frequency, amplitude and phase with reference to alternating voltage with neat sketch. 7

5. Find the Norton's equivalent circuit across resistance R_o of the circuit shown in Fig. (5). 7

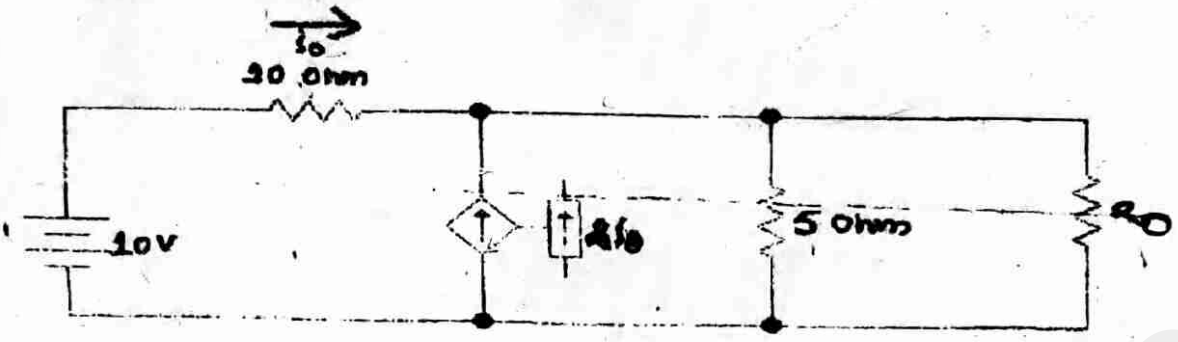


Fig. (5)

6. State and prove maximum power transfer theorem. 7

7. A sinusoidal alternating supply has rms value of 200V and frequency of 50Hz. A coil of resistance 10Ω and inductance 0.1H is connected in series with 150μF capacitor. Find impedance, rms value of current, power factor, active power, reactive power, apparent power and new value of capacitance that will make power factor unity. 1+1+1+4

8. What is transformer? Classify transformer on the basis of transformation ratio. Briefly explain about its working principle and derive its emf equation. 1+1+5

9. State and explain Kirchhoff's current law and Kirchhoff's voltage law with necessary diagram. 7

10. What is magnetic hysteresis? Classify ferromagnetic materials on the basis of hysteresis loop and briefly explain about them. 7

11(a) An aluminum wire 10m long is connected in parallel with a copper wire 6m long. When current of 5A is passed through combination, it as found that current in aluminum wire is 3A. The diameter of aluminum wire is 1mm. Determine the diameter of copper wire. Resistivity of copper is 0.017μΩm and that of aluminum is 0.028μΩm. 5

(b) Explain the term Linear and Non-Linear circuit. 1+1

12. What is electrolysis? Explain about Faradays laws of electrolysis. 2+5

13. Write short notes on any TWO: 3.5+3.5

(a) Torques in indicating instruments
(b) Joule's Law of heating
(c) Series resonance
(d) Dielectric loss

PURBANCHAL UNIVERSITY

2012

Bachelor in Information Technology (B.I.T.)/First Semester/ *Final*

Time: 03:00 hrs. Full Marks: 80 /Pass Marks: 32

BIT120EL: Basic Electrical System and Circuits

Candidates are required to give their answers in their own words as far as practicable.

All questions carry equal marks. The marks allotted for each sub-question is specified along its side.

Answer FIVE questions.

1(a) Differentiate between electric circuit and electric network. 3

(b) Derive the voltage divider rule and current divider rule used in electrical networks. 2.5+2.5

(c) Find the total resistance of the circuit shown below. What will be the power dissipation if a source of 10 V is connected across AB terminal? 5+3

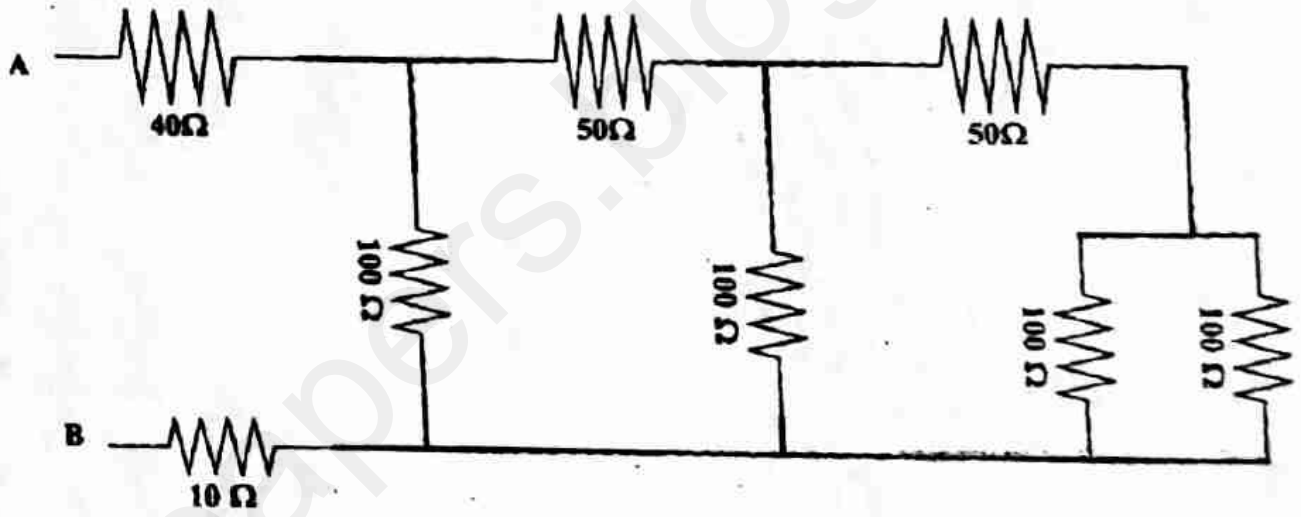


Fig. 1(c)

2(a) Find the equivalent resistance as seen from terminal AB. 6

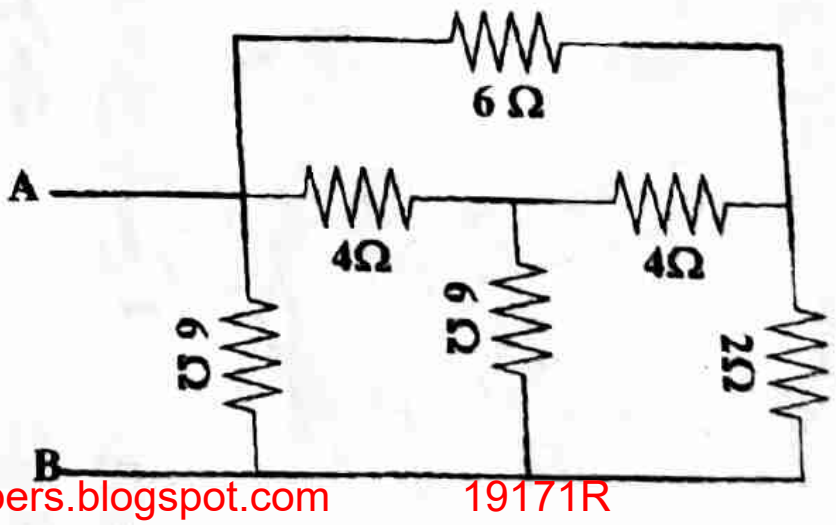


Fig. 2(a)

Contd. ...

(b) State Maximum power transfer theorem. 2

(c) Find the current in all the meshes of the circuit below using mesh analysis. 8

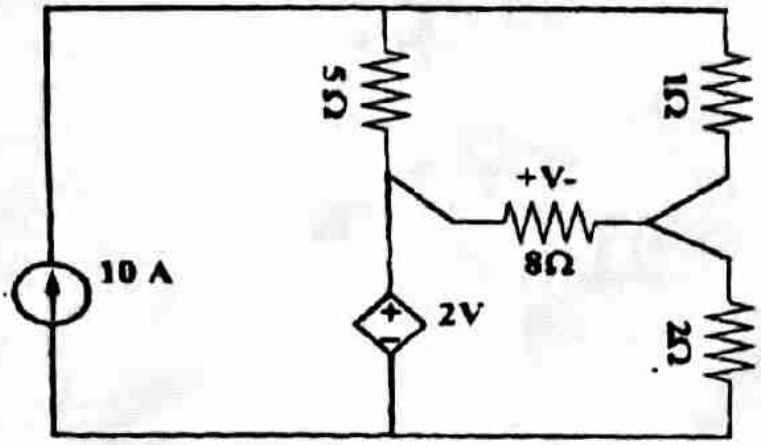


Fig. 2(c)

3(a) State and verify superposition theorem. 2+4

(b) Use Thevenins theorem to calculate current in 5Ω resistances. 6

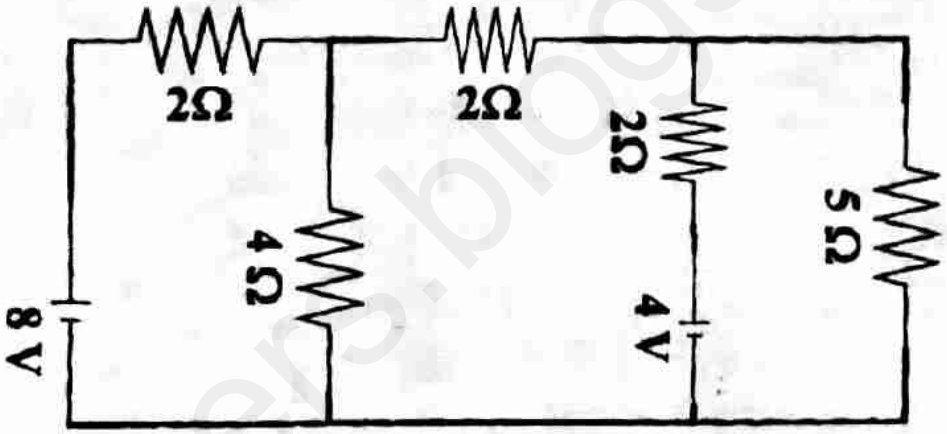


Fig. 3(b)

(c) Reduce the given circuit to a single resistance and current source. 4

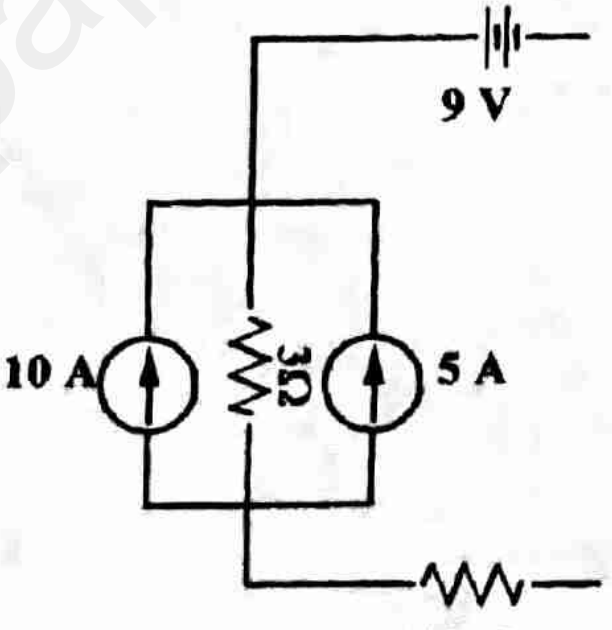


Fig. 3(c)

Contd. ...

4(a) State Faradays law of electromagnetic induction. 3

(b) Calculate form factor of the waveform shown below: 5

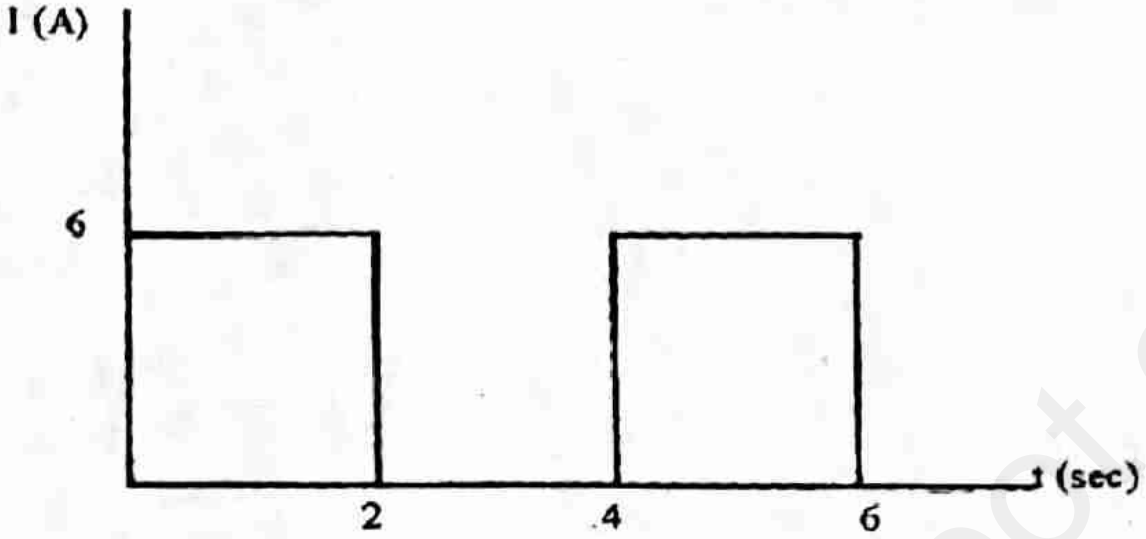


Fig. 4(b)

(c) A delta connected balanced three phase load is supplied from a three phase 400 V supply. The line current is 20 A and the total power taken by the load is 10,000 W. Calculate: (i) Impedance in each branch, (ii) Power factor, (iii) Total power consumed if same load is connected in star. 2+2+4

5(a) Explain resonance in series RLC circuit deriving resonant frequency. 5

(b) Three impedances $Z_1=3+j4\Omega$, $Z_2=2+j3.46\Omega$ and $Z_3=1-j7.46\Omega$ are connected in a series with a generator. If the voltage drop across Z_1 is 10+j0 V, Find: (i) Current supplied by generator, (ii) Voltage across each impedances, (iii) Voltage of generator. 2+3+1

(c) A circuit has 400Ω resistance in first branch, a 50Ω inductive reactance in second branch and 40Ω capacitive reactance in third branch. It is fed from 240V, 50Hz supply. Find the circuit current and power factor. 4+1

6. Write short notes on any FOUR: 4×4=16

(a) Ohm's law for magnetic circuits
(b) Power factor improvement
(c) Hysteresis
(d) Norton's theorem
(e) Advantages of three phase ac circuits

PURBANCHAL UNIVERSITY
2014 (New)

Bachelor in Information Technology (B.I.T.)/First Semester/*Final*

Time: 03:00 hrs. Full Marks: 80 /Pass Marks: 32

BIT120EL: Basic Electrical System and Circuits

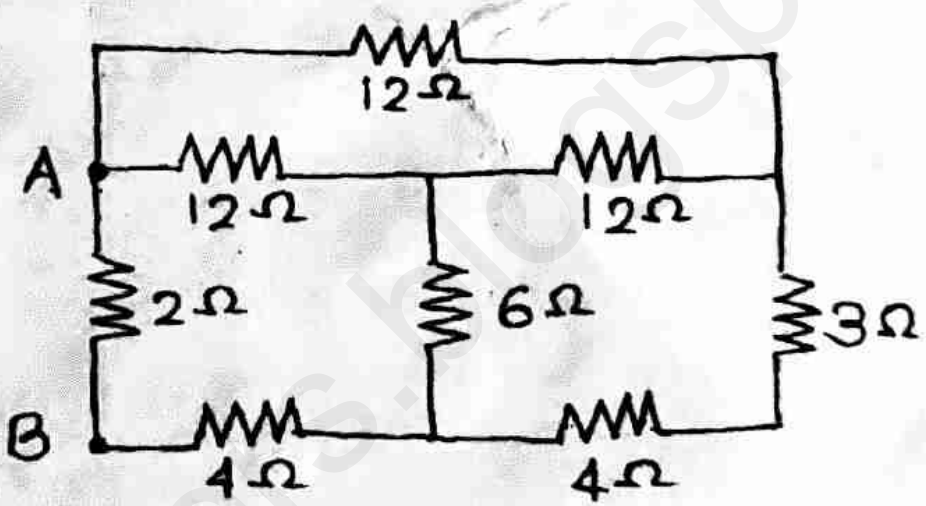
Candidates are required to give their answers in their own words as far as practicable.

All questions carry equal marks. The marks allotted for each sub-question is specified along its side.

Answer FIVE questions.

1(a) State Ohms Law. Define resistance and state law of resistance. 1+1+2

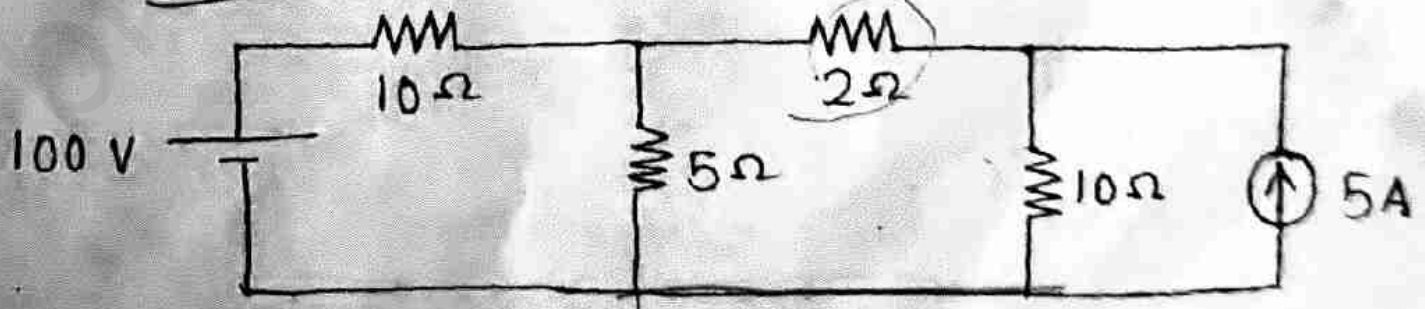
(b) Find equivalent resistance R_{AB} for give network. 6



(c) Find the equivalent resistance of two resistances in series and find ratio of voltage drop across each resistance. 6

2(a) State and explain reciprocity theorem. 4

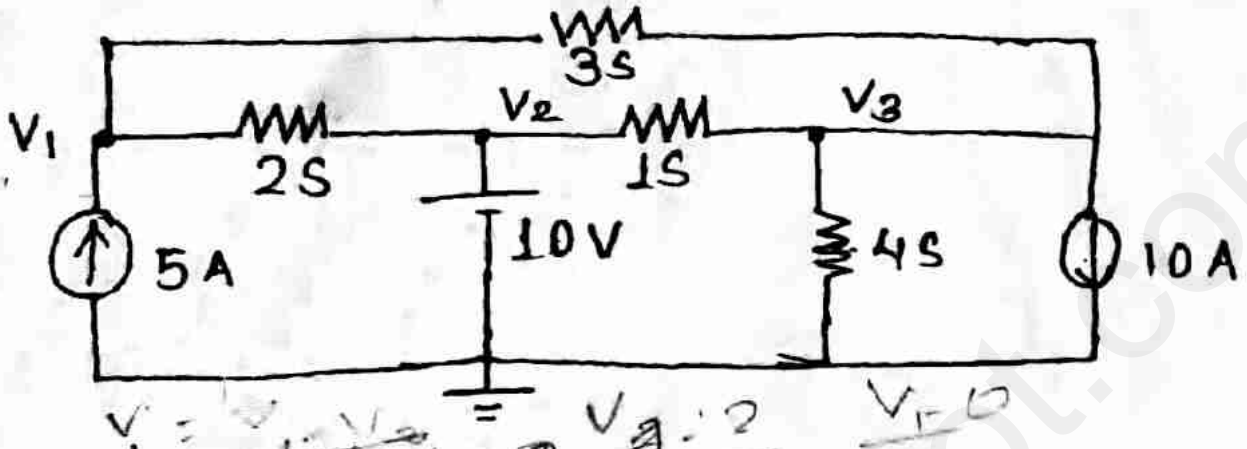
(b) Thevenize the given network and find current through load resistance of 2Ω. 6



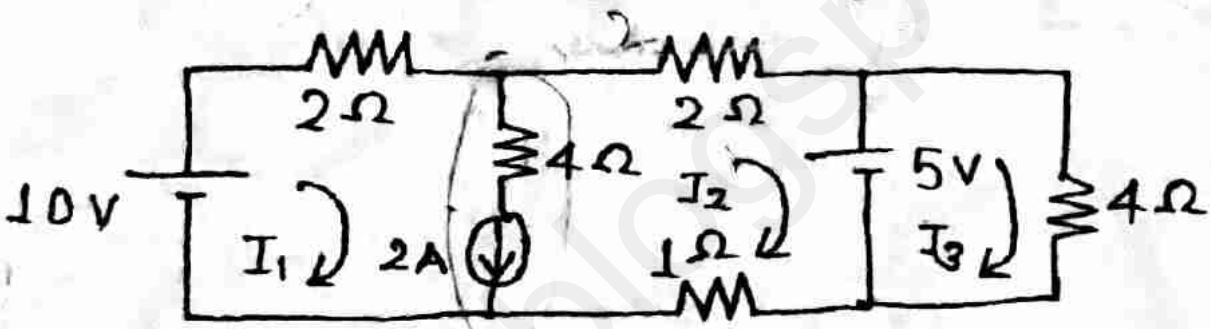
(c) A coil fo copper wire has a resistance of 90Ω at 20°C and is connected to 230V supply. By how much must the voltage be

increased in order to maintain current constant if the temperature of coil rises to 60°C. Take temperature coefficient of resistance of copper as 0.00428 at 0°C. 6

3(a) Using nodal analysis, determine the value of node voltages. 8

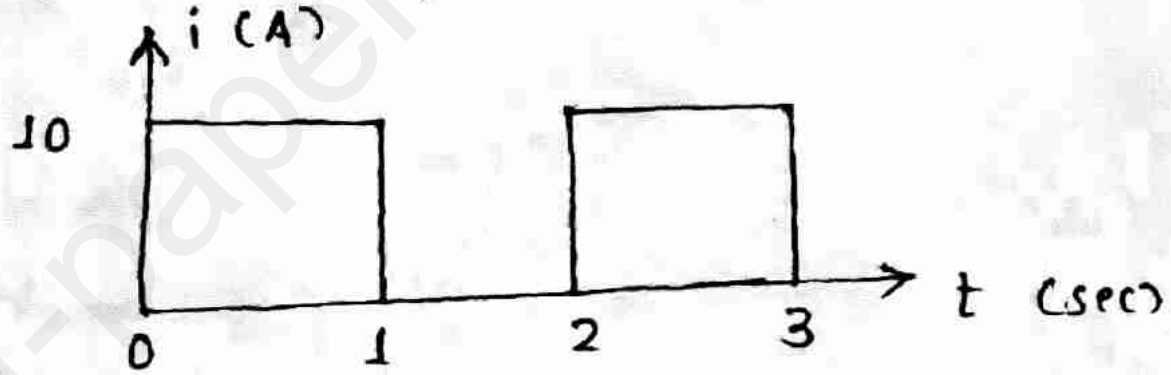


(b) Use mesh analysis to find the value of mesh currents. 8



4(a) Enumerate the advantages of 3ϕ system over 1ϕ system. 4

(b) Find the form factor and crest factor of the waveform shown. 6



(c) In a 3ϕ system with Y connected balanced load of (6 – i8)Ω, voltage of 230V is applied. Determine line current and total power absorbed. 3+3

5(a) Two impedances $Z_1 = (10+j15)\Omega$ and $Z_2 = (6-i8)\Omega$ are connected in parallel. If the total current supplied is 15A, find the power absorbed by each branch. Also find p.f. of individual branch and combination. Also draw phasor diagram. 3+3+2

(b) A resistance of 10Ω, capacitance of 2F and an inductance of 1H is connected in series across a 230V, 50Hz, 1ϕ supply. Find: 8

(i) Impedance
(ii) Current
(iii) Active power
(iv) Reactive power
(v) Apparent power
(vi) Resonant frequency
(vii) Q-factor at resonance
(viii) Power factor at resonance

6. Write short notes on: 4×4=16

(a) Ideal and practical voltage source
(b) Generation of alternating voltage
(c) Hysteresis in ferromagnetic materials
(d) Resonance in parallel circuit consisting coil and capacitance

PURBANCHAL UNIVERSITY
2015

chelor in Information Technology (B.I.T.)/First Semester/*Final*

ne: 03:00 hrs. Full Marks: 80 /Pass Marks: 32

T120EL: Basic Electrical System and Circuits *(New Course)*

ndidates are required to give their answers in their own words as far practicable.

questions carry equal marks. The marks allotted for each sub-question specified along its side.

swer FIVE questions.

a) Define specific resistance two coils connected in series have resistances of 600Ω and 300Ω with temperature coefficient of 0.1% and 0.4% respectively at 20°c. Find the resistance of combination at temperature of 50°c. What is the effective temperature coefficient of combination? 2+4+2

b) Find the current in 11Ω resistance in the network shown in figure 1 using star-delta. 8

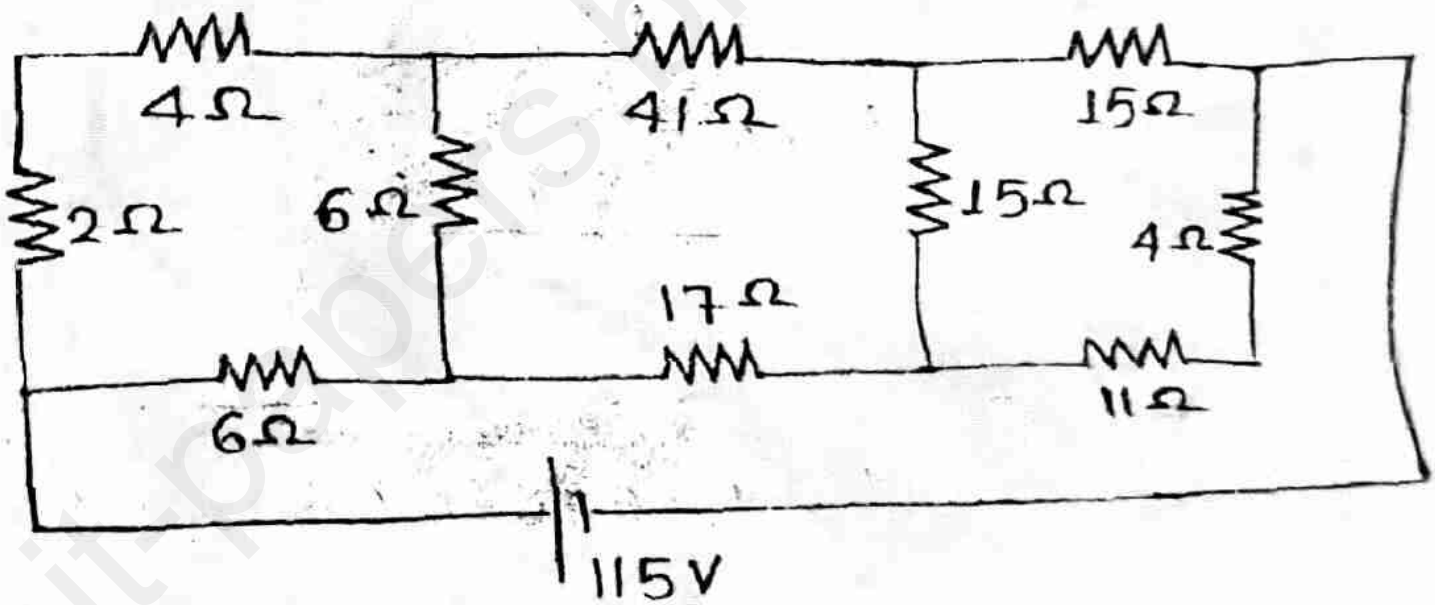


Fig. 1

Contd.

2(a) Find current I in the figure 2. 4

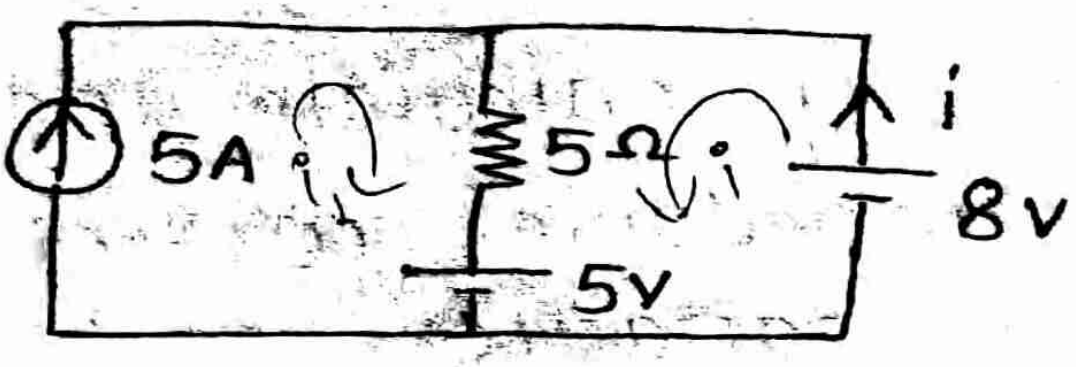


Fig. 2

(b) Find voltage drop across a-b terminals in figure 3. 4

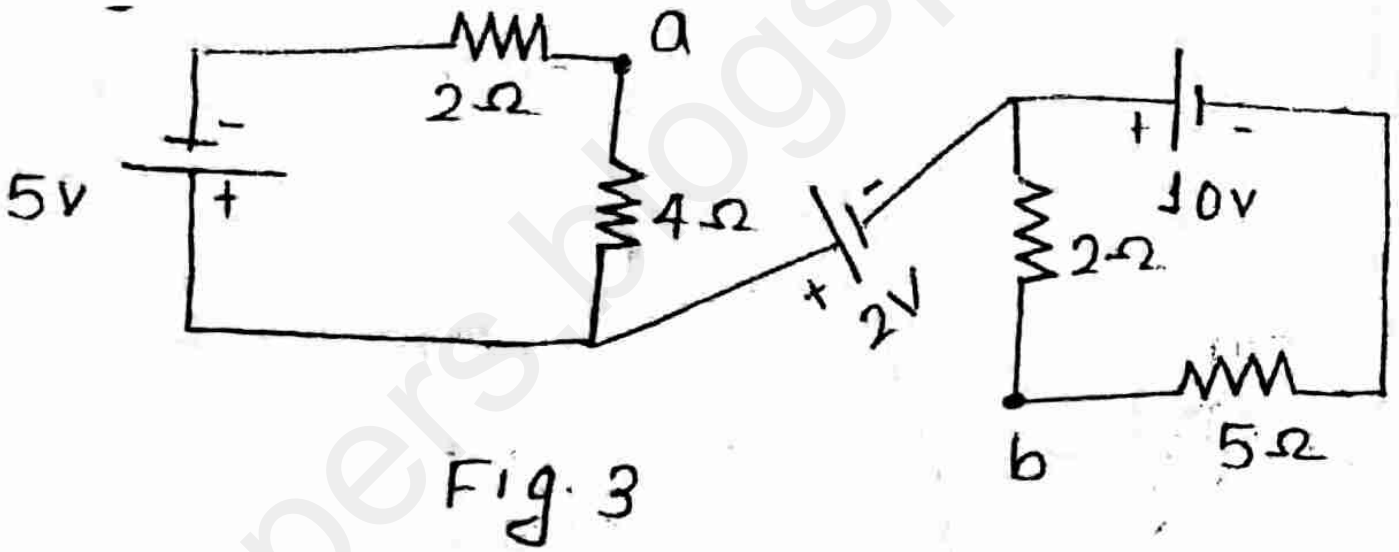


Fig. 3

(c) State and verify Reciprociry Theorem. 8

3(a) In the network of figure 4, find the node voltages by using nodal analysis. 8

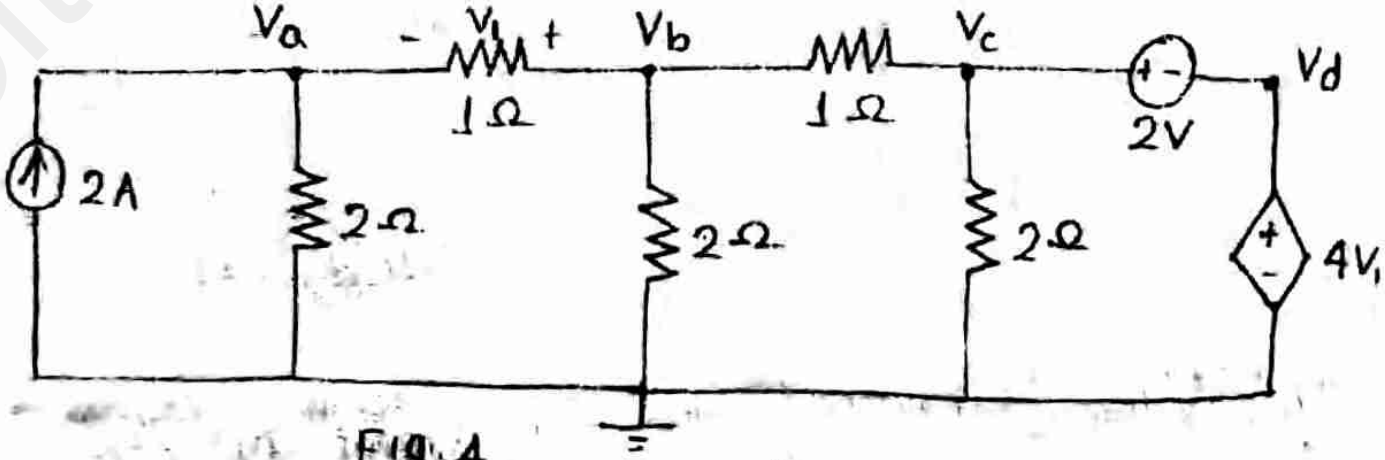


Fig. 4

Contd. ...

(b) Find the current in 6Ω resistance for the circuit shown in figure 5 using Norton's theorem. 8

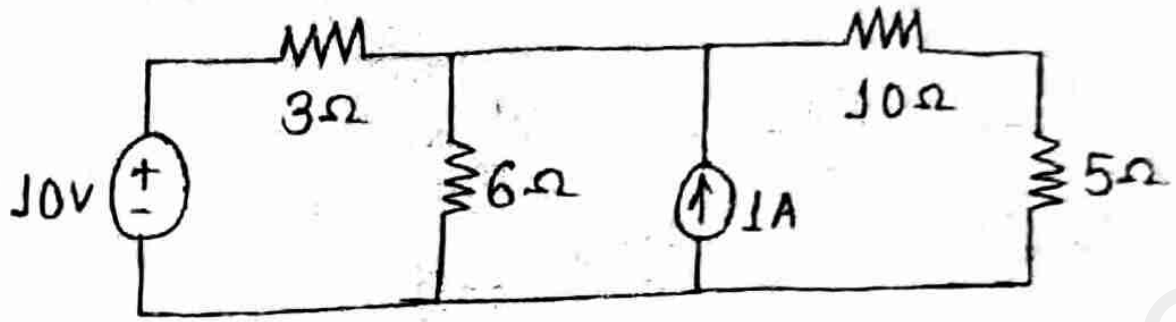


Fig. 5

4(a) Define cycle, time-period, frequency and amplitude with reference to alternating quantity. 4

(b) A coil of resistance 10Ω and inductance 0.1 H is connected in series with a 150 μF capacitor across 200v, 50 HZ supply. Calculate inductive reactance, capacitive reactance, impedance, current power factor, voltage across coil and capacitor and power consumed. 8

(c) Prove that average power consumed by a purely capacitive circuit is zero. 4

5(a) One branch of a parallel circuit consists of a coil, the resistance and inductance of which are 30Ω and 0.1 H respectively. The other branch consists of 100μF capacitor in series with a 20Ω resistor. If combination is connected to 240v, 50HZ mains, calculate branch currents and power consumed. Also draw phasor diagram. 8

(b) Differentiate between series resonant circuit and parallel resonant circuit. 4

(c) What do you mean by phase sequence of 3ϕ ac circuit? Enumerate the advantages of 3ϕ ac circuits. 1+3

6(a) Explain core loss in ferromagnetic material. 4

(b) A three phase, star connected load, each phase of which has Z=10+j6Ω is supplied from a 3ϕ 230 V, 50 HZ supply. Calculate line current, phase current, total power consumed by the load and power factor of load. 8

(c) Define the term resistance, reactance, conductance and susceptance with reference to complex impedance and complex admittance. 4

PURBANCHAL UNIVERSITY
2016

Bachelor in Information Technology (B.I.T.)/First Semester/*Final*

Time: 03:00 hrs. Full Marks: 80 /Pass Marks: 32

BIT120EL: Basic Electrical System and Circuits *(New Course)*

Candidates are required to give their answers in their own words as far as practicable.

All questions carry equal marks. The marks allotted for each sub-question is specified along its side.

Group A

Answer TWO questions. **2×12=24**

1(a) Define Resistor and Resistivity. Also state laws of resistance. The resistance of 100m length of cross sectional area $0.01m^2$ is 500Ω, if the wire is drawn to three times original length. Calculate its resistance? 2+2+4

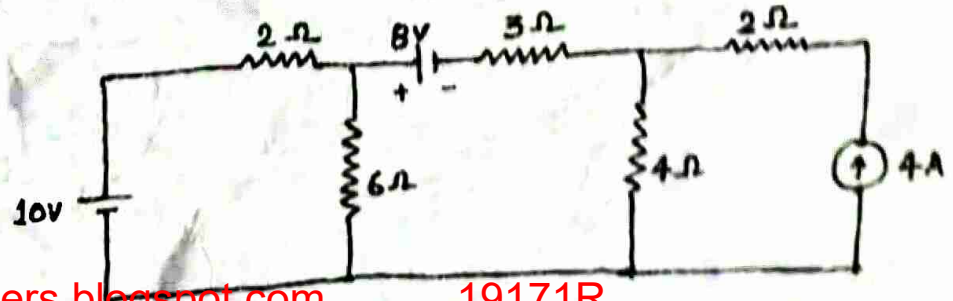
(b) Define: 4
(a) Amplitude
(b) Phase
(c) phase difference
(d) RMS and Average value

2(a) Derive the expression for current (I) of RC series circuit with the help of wave form and phasor diagram. 6

(b) A sinusoidal valtage of $V=230\angle 15^0$ of frequency 50Hz is applied to a series R-L circuit consisting R=4Ω and L=0.05H Calculate:
(i) The RMS current and its phase angle 2
(ii) Average power drawn by circuit 2
(iii) Reactive and apperant power. 2

3(a) State and prove superposition theorem. 6

(b) Find the current through each resistor in the circuit shown below. 6

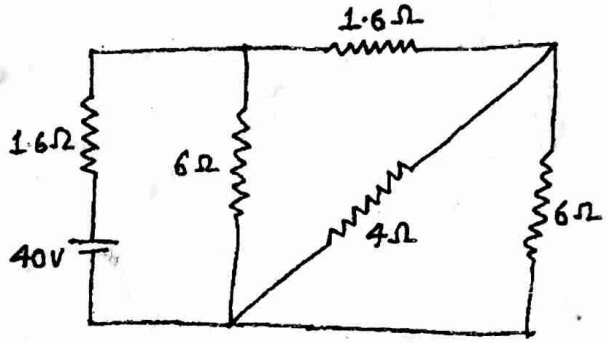


Contd. ...

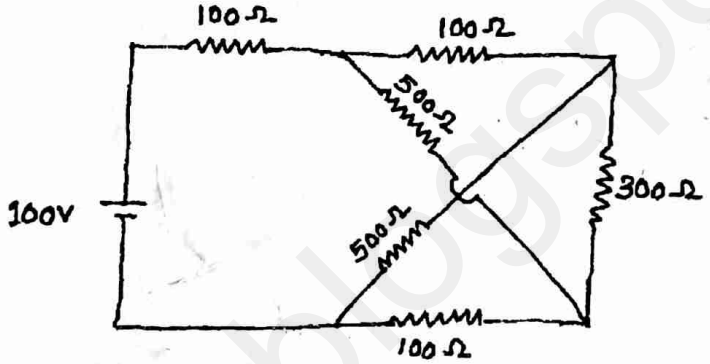
Group B

Answer SEVEN questions. 7×8=56

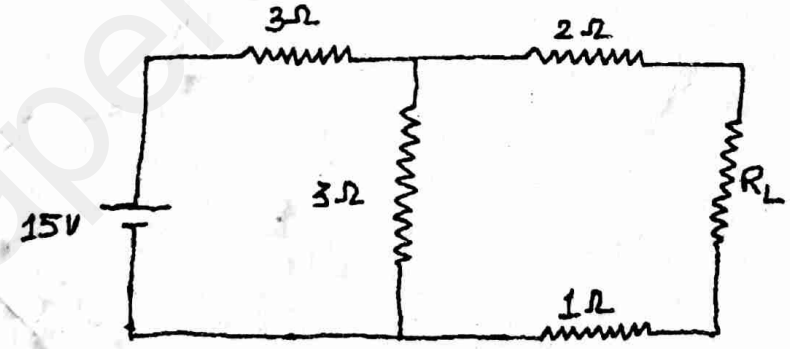
4. Find the current through 4Ω resistor.



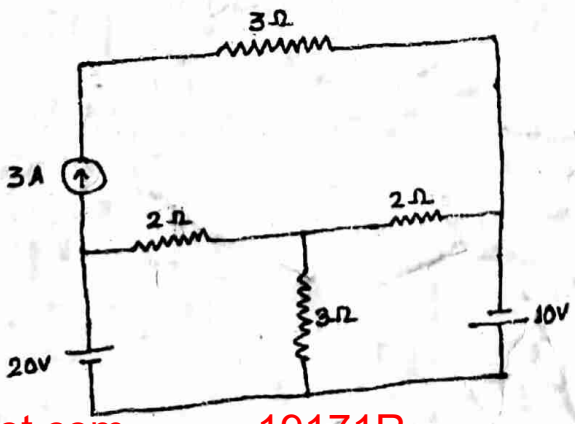
5. Determine the current supplied by the battery in the circuit shown in figure.



6. Find the value of R_L, such that maximum power will be transferred to R_L, Find the value of maximum power.



7. Apply loop analysis to analyze the given circuit.



Contd. ...

8. The voltage of current in an AC circuit is given by V=300sin 314t and i= 1sin (314t-36^0) Calculate:

(a) RMS value of V and i
(a) Active and Reactive power
(b) Draw the waveform of V and i
(c) Power

9. Two coils A and B are connected in series across a 240V, 50Hz supply. The resistance of A is 5Ω and inductance of A is 0.0132H. Also the resistance and inductance of B is 8.29Ω and 0.015H. Find:

(a) Impedance
(b) Active, Reactive and apperant power
(c) phasor diagram.

10. Derive the expression for average value and RMS value of pure sine wave AC voltage.

11 A 220V, 3-phase voltage is applied to balanced delta connected 3-phase load of phase impedance (15+j20)Ω, calculate:

(a) The phase voltage
(b) The power consumed per line
(c) The power consumed per phase
(iv) What is the phasor sum of three lines current? Why does it have this value?

12 Write short notes on any TWO:

(a) Ohm's law
(b) Kirchhoff's current and voltage law
(c) Operation of transformer

PURBANCHAL UNIVERSITY

2011

Bachelor in Information Technology (B.I.T.)/First Semester/Final

Time: 03:00 hrs. Full Marks: 60 /Pass Marks: 24

BIT112CS: Fundamentals of Information Technology

Candidates are required to give their answers in their own words as far as practicable.

Figure in the margin indicate full marks.

Group A:

Answer TWO questions. **2×12=24**

1(a) What is data warehouse? Explain the advantages of a data warehouse. 2+5

(b) Illustrate the components of data warehouse. 5

2(a) What is a database management system? How can you process the data in data management system? Give reasons. 2+4

(b) Define communication system. Write down the characteristics of distributed system. 2+4

3(a) Why memory is needed in computer? List different types of memory. Illustrate the advantages of secondary storage memory over primary storage memory. 2+1+4

(b) Discuss the two basic types of RAM. 5

Group B:

Answer SIX questions. **6×6=36**

4. Illustrate the working principle of hard disk with the help of diagram. 6

5. List the five generations of programming language. Give the differentiates between machine level language and assembly level language. 6

6. Distinguish between internet and intranet with example. 6

7. What is modulation? Why modulation is needed in telecommunication? Discuss. 6

8. What is an e-mail? How does an e-mail work? Describe.

9. Describe the word: Animation, shading, anti-aliasing and morphing in respect to multimedia.

10. What is a data warehouse? Discuss the uses of a data warehouse.

11. Write short notes on any TWO:
(a) SRAM and DRAM
(b) Function of OS
(c) Centralized data processing.

PURBANCHAL UNIVERSITY
2012

Bachelor in Information Technology (B.I.T.)/First Semester/*Final*

Time: 03:00 hrs. Full Marks: 60 /Pass Marks: 24

BIT170CO: Fundamentals of Information Technology

Candidates are required to give their answers in their own words as far as practicable.

Figure in the margin indicate full marks.

Group A

Answer TWO questions. **2×12=24**

1. What is computer network? Discuss about different types of computer networks and topologies for LAN in detail.
2. Differentiate between data processing and database processing. Discuss different types of database management systems in brief.
3. Explain different categories of digital computers and describe major components of a computer in brief.

Group B

Answer SIX questions. **6×6=36**

4. What are multimedia tools? What is the role of multimedia in entertainment?
5. What is hypermedia and electronic commerce? Explain different types of E-commerce.
6. What is multimedia and virtual reality? Explain in brief.
7. Explain different types of memory units of a digital computer.
8. List out different types of output devices. Discuss about impact and non-impact printers.
9. Explain difference engine and turning machine and discuss Pentium fifth generation computer.
10. Explain data mining and data warehousing.
11. Write short notes on any TWO:
    (a) Information Security (b) OLAP
    (c) Communication system

PURBANCHAL UNIVERSITY
2013 (New)

Bachelor in Information Technology (B.I.T.)/First Semester/*Final*

Time: 03:00 hrs. Full Marks: 60 /Pass Marks: 24

BIT170CO: Fundamentals of Information Technology

Candidates are required to give their answers in their own words as far as practicable.

Figure in the margin indicate full marks.

Group A

Answer TWO questions. **2×12=24**

1. Define analog computer and digital computer. What is memory? Explain its types. Explain about third generation of computer with advantages and disadvantages. 3+1+3+5

2. Justify the statement "internet is network of networks". What is electronic mail? Explain it working mechanism. Explain intranet. 4+2+3+3

3. Define E-commerce, data mart and data mining. Explain hypermedia and its importance. 3+3+3+3

Group B

Answer SIX questions. **6×6=36**

4. Explain Turing machine, microprocessor and VLSI in detail. 6

5. What is utility software? Explain programming language and packaged software, clearly. 6

6. What is data management system? Explain different types of database management system in briefly. 6

7. What is telecommunication? Explain basic requirements for telecommunication. 6

8. Explain multimedia tools and virtual reality. Why virtual reality is necessary for new technology? 6

9. Explain the application of computer in business and industry, medicine and engineering. 6

10. Explain cyber-crime and cyber law of Nepal. 6

11. Write short notes no any TWO: 3+3

(a) Auxiliary storage devices

(b) OLAP

(c) Distributed system

PURBANCHAL UNIVERSITY
2014 (New)

Bachelor in Information Technology (B.I.T.)/First Semester/*Final*

Time: 03:00 hrs. Full Marks: 60 /Pass Marks: 24

BIT170CO: Fundamentals of Information Technology

Candidates are required to give their answers in their own words as far as practicable.

Figure in the margin indicate full marks.

Group A

Answer TWO questions. **2×12=24**

1. What do you mean by computer? What are the application area of computer? Explain in details.
2. What is computer network? Explain the different types of computer network on the basis of scope.
3. What do you mean by data warehousing and data-mining? How the data-warehouse functions?

Group B

Answer SIX questions. **6×6=36**

4. What is OS? List and explain the functions of OS.
5. What are the advantages of Packet switching over circuit switching?
6. What is DBMS? Explain about the network database model
7. What do you mean by e-commerce? What are the different types of e-business model?
8. What is information security and cyber law? Explain.
9. What is the use of IT in business and industry? Explain in details.
10. What is memory? The system contains primary memory although we need secondary memory? Justify your answer.
11. Write short notes on (Any two):
    (a) OLAP (b) Hyper Media (c) Output devices

PURBANCHAL UNIVERSITY
2015

Bachelor in Information Technology (B.I.T.)/First Semester/*Final*

Time: 03:00 hrs. Full Marks: 60 /Pass Marks: 24

BIT170CO: Fundamentals of Information Technology *(New Course)*

Candidates are required to give their answers in their own words as far as practicable.

Figure in the margin indicate full marks.

Group A

Answer TWO questions. **2×12=24**

1(a) What is peripheral device? List-out the different categories of peripheral devices. Describe the working of CRT-monitor and working of mechanical house. 1+1+3+3

(b) Define impact and non-impact printer with example. Describe working of Laser-Printer. 4

2(a) What is modulation? Describe the different types of modulation and also write the need for modulation. 1+3+3

(b) What is distributed data processing? Illustrate the advantages of distributed data processing. 1+4

3. What are the five-generation of programming languages? Discuss the advantages and disadvantages of assembly language and high-level language. 12

Group B

Answer SIX questions. **6×6=36**

4. What are the major functions of a computer? Explain how the CPU and memory works?

5. Define an OS and describe the different types of OS.

6. What is a database? List out the different classification of DBMS and also describe about relational database management system.

7. What is computer network? Discuss the classification of computer network based on the geographical area.

8. What is protocol? List the different types of protocol. Explain the working principle of FTP.

9. What is multimedia system? Discuss the application of multimedia in respect to information representation. 1+5

10. Explain business to business e-commerce with their advantages. 6

11. Write short notes on any TWO: 2×3=6
(a) OLAP
(b) Electronic Mail
(c) Auxiliary storage devices

PURBANCHAL UNIVERSITY

2016

Bachelor in Information Technology (B.I.T.)/First Semester/*Final*

Time: 03:00 hrs. Full Marks: 60 /Pass Marks: 24

BIT170CO: Fundamentals of Information Technology *(New Course)*

Candidates are required to give their answers in their own words as far as practicable.

Figure in the margin indicate full marks.

Group A

Answer TWO questions. **2×12=24**

1(a) What is processor and microprocessor? Explain CPU and memory work. 1+5

(b) List different types of input and output devices. Describe the factors that quality of monitor depends on. 1+5

2(a) What is centralized and distributed data processing? Discuss the advantages and disadvantages of distributed data processing. 2+5

(b) What is virtual reality? How does multimedia help in achieving virtual reality? 1+4

3(a) Is an operating system more important for computer? If Yes/No, give causes. 6

(b) What is database management system? Why do you need DBMS? Describe. 6

Group B

Answer SIX questions. **6×6=36**

4. What is printer? Write difference between impact and non-impact printer. 1+5

5. What is complier and explain the compilation process? How does complier differ from interpreter? 1+1+4

6. What is data processing and file processing? Write the difference between sequential and direct access file processing. 1+5

7. What do you mean by computer N/W, N/W topology and N/W architecture? Discuss about the two types of N/W architecture. 2+4

8. List the new technology in information system. Discuss the advantages and uses of data warehouse. 2+4

9. What do you mean by computer crime? What methods can an organization use to maintain privacy and security of its information? 2+4

10. Write short notes on any TWO. 3+3
(a) Working of Hard disc
(b) Difference between SRAM and DRAM
(c) Need of modulation.

PURBANCHAL UNIVERSITY
2012

Bachelor in Information Technology (B.I.T.)/First Semester/Final

Time: 03:00 hrs. Full Marks: 80 /Pass Marks: 32

BIT111HS: Mathematics-I

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Group A

Answer ALL questions. **10×2=20**

1. Transform $x^2 + y^2 = a^2$ to polar coordinates.

2. State Rolle's theorem.

3. Find the degree of homogeneous function
$$f(x,y) = x^3 + 3x^2y + 3xy^2 + y^3.$$

4. Evaluate: $\int_1^2 \int_2^3 (x^2 + y^2)\,dxdy$

5. Find the angle between the vectors $\vec{a} = \vec{i} + \vec{j} - \vec{k}$ and $\vec{b} = 2\vec{i} - 3\vec{j} + \vec{k}$.

6. Transform the equation $x^2 + y^2 = z^2$ in to cylindrical coordinates.

7. What is a conic section? When does a conic section become hyperbola?

8. Define inverse of a matrix.

9. Evaluate: $\lim_{x \to 0} \frac{a^x - 1}{2x}$

10. Find the adjoint of a matrix $\begin{pmatrix} 4 & 5 \\ 6 & 7 \end{pmatrix}$.

Group B

Answer ALL questions. **8×5=40**

11. If $u = \tan^{-1}\dfrac{x^3+y^3}{x-y}$, prove that $x\dfrac{\partial u}{\partial x}+y\dfrac{\partial u}{\partial y}=\sin 2u$.

12. Solve the equations:

$$3x+2y+z=10$$
$$2x+3y+2z=14$$
$$x+2y+3z=14$$

by using Cramer's rule.

13. Expand cosx in ascending integral powers of x by using Maclaurin's series.

14. Find the asymptotes of the curve $y^2+2xy^2+x^2y-y+1=0$.

15. Evaluate: $\lim\limits_{x\to 0}\left(\dfrac{\tan x}{x}\right)^{1/x}$.

16. Find the center, eccentricity and vertices of the ellipse $9x^2+16y^2+18x-96y+9=0$.

17. For any three vectors $\vec{a},\vec{b},\vec{c}$, prove that

$$\vec{a}\times(\vec{b}\times\vec{c})+\vec{b}\times(\vec{c}\times\vec{a})+\vec{c}\times(\vec{a}\times\vec{b})=0$$

Or

Find the volume of solid generated by revolving the region between the y-axis and the curve $x=2/y,\ 1\le y\le 4$ about y-axis.

18. Find the length of the curve $y=\dfrac{4\sqrt{2}}{3}x^{3/2}-1,\ 0\le x\le 1$.

Group C

Answer FOUR questions. **4×5=20**

19. Calculate the area of the asteroid $x^{2/3}+y^{2/3}=a^{2/3}$.

20. Show that the three vectors $\vec{a} = \hat{i} - \hat{j} + \vec{k}$, $\vec{b} = 2\hat{i} + 3\hat{j} - \vec{k}$ and $\vec{c} = 4\hat{i} + \hat{j} + \vec{k}$ are coplanar.

21. Find the equation for the plane through $P_0(2,4,5)$ and perpendicular to the line $\frac{x-5}{1} = \frac{y-1}{3} = \frac{z}{4}$.

22. Find the derivative of cosx by first principle.

23. Find the inverse of the matrix $\begin{pmatrix} 3 & 6 & 1 \\ 2 & 4 & 3 \\ 1 & 3 & 2 \end{pmatrix}$.

PURBANCHAL UNIVERSITY
2014 (New)

Bachelor in Information Technology (B.I.T.)/First Semester/Final

Time: 03:00 hrs. Full Marks: 80 /Pass Marks: 32

BIT101SH: Mathematics-I

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Group A

Answer ALL questions. **10×2=20**

1. State Rolle's theorem.
2. Transform $x^2 + y^2 = 16$ to polar coordinates.
3. If $\vec{a} = \hat{i} + 2\hat{j} - \hat{k}$, $\vec{b} = \hat{i} + j + 3\hat{k}$, *Find* $\vec{a} \times \vec{b}$.
4. Evaluate: $\lim_{x \to \pi} (\pi - x) Tan \frac{x}{2}$
5. Show that at any point of the parabola $y^2 = 4ax$, the subtangent varies as the abscissa of the point of contact.
6. Find area between the curve $y^2 = 4x$ and the line x = y.
7. Verify Euler's theorem for the function $f(x, y) = ax^2 + 2hxy + by^2$.
8. Define orthogonal matrix with an example.
9. Find the radius of curvature at a point (x, y) on the curve y = a $\log\left\{\sec\left(\frac{x}{a}\right)\right\}$.
10. Evaluate: $\int_0^1 \int_1^2 (x^3 + y^3) dx dy$

Group B

Answer ALL questions. **8×5=40**

11. Transform the equation $x^2 + y^2 - 3z^2 = 0$ by using spherical polar coordinates.

Contd. ...

12. Expand $e^{\sin x}$ in ascending integral powers of x using Maclaurin's series.

13. Find the asymptole of the hyperbola
$3x^2 - 5xy - 2y^2 + 17x + y + 14 = 0$.

14. Evaluate: $\lim_{x \to 0}\left(\frac{1}{x} - \cot x\right)$

OR,

Find the radius of curvature at any point of the parabola $y^2 = 4ax$.

15. Find the centre, eccentricity, foci and directrices of the hyperbola.
$9x^2 - 16y^2 + 72x - 32y - 16 = 0$

16. Find the area bounded by $y^2 = 2x$ and y = x – 4.

17. Evaluate: $\int_0^a \int_0^x \int_0^y xyz\,dz\,dy\,dx$

18. Using the Gauss-Jordon procedure, solve the system:
$x + 2y - z = -1$
$3x + 8y + 2z = 28$
$4x + 9y - z = 14$

Group C

Answer FOUR questions. **4×5=20**

19. Find the image of the point (1, 2, 5) in the plane 2x – y – z + 3=0.

20. The electric current i in a circuit varies according to the equation $i = 2t + \frac{200}{t}$, where i is in amperes, and t > 0 is in second. Determine the minimum current.

21. Find that the shortest distance between the lines

$x = 2s + 1;$ $y = 3s + 2,$ $z = 4s + 3$ *and*

$x = 3s + 2,$ $y = 4s + 3,$ $z = 5s + 4$

Show also that the lines are coplanar.

22. The total resistance R of a circuit containing two resistors R1 and R2 in parallel is given by $R = \dfrac{1}{\left(\dfrac{1}{R_1}\right)+\left(\dfrac{1}{R_2}\right)}$, if R1 is increasing at the rate of 6 ohms/min and R_2 is decreasing at the rate of 3 Ohms/min. What is the rate of change of the circuit resistance when $R_1 = R_2 = 10$ Ohms?

23. Sketch the graph $r = \dfrac{2}{1 + Cos\theta}$.

≈

PURBANCHAL UNIVERSITY
2015

Bachelor in Information Technology (B.I.T.)/First Semester/Final

Time: 03:00 hrs. Full Marks: 80 /Pass Marks: 32

BIT101SH: Mathematics-I *(New Course)*

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Group A

Answer ALL questions. **10×2=20**

1. Transform $x^2 + y^2 = a^2$ to polar coordinates.
2. Give geometrical interpretation of Rolle's theorem.
3. If $\vec{a} = 2\hat{i} + 3\hat{j} - \hat{k}$, $\vec{b} = \hat{i} - j + \hat{k}$, Find $\vec{a}.\vec{b}$.
4. Evaluate: $\lim_{x \to 0} \frac{e^x - 1}{x}$
5. Show that at any point of the parabola $y^2 = 4ax$, the subnormal is constant.
6. Find the area of the region bounded by the curve $y = Sinx$ and the x-axis between x=0 and x=2π.
7. Verify Euler's theorem for the function $f(x, y)=5x^2+7xy-3y^2$.
8. Find the transpose of the matrix $\begin{bmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 7 & 8 & 9 \end{bmatrix}$.
9. Define shortest distance between two lines.
10. Evaluate: $\int_0^2 \int_1^2 (x^2 + y^2)\,dxdy$.

Group B

Answer ALL questions. **8×5=40**

11. Prove that the distance between two points in a plane with polar coordinates (r_1, θ_1) and (r_2, θ_2) is given by $d^2 = r_1^2 + r_2^2 - 2r_1, r_2 . Cos(\theta_1 - \theta_2)$ (Where d is the distance between the points).

Contd. ...

12. Find the asymptote of the curve $y^3 + 2xy^2 + x^2y - y + 1 = 0$.

13. If e denotes the eccentricity of the hyperbola and e^1 that of its conjugate, show that $\frac{1}{e^2} + \frac{1}{e'^2} = 1$.

14. Evaluate: $\lim_{x \to 0} (\sin x)^{\tan x}$

Or

Expand tanx using Maclaurin's series.

15. Find the centre, eccentricity, of the ellipse:
$9x^2 + 25y^2 - 18x - 100y - 116 = 0$

16. The ellipse $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$ is revoled about x-axis. Find the volume of the solid formed.

17. By changing the order of integration evaluate: $\int_0^\infty \int_x^\infty \frac{e^{-y}}{y} dy dx$

18. Solve by Gaussian elimination method:
$x + 2y - z = -1, \quad 3x - y - 2z = 5, \quad x - y - 3z = 0$

Group C

Answer FOUR questions. **4×5=20**

19. Given A(-1,1,2), B(0,1,3), C(2,3,4) and D(-1, 3, 3), find the volume of the parallelpiped with $\overrightarrow{AB}$, $\overrightarrow{AC}$, $\overrightarrow{AD}$ as three of its edges.

20. Water is withdrawn from a conical reservoir 2.5m in diameter and 3m deep (Vertex down) at the constant rate of 0.15 m^3/min. How fast is the water level falling when the depth of the water in the reservoir is 2m?

21. Show that the shortest distance between the lines:
$x + c = 2y = -12z$ and $x = y + 2c = 6z - 6c$ is 2 c

22. Sketch the graph of the curve, $r = \frac{2}{1 - Cos\theta}$.

23. Find the distance of point (1,2,3) from the plane 2x+3y+dz=6

PURBANCHAL UNIVERSITY
2016

Bachelor in Information Technology (B.I.T.)/First Semester/Final

Time: 03:00 hrs. Full Marks: 80 /Pass Marks: 32

BIT101SH: Mathematics-I *(New Course)*

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Group A

Answer ALL questions. **10×2=20**

1. Change to spherical polar and cylindrical polar coordinate $x^2+y^2+2z^2=4$.

2. Evaluate: $\lim_{x\to 0}\frac{x-\sin^{-1}x}{\sin^3 x}$

3. Find $\vec{A}\times\vec{B}$ and $\vec{B}\times\vec{A}$ If $\vec{A}=3\hat{i}+2\hat{j}+\hat{k}$ and $\vec{B}=-5\hat{i}+6\hat{j}+8\hat{k}$.

4. State the mean-value theorem.

5. Evaluate: $\int_3^4\int_1^2(x+y)dx\,dy$

6. Find the centre of the ellipse $9x^2+25y^2-18x-100y-116=0$.

7. Find the equation of line in parametric form.

8. Find the inverse of the matrix $\begin{bmatrix}1 & 2\\ 3 & 4\end{bmatrix}$.

9. Find f_x and f_y of $f(x,y)=\sin^{-1}(ax+by)$.

10. Find expansion of f(x)=sinx.

Group B

Answer ALL questions. **8×5=40**

11. Find the centre, foci, eccentricity and directrix of the conic section $2x^2+2y^2-28x+12y+114=0$.

12. Prove that $x/a+y/b=1$ touches the curve $y=be^{-x/a}$ at the point where the curve crosses the axis of y.

13. Evaluate: $\lim_{x\to 0}(\cot x)^{1/\log x}$

14. Show that the radius of curvature at the end of the major axis of the ellipse $x^2/a^2 + y^2/b^2 = 1$ is equal to the semilatus rectum of the ellipse.

15. Find the area bounded by the parabola $y^2=9x$ and the line $y=3x$.

16. Verify Euler's theorem for the function $u = x^n \sin y/x$.

17. Find the value of C so that the lines $\frac{x-1}{-3} = \frac{y-1}{2c} = \frac{z-1}{2}$ and $\frac{x-1}{3c} = \frac{y-5}{1} = \frac{z-6}{-5}$ are perpendicular to each other.

18. Find the equation of plane passing through the point (3,3,5) and having normal vector $4\vec{i} + 5\vec{j} + 7\vec{k}$.

Group C

Answer FOUR questions. **4×5=20**

19. Find the value of $\iint xy(x+y)\,dx\,dy$ taken over the region enclosed by the curves $y=x$ and $y=x^2$.

20. Find the total length of the curve given $x = a\cos^3\theta, y = a\sin^3\theta$.

21. Find the volume of the parallelopiped with $\vec{AB}, \vec{AC}$ and $\vec{AD}$ as three of its edges where $A = (-1,1,2)$, $B = (0,1,3)$, $C = (2,3,4)$ and $D = (-1,3,3)$.

22. Find the inverse of a matrix $\begin{pmatrix} 1 & 2 & -1 \\ 2 & -2 & 3 \\ 3 & -1 & 2 \end{pmatrix}$.

23. Prove that $\begin{vmatrix} a & b & c \\ a^2 & b^2 & c^2 \\ bc & ca & ab \end{vmatrix} = (a-b)(b-c)(c-a)(ab+bc+ca)$.

PURBANCHAL UNIVERSITY
2011

Bachelor in Information Technology (B.I.T.)/First Semester/Final

Time: 03:00 hrs. Full Marks: 80 /Pass Marks: 32

BIT115MS: Principles of Management

Candidates are required to give their answers in their own words as far as practicable.

Figure in the margin indicate full marks.

Group A:

Answer TWO questions. **2×12=24**

1. "Principles of management are helpful in increasing the productivity." Explain this statement. Why the knowledge of management is necessary to BIT student?

2. "Effective management is always contingency or situational management." Comment upon this statement and distinguish between the incremental decision and mixed scanning decision making.

3. "Organization is the frame work of management because it sets about the direction and distribution of total responsibilities into relevant section or grouping for more effective performance." Analyze this statement.

Group B:

Answer EIGHT questions. **8×7=56**

4. Explain classical approach of management.

5. What do you mean by planning function? Mention the different types of plan hierarchy.

6. Define authority. Differentiate between centralization and decentralization of authority.

7. Briefly mention the functions of human resource management.

8. What are the types of effective control system?

Contd. ...

9. Mention the significance of coordination in modern organization.

10. Explain the steps of rational decision making.

11. What are the important barriers to effective communication in an organization?

12. What do you mean by leadership? Explain the different types of leadership styles.

13. Briefly explain the job analysis or differentiate between quality circle and total quality management.

PURBANCHAL UNIVERSITY
2012

Bachelor in Information Technology (B.I.T.)/First Semester/*Back*

Time: 03:00 hrs. Full Marks: 80 /Pass Marks: 32

BIT115MS: Principles of Management

Candidates are required to give their answers in their own words as far as practicable.

Figure in the margin indicate full marks.

Group A

Answer TWO questions. **2×12=24**

1. "Lower management does what the higher management instructs." Bearing this statement in mind examine the effectiveness of different levels of management.
2. What is human resource management? What are the functions of human resource management? Discuss.
3. Discuss the essential steps in rational decision making process. How can you make quick and correct decision making in a big commercial unit? Explain.

Group B

Answer EIGHT questions. **8×7=56**

4. Describe behavioral approach to management.
5. Define planning. Discuss the hierarchy of planning elements.
6. What do you mean by line and staff organizing? Describe its demerits.
7. Define centralization. What are the advantages of centralization?
8. "Training enhances employee's capabilities." Explain.
9. What do you understand by directing function of management? Discuss its significance.
10. Explain the techniques of coordination in brief.

11. "Management is likely a two-way traffic; it is based upon on effective machinery of communication." Comment.

12. What are the various leadership styles? Explain any two of them.

13. Write short notes on any TWO:
    (a) Job analysis
    (b) SWOT analysis
    (c) Quality circle
    (d) Special report

PURBANCHAL UNIVERSITY
2013 (New)

Bachelor in Information Technology (B.I.T.)/First Semester/Final

Time: 03:00 hrs. Full Marks: 80 / Pass Marks: 32

BIT190MS: Principles of Management

Candidates are required to give their answers in their own words as far as practicable.

Figure in the margin indicate full marks.

Group A

Answer TWO questions. 2×12=24

1. Explain the term management. Also explain the system approach to management.
2. Discuss about human resource management and its functions.
3. Define decision making. Describe the steps involved in rational decision making process.

Group B

Answer EIGHT questions. 8×7=56

4. What is reporting? Explain its importance.
5. What do you mean by planning functions? Mention the different types of plan.
6. Define line and staff organizing design with suitable example.
7. What does directing mean? Explain its importance.
8. Mention the significance of coordination in modern organization.
9. Define communication. Explain different types of communication.
10. What is leadership? Explain the significance of leadership.
11. What do you understand by SWOT analysis? Explain.
12. What does Total Quality Management (TQM) mean? Explain.
13. Write short notes on any TWO:
    (a) Techniques of Monitoring
    (b) Mixed Scanning Decision-making
    (c) Centralization and decentralization of Authority

PURBANCHAL UNIVERSITY
2014 (New)

Bachelor in Information Technology (B.I.T.)/First Semester/Final

Time: 03:00 hrs. Full Marks: 80 /Pass Marks: 32

BIT190MS: Principles of Management

Candidates are required to give their answers in their own words as far as practicable.

Figure in the margin indicate full marks.

Group A

Answer TWO questions. **2×12=24**

1. What is planning? Differentiate strategic planning from tactical and operational planning with appropriate examples
2. Define Job analysis. If you are asked to develop a job description of IT manger of software Development Company, how do you develop it?
3. Define training. Discuss the various levels of training evaluation. How do you develop the outline of training evaluation?

Group B

Answer EIGHT questions. **8×7=56**

4. Define Management. Prepare the list of various approaches of management and explain any one of them.
5. Define decision making. Suggest a manager of a company to make rational decision.
6. Define organizing. What are the principles of organizing?
7. Discuss the significance of coordination in an organization. Prepare the list of various techniques of coordination
8. What is the concept of Quality Circle in an organization? Suggest to develop the quality service of an organization.
9. Define communication. What are the different barriers to effective communication?
10. Describe leadership. How do you apply the situation; leadership in an organization

11. What is the concept of Human Resource Management? Why it is important in an organization to achieve its goal.

12. Explain the directing in an organization. Highlight the significance of directing functions of an organization.

13. Write short notes on any TWO:

    (a) Total quality management (TQM)

    (b) Reporting

    (c) Theory 'X' and 'Y'

PURBANCHAL UNIVERSITY
2015

Bachelor in Information Technology (B.I.T.)/First Semester/*Final*

Time: 03:00 hrs. Full Marks: 80 /Pass Marks: 32

BIT190MS: Principles of Management *(New Course)*

Candidates are required to give their answers in their own words as far as practicable.

Figure in the margin indicate full marks.

Group A

Long Answer type Questions

Answer TWO questions. **2×12=24**

1. Define the Concept of management. Why the knowledge of management is necessary and important to IT professional.

2. 'Organizing is the backbone of management'. Do you agree with this statement? Explain.

3. What are the functions of human resource management? Explain.

Group B

Short Answer type Questions

Attempt EIGHT questions **8×7=56**

4. What is the system theory of management? Explain.

5. What do you mean by planning function? Mention the different types of plan in hierarchy.

6. Define the concept of organizational design. Explain about centralization and decentralization of authority.

7. What principles should be kept in mind by business executives while directing the activities of subordinates?

8. What are the different types of decision making? Explain any one of them.

9. Differentiate between formal and informal communication.

10. What do you mean by leadership? Differentiate between autocratic and democratic style of leadership.

11. Discuss why SWOT analysis, is necessary to be analyzed for organization?

12. Explain the concept of total quality management (TQM). Why is it necessary to apply different methods of reporting in and an organization?

13. Write short notes on any TWO:
    (a) Maslow's hierarchy of needs
    (b) Quality circle
    (c) Kaizen system
    (d) Co-ordination

PURBANCHAL UNIVERSITY
2016

Bachelor in Information Technology (B.I.T.)/First Semester/*Final*
Time: 03:00 hrs. Full Marks: 80 /Pass Marks: 32
BIT190MS: Principles of Management *(New Course)*

Candidates are required to give their answers in their own words as far as practicable.

Figure in the margin indicate full marks.

Group A

Answer TWO questions. **2×12=24**

1. Define management. Describe the important elements of management.
2. What is Organizing function of management? Explain different types of organization design.
3. Explain the concept of human resource management. Why HRM is important to all types of organization?

Group B

Attempt EIGHT questions **8×7=56**

4. Define planning. Explain the basic steps in any planning process.
5. What is system approach of management? Explain in brief, its characteristic.
6. "Management as control system". Do you agree with this statement? Justify.
7. What is decision making? Explain in brief, Rational Decision Making.
8. What is communication? What are barriers to effective communication? Explain.
9. Why leadership is a necessary management function?
10. Explain the concept of Total Quality Management (TQM).

11. Explain the concept of reporting. Explain its significance in organization.

12. What is coordination? Why it is important?

13. Write short notes on any TWO:
    (a) SWOT analysis
    (b) Span of control
    (c) Job evaluation
    (d) Levels of Management.

PURBANCHAL UNIVERSITY

2010

Bachelor in Information Technology (B.I.T.)/First Semester/Final

Time: 03:00 hrs. Full Marks: 80 /Pass Marks: 32

BIT113HS: Technical Communication (English)

Candidates are required to give their answers in their own words as far as practicable.

Figures in the margin indicate full marks.

Answer ALL questions.

1. Read the following passage and answer the questions that follow: 10

Nuclear science and technology after the potential for doing so much good: from having lives to improving our environment, while providing an essentially pollution-free energy source.

The first and most obvious application of nuclear technology is energy-with the use of nuclear fuels we not only preserve our existing fossil resources but keep the from becoming polluted with the by products of combustion. With advanced nuclear technologies we can produce more fuel than we can consume. Nuclear energy is then "a renewable energy source" – an energy source that is clean. Safe and competitive.

Questions:

(a) What is the passage about?

(b) Do you think that the writer is not in favour of using the nuclear technology for fear of any traditional thought or anything like that?

(c) Do you agree that it is the nuclear technology only that can save lives and keep the world free from pollution?

(d) What does the speaker say about the cost of nuclear energy?

(e) Is it possible that the nuclear energy resource will never make man see a day of shortage in energy resources?

2. Below are extracts from an interview between a journalist and a rural urban migrant. The questions of the journalist are listed in column A while the answers of the migrant are found in column B. They are not in order. Match the questions and answers.

Contd. ...

A		B	
1.	Do you have any problems here?	a.	I am a worker in a factory.
2.	What do you do here?	b.	My wife and two sons live here with me. All three of us migrated together from the village to the city.
3.	Are there others in your village who followed your example?	c.	Yes, I am. I have no regrets about my decision to come away from the village.
4.	Do you have a family?	d.	I was born in a village about fifty kilometers from here.
5.	Why did you come away from your village?	e.	It is difficult to find living accommodation with more and more people coming here from the villages. We live in small brick houses, or in huts, in a cramped way.
6.	Where were you born?	f.	I was cultivating the lands of a farmer in the village was leading a fairly decent life. But I was told that one could a lot more money in the city with fewer hours of work. So I was tempted to leave my village and come here.
7.	Are you happy here?	g.	Oh, nearly three-fourths of the population in my village moved out of it. Some of them are in this city.

3. Write a paragraph about internet and its impact on technology. 5

4. Fill in the blanks in the following sentences: 5

With appropriate articles: a, an, the: where

Required:

(a) For lunch I had ____ sandwich and ____ apple. ____ sandwich was not ____ very nice.

(b) ____ earth goes round ____ sun.

(c) Yesterday I took ___ umbrella to ___ university. I left ___ umbrella as I forgot about it because the rain had stopped ___ hour before I returned.

Contd. ...

5. Fill in the blank spaces in the box below with the appropriate forms of the words: 2.5

Noun	Adjective	Person Concerned
Environment	.....	.....
Nature	.....	.....
.....	Ecological	.....
.....	.....	Conservationist geneticist
.....	.....	

6. Put a suitable time-when conjunction in the blank in the following sentences:
when, as, before, while, as soon as, once, now that, since, until or after.
Example: _____ I last saw you, you lived in Biratnagar.
Answer: When I last saw you, you lived in Biratnagar.
(a) ____ you have taken the examination, you'll be able to relax.
(b) _____ I drove away, I saw them waving goodbye.
(c) Wait _____ you're called.
(d) _____ I was asleep, I dreamed about you.
(e) _____ I saw her last, she has dyed her hair.

7(i) Use the verbs given in brackets in the following sentences appropriately. 2.5
(a) We enjoyed (see) you and (hear) all your news.
(b) I'd prefer (go) today.
(c) He loved (watch) the trains go by.
(d) What would you like (eat)?

(ii) Fill in the blanks in the following sentences with appropriate prepositions: 2.5
(a) The meeting will be held ..... 10.00 A.M. (in, at, on)
(b) He is writing ..... a pencil. (by, from, with)
(c) He went to Kathmandu (by, in, with)
(d) He is sitting ..... The sofa. (in, on, into)
(e) The robber broke ..... the door. (in, through, into).

8(a) Show the stress in the following words: 2.5
Migrate, Human, Teacher, Music, Refuse
(b) Transcribe the following words: 2.5
Cat, Cup, Schedule, This, Theory

Contd. ...

9. Match the following words in column A on the basis of the vowel sound with those in Column B.

A	B
Man	Sneeze
Night	Fowl
Short	Ram
Cheese	Bright
Yet	Shot
Peer	Fail
Bead	set
Calm	rear
Male	reed
Crowd	Charm

10. Explain the following: 5
Word processor, keyboard, machine language, item code, pen drive

11. Read the following passage and write your opinion on the subject matter:
Science fiction is one of the most popular forms of literature. It commands a very wide reading public. Many writers all over the world are trying to produce it. As the name itself indicates it is a mixture of fiction and reality where adventures are set against the background of tomorrow. It is this orientation towards the future which endears it to young people and those in the forefront of science. Some of the greatest writers of science fiction such as Arthur Clark, Isaac Asimov, Robert Heinlein, Johan Taine, Edward Smith, Leo Szilard, Otto Frisch, Fred Hoyle, Chad Oliver. Stanislaw Lem and Norbert wiener were themselves renowned scientists or engineers.

12. You have bought a P4 computer from a reputed dealer in your town. But computer does not work properly. You have found the faults in the computer. Write a letter to the dealer asking to replace it immediately.

13. Write an application to the Golchha Organization for the post of computer supervisor, advertised in Kathmandu post, with a complete resume.

Contd. ...

Comment on any TWO of the following in not more than 150 words: 10

(a) Professional education in Nepal should replace general education at graduation level.

(b) Professional computer education affects the technical educations.

(c) Admission into any discipline should be open to students coming from any discipline as admission is provided on the basic of Entrance Test.

PURBANCHAL UNIVERSITY
2011

Bachelor in Information Technology (B.I.T.)/First Semester/Final

Time: 03:00 hrs. Full Marks: 80 /Pass Marks: 32

BIT113HS: Technical Communication (English)

Candidates are required to give their answers in their own words as far as practicable.

Figures in the margin indicate full marks.

Answer ALL questions.

1. Read the following passage and answer the questions asked below: 15

The third great defect of our civilization is that it does not know what to do with its knowledge. Science has given us powers fit for the gods, yet we use them like small children. For example, we do not know how to manage our machines which were made to be man's servants, yet he has grown so dependent on them that they are in a fair way to become his masters. Already most men spend most of their lives looking after and waiting upon machines. And the machines are very stern masters. They must be fed with coal, and given petrol to drink and oil to wash with and they must be kept at the right temperature. We have to wait upon them very attentively and do all that we can to keep them in good temper. Already we find it difficult either to work or play without the machines and a time may come when they will rule us together, just as we rule the animals.

"What can we do with all the time which the machines have saved for us, and the new energy they have given us?" On the whole, it must be admitted, we do very little. For the most part, we use our time and energy to make more and better machines, but more and better machines will only give us still more time and energy, and what are we to do with them? The answer certainly is that we should try to become civilized. For the machines themselves and the power provided to us, are not civilization but aids to civilization. Being civilized, needless to say, means making and linking beautiful things, thinking freely, and living rightly and maintaining justice equally between man

Contd. ...

and man. Man has a better chance today to do these things than he ever had before; he has more time, more energy, less to fear and less to fight against. If he gives his time and energy to more beautiful things, to finding out more and more about the universe, to removing the causes of quarrels between nations, to discovering how to prevent poverty, our civilization would undoubtedly be greater as it would be the most lasting that there has ever been.

Questions:

(a) Instead of making machines our servants, the author says, they have become our masters. In what sense has this come about?

(b) The use of machines has brought us more leisure and more energy. But the author says that this has been a curse rather than a blessing. Why?

(c) What exactly is the meaning of "civilization"? Do you agree with the author's view?

(d) For what does "making more beautiful things" stand? How would you make them?

(e) Mention some plans you may have to prevent poverty in the world. Explain your reason.

2. Mark the stress on the following words. 5

(a) capacity (b) accumulation (c) historical (d) deliver
(e) difference (f) behind (g) whatever (h) success
(i) literature (j) machinery

3. Decide the tone pattern of the following sentences: 5

(a) What a marvel!
(b) Why do you come and help me?
(c) Thank you very much.
(d) Do it now quickly, will you?
(e) I invited Mr. Sharma last night.

4. Supply the correct forms of verbs in the brackets and rewrite the sentences: 5

(a) Every boy and every girl (have) attended the meeting.
(b) If I were you, I (go) there.

Contd. ...

(c) We are looking forward to (see) you again.
(d) It is a week since I (have) a swim.
(e) It is high time you (do) your work yourself.

5. Fill in the blanks with appropriate prepositions: 5
(a) It is no use quarreling ..... trifles.
(b) He has an aversion ..... going out.
(c) Have you a taste ..... music?
(d) All of us should abide ..... the set rules.
(e) Technology is developed to cater ..... basic needs.

6. Answer any two of the following: 20
(a) Imagine that you are a supervisor in a factory. There has been a fire in the factory and one of the workers has been badly burnt, and is in hospital. Your General Manager has asked you to send him a report on this incident. He has asked you to recommend essential measures to prevent such a disaster. Write a report to him sending your recommendation and findings.
(b) Imagine that a client has written a complaint letter about a problem he/she has encountered with your product or service. Write a letter in response to this complaint, making adjustment and retaining their goodwill.
(c) As an Executive Director of a company, write a memorandum to the heads of departments informing about a plan to convert its administrative operations from a manual to a computerized system.

7. Answer any two of the following: 15
(a) Discuss the fundamentals of effective speaking.
(b) As a member of the Association of Engineering Colleges in Nepal, you have attended a meeting on the agenda "Measures to promote and maintain academic environment." Write the minutes of this meeting.
(c) Write short notes on any ONE of the following: 10
(i) Extensive Reading (ii) Eye Contact

8. Write an essay on any ONE of the following topics: 10
(a) Tourism in Nepal (b) Use and Misuse of Internet System

PURBANCHAL UNIVERSITY
2012

Bachelor in Information Technology (B.I.T.)/First Semester/*Final*

Time: 03:00 hrs. Full Marks: 80 /Pass Marks: 32

BIT105SH: Technical Communication (English)

Candidates are required to give their answers in their own words as far as practicable.

Figures in the margin indicate full marks.

Answer ALL questions.

1. Read the following passage and answer the questions asked below: 15

Man has been defying the elements since he appeared on earth. Driven by the necessity of survival, by his love of adventure and by an insatiable curiosity where the unknown is concerned, he has braved the oceans, the mountains, the deserts, the skies and finally space.

For several centuries man has lifted himself into the air with balloons, but it was not until this, twentieth century, that Orville Wright, in 1903, made man's first powered flight. His average speed for the trip was 31 miles an hour.

Both the speed and altitude of man's flights have increased since that time – slowly at first and then by great leaps. The speed of sound (about 735 miles an hour) was exceeded in 1947. Present-day aircraft fly regularly at more than twice that speed. The X-15 has flown at more than 4100 miles an hour. Now, in space, man has achieved altitudes measured in hundreds of miles and speeds measured in thousands of miles an hour.

As far as the rigid requirements of space travel are concerned, man is not the most efficient mechanism. He requires an environment even closely resembling that in which he lives on earth. In order to survive he needs adequate oxygen, barometric pressure, temperature control and the elimination of toxic agents. He is a relatively heavy object and the equipment required to protect him in space flight of even short duration weighs hundreds of pounds.

Contd. ...

In space, man must cope with isolation, confinement and even radiation which menace his life. His efficiency and reliability are variable. As a power source he is slow and frequently inaccurate. He requires rest, food and relaxation and unlike a machine, he is not expendable.

Notwithstanding all this, there has never been any doubt that man would challenge the dangers of space as he has challenged every other unknown. For, in spite of his shortcomings, man brings to space exploration certain attributes which no one has ever succeeded in building into a machine. He brings intelligence, judgement, determination, courage and creativity. He can use all of these attributes in case of the unforeseen. By simply adding man and his capabilities to a machine, its chances of success in a space mission are enormously increased.

Questions:

(a) Why has man been defying nature?
(b) What are the requirements of space travel?
(c) Why is man not an efficient mechanism to travel in space?
(d) What skills and qualities should a person possess for travelling in space?
(e) Write a note on recent development in space exploration.

Mark the primary stress on the following words: 5

(a) aircraft	(b) beautiful	(c) x-ray	(d) doctor
(e) Sunday	(f) biology	(g) collect	(h) condition
(i) police	(j) civilization		

Decide the tone pattern of the following sentences: 5

(a) Ravi wrote an essay.
(b) Is he the same man who gave you a book?
(c) Ram saw a tiger, a bear, a monkey and a donkey.
(d) Don't touch me, will you?
(e) I met Ram, my old friend.

Contd. ...

4. Supply the correct forms of verbs in the brackets and rewrite the sentences: 5

(a) The captain, with his soldiers, (was/were) killed.
(b) Whisky and soda (was/were) served.
(c) The number of problems (has/have) been minimized.
(d) The Prime Minister and President (is/are) on leave.
(e) Not only Raju but also his brother (is/are) in deep trouble.

5. Fill in the blanks with appropriate prepositions: 5

(a) Children are the delight ..... the house.
(b) She is accustomed ..... doing work under any type of circumstances.
(c) The prisoner is accused ..... theft.
(d) India is committed ..... a policy of peaceful existence.
(e) We must keep ..... something for the rainy day.

6. Answer any TWO of the following questions: 2×10=20

(a) Submit a progress report to the head of the Traffic Police on ways of reducing accidents.
(b) Imagine that you are the Secretary of the Staff Association of your organization. Write a notice, giving the agenda of the first business meeting of the General Body.
(c) As Sales Officer of a company, write a letter to housewives to promote the sale of an electric milk boiler that it has recently manufactured. The boiler has a device with automatically cuts off the electricity supply after the milk has boiled.

7. Answer any TWO of the following: 2×7.5=15

(a) Discuss the fundamentals of effective writing.
(b) Write instruction on using digital camera.
(c) Write short notes on any ONE of the following topics:
(i) Technical report
(ii) Intensive reading

8. Write an essay on any ONE of the following topics: 10

(a) Life and Art (b) Science and War

PURBANCHAL UNIVERSITY
2013 (New)

Bachelor in Information Technology (B.I.T.)/First Semester/*Final*

Time: 03:00 hrs. Full Marks: 80 /Pass Marks: 32

BIT105SH: Technical Communication (English)

Candidates are required to give their answers in their own words as far as practicable.

Figures in the margin indicate full marks.

Answer ALL questions.

1. Read the following passage and answer the questions asked below: **8**

Progress in life depends a good deal on crossing one threshold after another. Some time ago, a man watched his little nephew try to write his name. It was hard work, very hard work. The little boy had arrived at an effort threshold. Today he writes his name with comparative ease. No new threshold confronts him. This is the way with all of us. As soon as we cross one threshold, as soon as we conquer one difficulty, a new difficulty appears or should appear. Some people make the mistake of steering clear of thresholds. Anything that requires genuine thinking and use of energy they avoid. They prefer to stay in a rut where thresholds are not met. Probably, they have been at their job a number of years. Things are easy for them. They make no effort to seek out new obstacles to overcome. Real progress stops under such circumstances.

Some middle aged and elderly people greatly enrich their lives by continuing to cross thresholds. One man went into an entirely new business when he was past middle life and made success of it, De Morgan didn't start to write novels until he was past sixty. Psychologists have discovered that man can continue to learn throughout his life. And it is undoubtedly better to try and fail than not to try at all. There one can be placed in the category of the Swiss mountaineer of whom its was said, "He died climbing". When a new difficulty arises to obstruct your path, do not complain. Accept the challenge. Determine to cross this threshold as you have crossed numerous other thresholds in your past. In the words of a poet, do not rest but strive to pass from dream to grander dream.

Questions:

(a) What obstructs real progress in life?

(b) What does 'He died climbing' signify?

(c) How do middle- aged and elderly people add brilliance to their lives?

(d) What does De Morgan's life teach?

2. Answer any TWO of the following: 2×8=16

(a) Prepare a complete manuscript for a talk on "Under Production of Hydropower in Nepal" lasting for 10 minutes.

(b) Imagine that you are the secretary of Dynamic tools Manufacturing Co. ltd., Teku, Kathmandu. Prepare the discussions of the different members along with the suggestions of the chairman about the causes of frequent strikes in the company's factory at Ring Road.

(c) Prepare a notice along with agenda for the 10th meeting of the Board of Directors of Himal Cement Industries, Kalanki, Kathmandu.

3. Define group discussion. Describe the importance of group discussion in reaching the meeting in conclusion. 8

4. Write a letter to the Managing Director of Panasonic Electronics Company located at New Road, Kathmandu, applying for the post of a senior Electronics Engineer. Also include your complete C.V. 8

5. As an engineering graduate, you have decided to establish a manufacturing unit in your town. You wish to avail of the liberalized loan facility under the self employment scheme. Draft a proposal for the manufacturing of an item of your choice, seeking loan from the Industrial Development Finance Corporation. 8

6. Write short notes on any TWO: 2×4=8

(a) Fundamentals of effective writing

(b) General types of description

(c) Extensive reading

7. Write an essay on any ONE: 10

(a) Price Hike in Nepal

(b) Role of Engineering Colleges in South Asia

8. Mark stress on the correct syllable of the following words: 4

exterminate, beneath, produce, instantaneous, tuberculosis, religious, exaggerate, bedroom

9. Put suitable intonation mark in the following: 4

(a) Please sit down

(b) Do you live in the town or in the country

(c) It's warm here, isn't it?

(d) Thank you!

10. Fill in the blanks with appropriate clauses: 4

(a) Should that happen, ...

(b) If he were to disturb her, ...

(c) Had she married him, ...

(d) When I reached the airport, ...

11. Fill in the blanks with appropriate prepositions. 2

(a) He goes to market ..... buy some sweet.

(b) She always goes to college ..... foot.

(c) Bimal is sitting ..... Kamala and Bimala

(d) He is fond ..... playing football.

PURBANCHAL UNIVERSITY
2014 (New)

Bachelor in Information Technology (B.I.T.)/First Semester/*Final*

Time: 03:00 hrs. Full Marks: 80 /Pass Marks: 32

BIT105SH: Technical Communication (English)

Candidates are required to give their answers in their own words as far as practicable.

Figures in the margin indicate full marks.

Answer ALL questions.

1. Read the following passage and answer the questions asked below: **15**

If is very difficult for a deaf child to learn to talk. Most babies learn by hearing other people talking, but the deaf child can't hear them; so how can he know what talking sounds are like? Many deaf people learn to lip read, and become very clever at knowing what other people are saying by watching them. But Helen could not see what other was doing. She remembered a few words she had known before she was ill: for instance, she went on calling water 'waa-waa' But she had to make signs for most things. She would shake her head for 'No' and nod for 'Yes'. A pull 'come' and push meant 'go'. But she could say very little like this and she depended entirely on other people. Yet, she had an active mind and a cleaver brain, and wanted to do and say everything any other child would. She used to get into terrible tempers when she couldn't explain what she meant, or understand what others wanted to say.

Questions:

(a) Why is it very difficult for a deaf child learn to talk?

(b) What do you understand by lip reading?

(c) How did Helen express 'yes' and 'no'?

(d) Why did she want to do everything other child would?

(e) When did she get into terrible trouble?

2. Fill in the blanks with appropriate form of the verbs given in the brackets: 5

(a) I wish I ..... (find) a good job.

(b) Listen! They ..... (move) towards us.

(c) By next Friday, they ..... (accomplish) their mission.

(d) It's hard time we ..... (start) the work.

(e) Had she been silent, everyone ..... (like) her.

3. Mark the Tone (falling, rising etc.) in the following sentences. 5

(a) Did they go there?

(b) Bye bye.

(c) Shut the door.

(d) Do you like tea or coffee?

(e) Oh?

4. Mark the primary stress on the following words. 5

(a) thousand	(b) hotel	(c) energy
(d) understand	(e) biology	(f) democratic
(g) velocity	(h) yourself	(i) librarian
(j) education		

5. Answer any TWO of the following: 20

(a) On behalf of the secretary of engineering association, write a notice for a meeting along with the agenda to be sent to the members of this association.

(b) Suppose that you are a site engineer of upper seti hydro project, which is under construction. Now make a sample of first quarterly progress report to be sent to the chief engineer.

(c) Suppose you are a president of a social club. You want to do some social work in the society. Now submit a proposal to plan Nepal and also ask financial support to complete the task.

6. Answer any TWO of the following questions: 2×10=20

(a) What do you mean by non-verbal aspect of communication? In what why does this affect oral communication?

(b) Make a landscape description of your hometown.

(c) Write short note on the following topics (any TWO):

(i) Group discussion

(ii) Fundamentals of effective writing

(iii) Intensive reading

7. Write on essay on ONE of the following topics: 10

(a) Cyber crime and cyber law

(b) Science in 21st century.

PURBANCHAL UNIVERSITY
2015

Bachelor in Information Technology (B.I.T.)/First Semester/*Final*
Time: 03:00 hrs. Full Marks: 80 /Pass Marks: 32
BIT105SH: Technical Communication (English) *(New Course)*

Candidates are required to give their answers in their own words as far as practicable.

Figures in the margin indicate full marks.

Answer ALL questions.

1. Read the following passage and answer the following questions: 10

When the author writes, he starts with an idea. Then he puts down words to express it. When you reverse the process, you start with words. Then come up with the ideas they express. When you get the ideas, you get a clear picture of what you are reading is all about. With a clear picture in your mind, you can see how all parts fit together and which parts are more important than others. Getting the ideas is like viewing an assembled jigsaw puzzle rather that it's scrambled parts. The key to comprehension is getting the idea.

When you read slowly, word by word you have virtually no chance of getting the ideas. That's because (as you already know) words by themselves have much meaning as a laundry lists. The words and meanings of the groups flash directly to your brain, interconnect together and form the ideas. The key to comprehension is speed — reading. To understand what you are reading, do not make the common mistakes of slowing down and reading every word. That is self defeating. Do put the reading dynamics techniques you have learnt to work and read fast.

Questions:

(a) How is reading process opposed to writing process?
(b) What does the writer compare getting the idea with? Why?
(c) Why is it not a good idea to read word by word?
(d) What is 'self defeating'?
(e) Give an appropriate title for the above passage.

2. Decide the tone pattern of the following sentences: 5
(a) You like it?
(b) Good Morning.
(c) Did you see a girl in white sari and black sweater?
(d) Where are you going?
(e) I am proud of you.

3. Supply the correct forms of the verbs in the brackets and rewrite the sentences: 5
(a) Had she studied hard, she ..... (pass) the exam.
(b) I am looking forward to ..... (see) you again.
(c) There is no use ..... (sell) it.
(d) The teacher got me ..... (bring) a duster.
(e) He is one of the best teacher who ..... (teach) well.

4. Mark stress on the following words: 5
ambition, ability, hotel, elephant, biology, undergo, electricity, coffee, democratic, capacity

5. Answer any two of the following: 20
(a) Write the fundamentals of effective oral communication.
(b) What do you mean by group discussion? How do you hold group discussion?
(c) Write a job application for the post of IT officer which is required to Rastriya Banijya Bank, Biratnagar with resume.

6. Answer any two of the following: 20
(a) Make a sample of' notice' and 'agenda' issued by a local Youth Club for a meeting to be held on 'Sanitation Program' that is supposed to start from the next week.
(b) Imagine that you are a site engineer of Biring Hydro Power Project stationed in Ilam district. Now prepare a first quarterly progress report to be submitted to its head office in Kathmandu.
(c) Write a proposal on behalf of your company responding to a bid issued by Sunsari District Office for construction of its new office building.

7. Write an essay on ONE of the following topics: 10
(a) Relevance of IT Education in 21st century
(b) Eco-friendly Development: A Necessity of Present World

8. Write short notes on any ONE of the following: 5
(a) Extensive Reading (b) Coherence in writing