Narasaraopeta Engineering College (Autonomous)
Kotappakonda Road, Yellamanda (P.O), Narasaraopet- 522601, Guntur District, AP.

Subject Code: R16CC1101

I B.Tech I Semester Regular and Supplementary Examinations, November-2018.

FUNCTIONAL ENGLISH

(Common to CE, EEE, ME, ECE& CSE)

Time: 3 hours **Max Marks: 60**

Question Paper Consists of Part-A and Part-B.

Answering the question in Part-A is Compulsory & Four Questions should be answered from Part-B

All questions carry equal marks of 12.

PART-A

1. (a) What techniques did astrologer use to surprise his customers?
   (b) What is the uniqueness of water according to the author?
   (c) According to Abdul Kalam, 'Value addition' will build a new State. Provide two reasons.
   (d) Differentiate between intensive reading and extensive reading?
   (e) What are the two major disadvantages of war according to the lesson *Progress?*
   (f) Write the two similarities between wood rose plant and old woman.

[2+2+2+2+2+2]

PART-B

2. (a) Comment on the irony of the story "An Astrologer's Day."

   (b) Write one-word substitutes for the following.
   i. Which is easily broken.
   ii. A person who always thinks dark side of life
   iii. Which cannot be altered.
   iv. One who is present everywhere.

   (c) You are Mr. Aravind, a graduate in Computer Science and Engineering from IITChennai. You have four years of experience as a Software Engineer in CAP GEMINI. Write an e-mail application letter in response to an advertisement for the post of a Senior Software Engineer in IBM Company.

[7+2+3]

3. (a) Explain Kalam's ideology of 'Building a New State.'

   (b) Correct errors, if any, in the following sentences and rewrite them.
   i. I didn't ate anything.

ii. She is having many pens.
iii. I can't find my spectacle.
iv. I prefer coffee than tea.
v. They don't work on Sundays, will they not?

4. (a) How does water sustain life in animals and plants according to the author? **[7+5]**

(b). Expand the proverb 'Try and try until you succeed.' **[7+5]**

5. (a). Why is the narrator upset when she finds out her son's reason for cutting the creeper?

(b). Write an antonym for each of the words given below.
(i) Briskly (ii) indulge (iii) deceitful (iv) sooth

(c) Match the words given in Column A with their meanings in Column B.

	Column A		Column B
1	Vain	A	Gift
2	Jocund	B	Hard
3	Boon	C	Cheerful
4	Heed	D	Useless
5	Callous	E	Greedy
6	Voracious	F	Listen

6. (a) How does Mrs. Meldon ensure that Corrie's invention is not harmful to anyone? **[7+2+3]**

(b) Fill in the blanks with suitable words.
i. Justin was _____(already/all ready)for the big exam when he discoved it had been cancelled.
ii. He has been the acting head of the company, but today he was_____(Formally/formerly) given the title of company president.
iii. He is tired, so he is going to sleep late in the morning. _____,(beside/besides) tomorrow is a holiday
iv. This pattern works best with _____, (course/coarse) heavy fabric.
v. Leela has come up with a good_____(idea/ideal) for our group presentation. **[7+5]**

7. (a) Write an essay on 'Impact of Western culture on India'.

(b). Read the paragraph given below and answer the following questions.

In some places, murderers get life sentences for their crimes. In others, they get the death penalty. There is a lot of disagreement about how murderers should be punished. However, I believe that people should get life sentences for murder, not the death penalty. One reason I

support life sentences for murder is that death is not the worst punishment. It is worse to have to sit in jail for the rest of one's life. Life imprisonment is hard. Prisoners never get to do what they want. All they can do is think about their crimes. They know that they will never be able to get out of prison. Therefore, life imprisonment is an effective punishment. Another reason is that sometimes people change. Same people commit murder when they are addicted to drugs or have other bad influences in their lives. With time, people can change in jail. Many convicted criminals start studying or learn about religion when they are in jail. Some of them start to really think about what they did wrong. They even try to help other prisoners by teaching or counseling them. However, change is not possible if they are dead. Some opponents of life sentences for murder say that it is too expensive to keep murderers in jail and it would be cheaper to execute them. However, capital punishment can also be very expensive. The courts are very careful before they execute people, so there are many court hearings before they decide to execute them. Sometimes the hearings continue for years. The government has to pay for the court hearings, the criminal's lawyer, and many other expenses. It is clear that capital punishment is not always cheaper than life in prison. In conclusion, there are many good reasons to give life sentences to murderers instead of the death penalty. Life sentences are an effective punishment, they give criminals a chance to change, and they do not involve a lot of expensive court hearings. For these reasons, I think that life sentences are a better punishment for murder than the death penalty.

1. What can be the best title that summarizes the main idea of the passage?
2. In line 2, the word **disagreement** is close to the meaning _____.
3. According to the passage, which idea is better ' life sentence' or 'death'?
4. What is the antonym of the word **punishment**?
5. What is effective punishment according to the passage?

[7+5]

Narasaraopeta Engineering College (Autonomous)

Kotappakonda Road, Yellamanda (P.O), Narasaraopet- 522601, Guntur District, AP.

Subject Code: R16CC1102 ENGINEERING MATHEMATICS

I B.Tech I Semester Regular and Supplementary Examinations, November-2018.

(Common to CE, EEE, ME, ECE & CSE)

Time: 3 hours **Max Marks: 60**

Question Paper Consists of Part-A and Part-B.

Answering the question in Part-A is Compulsory & Four Questions should be answered from Part-B

All questions carry equal marks of 12.

PART-A

1. (a) Solve $\left(D^2+1\right)^3 y=0$

   (b) Find the particular integral of $\left(D^2-2D+4\right)y=e^x\cos x$

   (c) Evaluate $\lim_{s\to\infty}\left\{\log\left(\frac{s}{s-1}\right)\right\}-\log\left(\frac{s}{s-1}\right)$.

   (d) If $u=\cos^{-1}\left(\frac{x}{y}\right)+\tan^{-1}\left(\frac{y}{x}\right)$, then find the value of $x\frac{\partial u}{\partial x}+y\frac{\partial u}{\partial y}$.

   (e) Write the order and degree of the partial differential equation $\left(\frac{\partial z}{\partial x}\right)^3+\frac{\partial^2 z}{\partial y^2}=\sec(x+y)$

   (f) While solving $\frac{\partial u}{\partial x}=4\frac{\partial u}{\partial y}$ satisfying boundary condition $u(0, y) = 8e^{-3y}$ by the method of separation of variables, if we arrive at $u(x, y) = c_1e^{ax}c_2e^{ay/4}$, find the complete solution of the problem

[2+2+2+2+2+2]

PART-B

4X 12 = 48

2. (a) Solve the differential equation $\frac{dy}{dx}=\frac{y}{x+\sqrt{xy}}$

   (b) If the air is maintained at 30^0C and the temperature of the body cools from 80^0C to 60^0C in 12 minutes, find the temperature of the body after 24 minutes.

3. (a) Solve $x^2\frac{d^2y}{dx^2}-3x\frac{dy}{dx}+4y=(1+x)^2$.

   (b) By the method of variation of parameters, solve $y''-2y'+y=e^x\log x$.

4. (a) Using Taylor's theorem, prove that $x-\frac{x^3}{6}<\sin x<x-\frac{x^3}{6}+\frac{x^5}{120}$, for $x > 0$.

   (b) A rectangular metal sheet of length 6 metres width 2 metre is given. Four equal squares are removed from the corners. The sides of this sheet are now turned up to form an open

rectangular box. Find approximately, the height of the box in centimetres, such that the volume of the box is maximum.

5. (a) If $u = f(2x-3y,\ 3y-4z,\ 4z-2x)$, prove that $\frac{1}{2}\frac{\partial u}{\partial x}+\frac{1}{3}\frac{\partial u}{\partial y}+\frac{1}{4}\frac{\partial u}{\partial z}=0$.

   (b) Discuss the maxima and minima of $f(x,y)=x^3y^2(1-x-y)$

6. (a) Form the partial differential equation by eliminating arbitrary functions from $f(x^2+y^2,\ z-xy)=0$.

   (b) Solve $x^2(y-z)p+y^2(z-x)q=z^2(x-y)$.

7. A tightly stretched string of length l with fixed ends is initially in equilibrium position. It is set vibrating by giving each point a velocity $v_0 \sin^3\left(\frac{\pi x}{l}\right)$. Find the displacement $y(x, t)$.

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Narasaraopeta Engineering College (Autonomous)

Kotappakonda Road, Yellamanda (P.O), Narasaraopet- 522601, Guntur District, AP.

Subject Code: R16CC1103

I B.Tech I Semester Regular and Supplementary Examinations, November-2018

MATHEMATICAL METHODS

(Common to CE, EEE, ME & ECE)

Time: 3 hours **Max Marks: 60**

Question Paper Consists of **Part-A** and **Part-B.**

Answering the question in **Part-A** is Compulsory & Four Questions should be answered from Part-B

All questions carry equal marks of 12.

PART-A

1. (a) Find X, if $\begin{bmatrix} 5 & 4 \\ 1 & 1 \end{bmatrix} X = \begin{bmatrix} 1 & -2 \\ 1 & 3 \end{bmatrix}$

   (b) Find the index and signature of the quadratic form $x_1^2 + 2x_2^2 - 3x_3^2$

   (c) Change the order of integration $\int_0^1 \int_x^{\sqrt{2-x^2}} \frac{x}{\sqrt{x^2+y^2}} dy\, dx$

   (d) Explain the procedure to find the roots of a continuous function $f(x)$ between real numbers a and b by Bisection method.

   (e) State Fundamental theorem of finite differences and hence evaluate $\Delta^{10}\left[(1-x)(1-2x^2)(1-3x^3)(1-4x^4)\right]$, considering interval of difference as 1.

   (f) Write the formula to find solution of first order ordinary differential equations by Taylor's series method.

[2+2+2+2+2+2]

PART-B

4X 12 = 48

2. (a) Find non-singular matrices P and Q such that PAQ is in the normal form of A for the matrix

$$A = \begin{bmatrix} 1 & -1 & -1 \\ 1 & 1 & 1 \\ 3 & 1 & 1 \end{bmatrix}$$

   (b) Using Gauss Jordan method, find the inverse $\begin{bmatrix} 8 & 4 & 3 \\ 2 & 1 & 1 \\ 1 & 2 & 1 \end{bmatrix}$

3. (a) Find the latent roots and the latent vectors of the matrix $\begin{bmatrix} 8 & -6 & 2 \\ -6 & 7 & -4 \\ 2 & -4 & 3 \end{bmatrix}$

(b) Write the characteristic equation of the matrix $A = \begin{bmatrix} 1 & 1 & 3 \\ 1 & 3 & -3 \\ -2 & -4 & -4 \end{bmatrix}$ and hence find A^{-2}, given that $A^2 = \begin{bmatrix} -4 & -8 & -12 \\ 10 & 22 & 6 \\ 2 & 2 & 22 \end{bmatrix}$.

4. (a) Find the volume formed by the revolution of loop of the curve $y^2(a+x) = x^2(3a-x)$, about x-axis.

(b) Evaluate $\int_1^e \int_1^{(\log y)} \int_1^{e^x} (\log z)\, dz\, dx\, dy$.

5. (a) By Newton's method, find the real root of the equation $3x = \cos x + 1$

(b) Use the method of false position, to find the fourth root of 32 correct to three decimal places.

6. (a) In the following table, the values of y are consecutive terms of a series of which 12.5 is the 5th term. Find the first and tenth terms of the series

x	3	4	5	6	7	8	9
y	2.7	6.4	12.5	21.6	34.3	51.2	72.9

(b) Use Lagrange's interpolation formula to find the value of y when $x = 10$, if the following values of x and y are given

x	5	6	9	11
Y	12	13	14	16

7. (a) Using Euler's modified method compute y for 0.1 and 0.2 given that $\frac{dy}{dx} = x + y^2$, $y(0) = 1$.

(b) Evaluate $\int_0^1 \frac{dx}{1+x^2}$ using

(i) Trapezoidal rule taking h = ¼

(ii) Simpson's 1/3rd rule taking h = ¼

(iii) Simpson's 3/8th rule taking h = 1/6

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Narasaraopeta Engineering College (Autonomous)

Kotappakonda Road, Yellamanda (P.O), Narasaraopet- 522601, Guntur District, AP.

Subject Code: R16CC1104

I B.Tech I Semester Regular and Supplementary Examinations, November-2018.

PROGRAMMING WITH C

(Common to CE, EEE & ME)

Time: 3 hours **Max Marks: 60**

Question Paper Consists of **Part-A** and **Part-B.**

Answering the question in **Part-A** is Compulsory & Four Questions should be answered from Part-B

All questions carry equal marks of 12.

PART-A

1.

a) Distinguish between character and string
b) State the different looping statements
c) What is static variable in C?
d) What is pointer to pointer in C?
e) How the members of structure object is accessed?
f) Define binary file

[2+2+2+2+2+2]

PART-B

4 X 12 = 48

2. (a) Explain in detail the structure of a C program with an example. [6+6]
   (b) Discuss about the various data types in 'C'.

3. Write short notes on the following: [4+4+4]
   (a) 'for' loop
   (b) 'while' loop
   (c) 'do...while' loop

4. (a) Illustrate the storage class specifiers with example. [8+4]
   (b) Write a C program to check whether a given year is leap or not

5. (a) Discuss about pointers and their operations that can be performed on it [6+6]
   (b) Write a C program for swapping of two numbers and changing the value of a variable using pass by reference

6. (a) Explain about pointers to structures, array of structures and nested structures. [6+6]
   (b) Write a C program using structures to prepare the students mark statement

7. (a) Describe the various functions used in a file with example [6+6]
   (b) Write a C program to read content of a file and displayed on a screen.

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Narasaraopeta Engineering College (Autonomous)

Kotappakonda Road, Yellamanda (P.O), Narasaraopet- 522601, Guntur District, AP.

Subject Code: R16CC1105

I B.Tech I Semester Regular and Supplementary Examinations, Nov-2018.

ENGINEERING CHEMISTRY

(Common to CE, EEE & ME)

Time: 3 hours **Max Marks: 60**

Question Paper Consists of **Part-A** and **Part-B.**

Answering the question in **Part-A** is Compulsory & Four Questions should be answered from Part-B

All questions carry equal marks of 12.

PART-A

1. (a) Write the reaction when hard water is treated with sodium aluminate?
   (b) Explain syndiotactic and isotactic polymers.
   (c) Write any three applications of green chemistry.
   (d) Define single electrode potential.
   (e) Explain why CNG is preferred than other gaseous fuels?
   (f) Define quantum yield. Give examples.

[2+2+2+2+2+2]

PART-B

4X 12 = 48

2. (a) Discuss the internal treatment methods for purification of water. [5M]
   (b) What is hardness? Mention its units? Explain its types? Calculate the temporary and permanent hardness of water sample containing $Mg(HCO_3)_2$ = 7.4 mg/L, $Ca(HCO_3)_2$ = 20.5 mg/L, $MgCl_2$ = 12.6 mg/L, $CaSO_4$ = 17.6 mg/L. [7M]

3. (a) Explain the preparation, properties and uses of nitrile rubber? [6M]
   (b) Write notes on intrinsic conducting polymers. [6M]

4. (a) Explain the preparation of adipic acid by green synthesis. [5M]
   (b) Discuss (i) photovoltaic cells (ii) laser ablation method for synthesis of nanotubes.[7M]

5. (a) What are reference electrodes? Explain the working of calomel electrode with a neat sketch.
   (b) Discuss electroless plating and impressed current cathodic coating. [6M + 6M]

6. (a) Explain with a neat sketch Bergius process for preparation of synthetic petrol.[5M]
   (b) Define HCV and LCV. Calculate the HCV and LCV of a coal sample containing C = 87%; H = 6.5%; O = 4.5%; N = 0.5%; S = 0.5% and remaining ash. Assume latent heat of condensation of steam (587 cal/g). [7M]

7. (a) Explain the laws of photochemistry. [7M]
   (b) Give the applications of photochemistry. [5M]

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Narasaraopeta Engineering College (Autonomous)

Kotappakonda Road, Yellamanda (P.O), Narasaraopet- 522601, Guntur District, AP.

Subject Code: R16CC1106

I B.Tech I Semester Regular and Supplementary Examinations, November-2018.

PROFESSIONAL ETHICS, VALUES & PATENTS

(Common to CE, EEE & ME)

Time: 3 hours **Max Marks: 60**

Question Paper Consists of **Part-A** and **Part-B.**

Answering the question in **Part-A** is Compulsory & Four Questions should be answered from Part-B

All questions carry equal marks of 12.

PART-A

1. (a) Explain the importance of empathy?
   (b) Give the uses of ethical theories.
   (c) What do you mean by industrial espionage?
   (d) What is the nature of cyber law?
   (e) What are different types of IPRs?
   (f) What is trademark?

[2+2+2+2+2+2]

PART-B

4X 12 = 48

2. (a) "Ethical Leaders must have Integrity". Explain in detail.
   (b) Explain the classification of human values.

3. (a) Discuss different professional roles to be played by Engineer.
   (b) Describe various ethical theories.

4. (a) What is whistle blowing? Explain different types of whistle blowers.
   (b) Write briefly about cross cultural issues and occupational crimes.

5. (a) What are the ethical obligations in Intellectual Property Law? Explain.
   (b) Explain about innovations and inventions in trade related Intellectual Property Right.

6. (a) Describe the process of copy rights registration.
   (b) What are the various requirements for patents registration?

7. (a) Elaborate the trademarks registration process.
   (b) Write about employee confidentiality agreement.

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Narasaraopeta Engineering College (Autonomous)

Kotappakonda Road, Yellamanda (P.O), Narasaraopet- 522601, Guntur District, AP.

Subject Code: R16CC1107

I B.Tech I Semester Regular and Supplementary Examinations, November-2018.

ENGINEERING GRAPHICS

(Common to ECE & CSE)

Time: 3 hours **Max Marks: 60**

Question Paper Consists of **Part-A** and **Part-B.**

Answering the question in **Part-A** is Compulsory & Four Questions should be answered from Part-B

All questions carry equal marks of 12.

PART-A

1. (a) A block of Ice- berg 1000m ^{3} volumes is represented by a block of 27 cm^3 volume. Find the scale factor.
   (b) A point P is 20mm below the H.P. and 30mm behind the V.P. Draw its projections
   (c) Draw the projection of 65mm long line parallel to and 30mm above the H.P. and in the V.P.
   (d) A circular lamina of diameter 50mm its surface is perpendicular to V.P and parallel to H.P. Draw its projections.
   (e) Draw the projections of a square prism of side 30 mm, axis 60 mm long, its base is resting on H.P.
   (f) Draw isometric view of a cube of 50mm long edge.

[2+2+2+2+2+2]

PART-B

4X 12 = 48

2. (a) The major axis of an ellipse is 100mm long and the foci are at a distance of 15mm from its ends . Find the minor axis. Draw the ellipse by arcs of circles method. Draw a tangent to the ellipse at any point on it.
   (b) Construct a Vernier scale of RF=1:25 to show decimetres, centimetres and millimetres. The scale should capable of reading up to 4 decimetres. Mark on your scale a distance of 3.23 decimetre

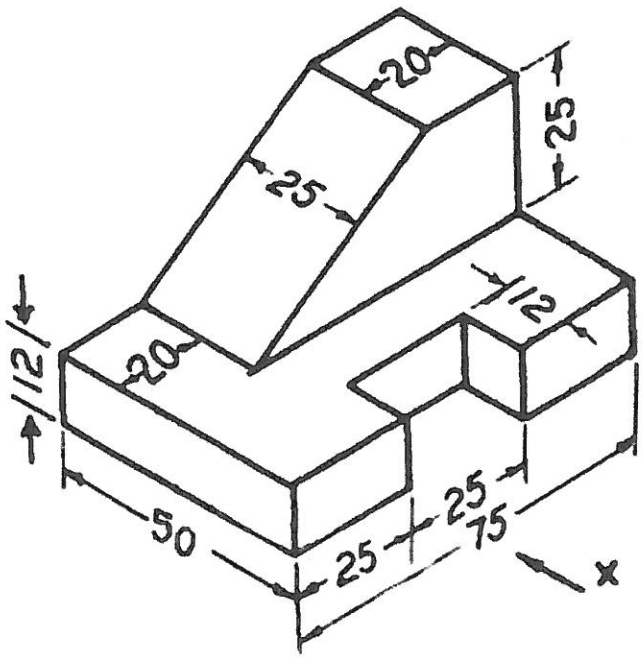
3. (a) A point A is 20mm above the HP and in the first quadrant. Its shortest distance from the reference line XY is 40 mm. draw the projections of the point and determine its distance from the VP
   (b) A 100 mm long line is parallel to and 40 mm above the H.P. its two ends are 25 mm and 50mm in front of the V.P. respectively. Draw its projections and find its inclination with the V.P.

4. A line AB, inclined at 40^0 to the V.P., has its ends 50mm and 20mm above the H.P. The length of its front view is 65mm and its V.T. is 10mm above H.P. Determine the true length of AB, its inclination with the H.P. and its H.T.

5. A circular plate of negligible thickness and 50mm diameter appears as an ellipse in the front view, having its major axis 50mm long and minor axis 30mm long. Draw its top view when the major axis of the ellipse is horizontal

6. A hexagonal pyramid, base 25mm side axis 50mm long, has an edge of its base on the ground. Its axis is inclined at 30^0 to the ground and parallel to the VP. Draw its projections

7. Draw the (i) Front view (ii) Top view and (iii) Side view for the following figure



Narasaraopeta Engineering College (Autonomous)

Kotappakonda Road, Yellamanda (P.O), Narasaraopet- 522601, Guntur District, AP.

Subject Code: R16CC1107

I B.Tech I Semester Regular and Supplementary Examinations, November-2018.

ENGINEERING GRAPHICS

(Common to ECE & CSE)

Time: 3 hours **Max Marks: 60**

Question Paper Consists of **Part-A** and **Part-B.**

Answering the question in **Part-A** is Compulsory & Four Questions should be answered from Part-B

All questions carry equal marks of 12.

PART-A

1. (a) Draw a regular hexagon of side length 30 mm with one of its sides vertical.
(b) Draw projection of a point P which is 20 mm below H.P and 40 mm behind V.P.
(c) Draw projections of a straight line of length 40 mm positioned 20 mm above H.P and 40 mm behind V.P.
(d) Draw an equilateral triangle with side length 30 mm which is parallel to and 20 mm above H.P with one of its edges 10 mm in front of V.P.
(e) Draw a square prism resting on H.P. with side length 30 mm and height 50 mm with one of its edges making 30^0 with V.P.
(f) Draw isometric view of a rectangular prism with dimensions 30X40X60 with axis vertical.

[2+2+2+2+2+2]

PART-B

4X 12 = 48

2. (a) A fixed point is 75 mm from a fixed straight line. Draw the locus of a point P moving such a way that its distance from the fixed straight line is equal to its distance from the fixed point. Name the curve. Draw tangent and normal to the curve at a point on it which is at 50 mm from focus.
(b) Construct a diagonal scale of R.F. = 1/6250 to read upto 1 kilometre and to read metres on it. Show a length of 653 metres on it.

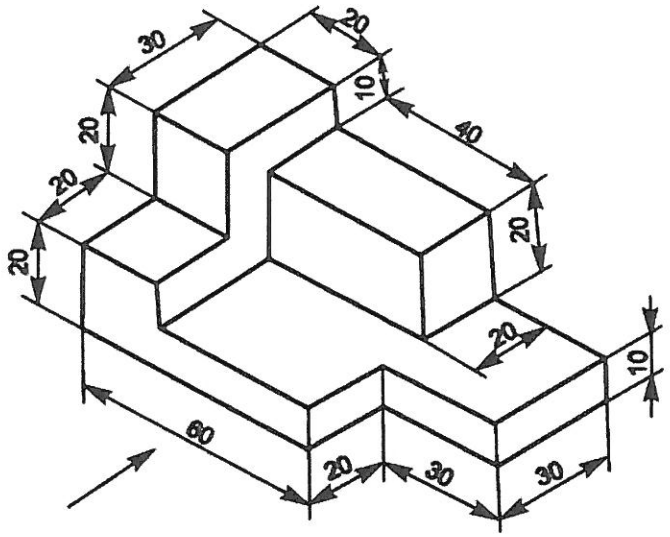
3. (a) A point P is 20 mm below H.P. and lies in the third quadrant. Its shortest distance from xy is 40 mm. Draw its projections.
(b) The front view of a line, inclined at 30^0 to the V.P is 65 mm long. Draw the projections of the line, when it is parallel to and 40 mm above the H.P., its one end being 30 mm in front of the V.P.

4. The top view of a 75 mm long line AB measures 65 mm, while the length of its front view is 50 mm. Its one end A is in the H.P and 12 mm in front of the V.P. Draw the projections of AB and determine its inclinations with the H.P and the V.P.

5. A pentagonal plate of 45 mm side has a circular hole of 40 mm diameter in its centre. The plane stands on one of its sides on the H.P. with its plane perpendicular to V.P. and 45^0 inclined to the H.P. Draw the projections.

6. Draw the projections of a pentagonal prism, base 25 mm side and axis 50 mm long, resting on one of its rectangular faces on the H.P., with the axis inclined at 45^0 to the V.P.

7. Draw the (i) Front view (ii) Top view and (iii) Side view for the following figure



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Narasaraopeta Engineering College (Autonomous)

Kotappakonda Road, Yellamanda (P.O), Narasaraopet- 522601, Guntur District, AP.

Subject Code: R16CC1108

I B.Tech I Semester Regular and Supplementary Examinations, Nov-2018.

ENGINEERING PHYSICS

(Common to ECE & CSE)

Time: 3 hours **Max Marks: 60**

Question Paper Consists of **Part-A** and **Part-B.**

Answering the question in **Part-A** is Compulsory & Four Questions should be answered from Part-B

All questions carry equal marks of 12.

PART-A

1. (a) What are coherent sources?
   (b) Mention the applications of Lasers.
   (c) What is meant by primitive and non-primitive cell?
   (d) Write any four properties of ultrasonic waves.
   (e) What are matter waves? Write its properties.
   (f) State Bloch theorem.

[2+2+2+2+2+2]

PART-B

4X 12 = 48

2. (a) Discuss the theory of Newton's rings with relevant diagram.
   (b) Write a short note on quarter wave plate and half wave plate. [6+6]

3. (a) Describe the construction and working of Ruby laser with a neat diagram.
   (b) Define Numerical aperture of an optical fiber. Derive the expression for it. [6+6]

4. (a) Describe the seven crystal systems with diagrams.
   (b) State and prove Bragg's law. [8+4]

5. (a) Explain the production of ultrasonics using magnetostriction method.
   (b) What are the basic requirements of acoustically good hall? [6+6]

6. (a) Explain the Fermi-Dirac distribution function of electrons. Explain the effect of temperature on the distribution.
   (b) Derive Schrodinger's time independent wave equation. [6+6]

7. (a) Explain how the materials are classified into conductors, semiconductors and insulators.
   (b) State Hall effect. Derive the expression for hall coefficient. [6+6]

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Narasaraopeta Engineering College (Autonomous)

KotappakondaRoad, Yellamanda (P.O), Narasaraopet- 522601, Guntur District, AP.

Subject Code: R16CC1109

I B.Tech I Semester Regular and Supplementary Examinations, November- 2018

ENVIRONMENTAL STUDIES

(Common to ECE & CSE)

Time: 3 hours **Max Marks: 60**

Question Paper Consists of **Part-A** and **Part-B**

Answering the question in **Part-A** is Compulsory

Four Questions should be answered from Part-B

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PART-A

1.(a) What is the importance of food web?

(b) What is the importance of mineral resources?

(c)Define genetic biodiversity?

(d)Define bio magnification?

(e) Write a note on Global warming?

(f) what is EIA?

[2+2+2+2+2+2]

PART-B

4X 12 = 48

2. (a) Explain multidisciplinary nature of environmental studies?
(b)Write about ecological succession? (6+6)

3. (a)Write notes on Environmental effecting of extracting and using mineral resources? (7+5)
(b)What are the uses and over exploitation of forests?

4. (a) What are the values of biodiversity?
(b)Explain in detail threats to biodiversity with suitable examples? (6+6)

5. (a)Define air pollution. What are its impacts on human health?
(b)What are the control measures used for controlling soil pollution? (6+6)

6. (a)Discuss the problems associated with resettlement and rehabilitation of people? (6+6)
(b)Write the salient features of Forest conservation act?

7. (a)Explain Environment Impact Assessment and its significance in various stages? (7+5)
(b)Explain Environment audit and its importance?

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Narasaraopeta Engineering College (Autonomous)

Kotappakonda Road, Yellamanda (P.O), Narasaraopet- 522601, Guntur District, AP.

Subject Code: R16CS1110

I B.Tech I Semester Regular and Supplementary Examinations, November-2018.

INTRODUCTION TO COMPUTERS AND PROBLEM SOLVING

(CSE)

Time: 3 hours **Max Marks: 60**

Question Paper Consists of **Part-A** and **Part-B.**

Answering the question in **Part-A** is Compulsory & Four Questions should be answered from Part-B

All questions carry equal marks of 12.

PART-A

1.

a) State the various output devices

b) What are the standard units of measurement used for data storage?

c) What are the different types of number systems in computer?

d) Define an algorithm

e) What is Fibonacci sequence?

f) What is meant by searching?

[2+2+2+2+2+2]

PART-B

4 X 12 = 48

2. Illustrate the different generations of computers [12]

3. (a) Differentiate RAM and ROM [4+7]
   (b) What is an optical drive? Explain the different kinds of optical drives

4. (a) Find the decimal equivalent of 10101_2 [4+4+4]
   (b)Find the octal equivalent of the decimal number 21
   (c) Find the hexadecimal equivalent of the binary number 10101

5. (a) Summarize the symbols used in flow chart [6+6]
   (b) Draw a flow chart for factorial of a given number

6. (a) Describe the algorithm for finding the sum of n numbers. [6+6]
   (b) Write the algorithm for exchanging the value of two variables

7. (a) Explain the algorithm for finding greatest common divisor of two integers [6+6]
   (b) What is an array? Write the algorithm for finding maximum number in a set

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