AR16

CODE: 16CE3018 SET-2

ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI
(AUTONOMOUS)
III B.Tech II Semester Regular & Supplementary Examinations, October / November-2020

GEOTECHNICAL ENGINEERING-II
(Civil Engineering)

Time: 3 Hours   Max Marks: 70

Answer ONE Question from each Unit
All Questions Carry Equal Marks
All parts of the Question must be answered at one place

UNIT-I

1. a) How would you conduct a plate load test? Explain with a sketch.   7M
   b) Describe the salient features of a good subsoil investigation report   7M

(OR)

2. a) Explain Percussion and Core drilling methods and its suitability depending on the site conditions.   7M
   b) How would you decided the depth of exploration and the lateral extent of the investigations?   7M

UNIT-II

3. What will be the factors of safety with respect to average shearing strength, cohesion and internal friction of a soil, for which the shear strength parameters obtained from the laboratory tests are $c' = 32$ kN/m^2 and $\Phi_1 = 18°$; the expected parameters of mobilized shearing resistance are $c'_m = 21$ kN/m^2 and $\Phi'_m = 13°$ and the average effective pressure on the failure plane is 110 kN/m^2. For the same value of mobilized shearing resistance determine the following:
   i) Factor of safety with respect to height;
   ii). Factor of safety with respect to friction when that with respect to cohesion is unity; and iii). Factor of safety with respect to strength.   14M

(OR)

4. a) Derive an expression for the factor of safety using Swedish circle method.   7M
   b) What are the different factor of safety used in the stability of slopes?   7M

UNIT-III

5. a) Explain the active thrust on the retaining wall Culmann's graphical method.   14M

(OR)

6. a) Determine the coulomb active force on the retaining wall shown in Fig.   7M

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i = 15°
φ' = 30°
δ = 20°
γ = 17.5 kN/m³
β = 75°
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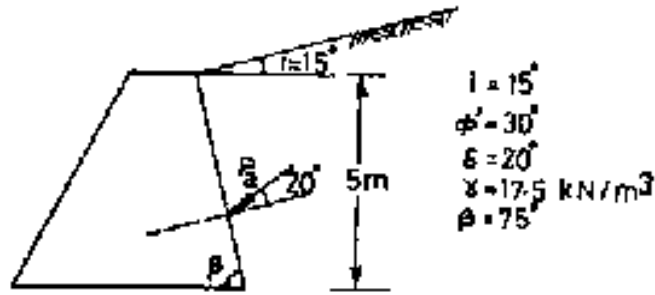
b) What are the assumptions in Coulomb's theory? Compare Rankine's theory and Coulomb's theory. **7M**

UNIT-IV

7. Write brief critical notes on settlement of foundations. Describe the procedure of determine the safe bearing capacity based on standard penetration. **14M**

(OR)

8. a) A square footing is required to carry a net load of 1200 kN. Determine the size of the footing if the depth of foundation is 2 m and the tolerable settlement is 40 mm. the soil is sandy with N = 12. Take a factor of safety of 3.0. the water table is very deep. Use Teng's equation. **7M**

b) Determine the ultimate bearing capacity of a strip footing, 1.20 m wide, and heaving the depth of foundation of 1.0 m. use Terzaghi's theory and assume general shear failure. Take $\varnothing' = 35^0$, $\gamma = 18$ kN/m³, and c' = 15 kN/m². **7M**

UNIT-V

9. a) Discuss various dynamic formula. What are their limitations? **14M**

(OR)

10. a) How would you estimate the group capacity of piles in sand and clay? **7M**

b) A pile group consists of 9 friction piles of 30 cm diameter and 10 m length driven in clay (Cu = 100 kN/m², $\gamma = 20$ kN/m³), as shown in Fig. Determine the safe load for the group (FoS = 3, $\alpha = 0.6$). **7M**
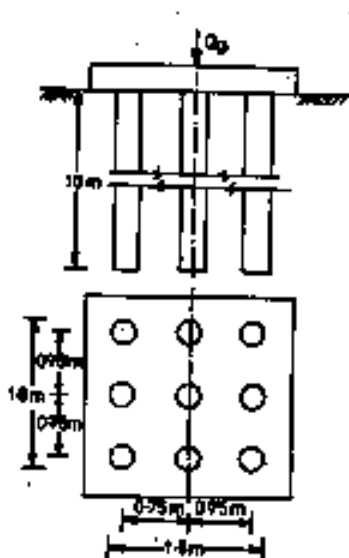
AR16

CODE: 16EC3016   SET-2

ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI
(AUTONOMOUS)
III B.Tech II Semester Regular & Supplementary Examinations, October / November-2020
ANALOG AND DIGITAL ELECTRONIC CIRCUITS
(Electrical And Electronics Engineering)

Time: 3 Hours   Max Marks: 70

Answer ONE Question from each Unit
All Questions Carry Equal Marks
All parts of the Question must be answered at one place

UNIT-I

1 a) Discuss the response of RC high pass circuit for different types of input   7M
      voltage.
   b) Illustrate about RC low pass circuit as integrator and obtain an   7M
      expression for good integrator.
                              (OR)
2 a) Explain the working of two level clipper with the help of neat diagram,   7M
      waveforms.
   b) Describe the working of negative clamper with the help of diagrams.   7M

UNIT-II

3 a) Explain the phenomenon of transistor as a switch .   7M
   b) Explain the switching times of transistor with neat waveforms.   7M
                              (OR)
4 a) i. What is triggering? Explain symmetrical and asymmetrical   7M
         triggering.
      ii. What is the difference between stable and quasi stable state?
   b) Draw the Schmitt trigger circuit and explain its working with neat   7M
      waveforms.

UNIT-III

5 a) Draw and explain the block diagram of op-amp.   7M
   b) i. Explain the terms CMMR, slew rate and power supply rejection ratio   7M
         (PSRR) of an op-amp.
      ii. How fast can the output of an op-amp change by 10V, if its slew rate
         is 1V/µs?
                              (OR)
6 a) Derive an expression for the output voltage of op-amp integrator.   7M
   b) Explain first-order high pass filter. Also draw its frequency response.   7M

UNIT-IV

7 a) Explain the functional block diagram of monostable multivibrator using 555 timer.   7M

   b) Draw the block diagram of PLL and explain each block.   7M

(OR)

8 a) Describe in detail the operation of a dual slope ADC.   7M

   b) i. With a neat circuit diagram explain the working of weighted resistor DAC.   7M

      ii. A 5-bit DAC produces an output of 0.2V for a digital input of 00001. Find the output value for a digital input of 11111.

UNIT-V

9. a) Explain the following terms of logic families: 7M
     i. Fan-in and Fan-out
     ii. Noise margin
     iii. Power dissipation
     iv. Speed power product

   b) Design a 2-input TTL NAND gate and explain its operation with truth table.   7M

(OR)

10 a) Explain the operation of ECL-NOR gate with neat diagram.   7M

    b) Compare various logic families. List out merits and demerits.   7M

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AR16

CODE: 16ME3020   **SET-2**

ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI
(AUTONOMOUS)
III B.Tech II Semester Regular & Supplementary Examinations, October / November-2020

CAD/CAM
(Mechanical Engineering)

Time: 3 Hours   **Max Marks: 70**

Answer ONE Question from each Unit
All Questions Carry Equal Marks
All parts of the Question must be answered at one place

UNIT-I

1. a) State the functions of an interactive computer graphics in CAD/CAM?   7M
   b) Explain design process in product cycle.   7M

(OR)

2. a) Discuss the benefit of CAD/CAM.   6M
   b) Define transformations. Discuss rotational and translational transformation with example.   8M

UNIT-II

3. a) Explain synthetic and analytic entities used in wireframe modelling.   7M
   b) Distinguish between solid modeling using CSG technique and B-rep technique.   7M

(OR)

4. a) Explain Bezier curve with a neat sketch. Explain its advantages and limitations.   8M
   b) Find the degree of Bezier curve controlled by three points (4, 2), (0, 0) and (2, 8). Also find the equation of the Bezier curve in parametric format with parameter "μ"?   6M

5. a) Write the manual part programme for the part shown in figure 5 (a). Assume suitable raw material size.   6M
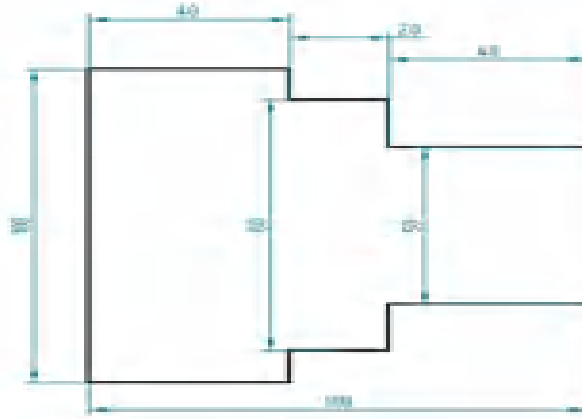

Fig 5(a)

   b) Describe various G and M codes used in CNC machines?   8M

(OR)

6. a) Describe the axis representation system used for CNC Milling machines. Discuss the various NC modes.   8M
   b) State the advantages and disadvantages of Numerical Control.   6M

UNIT-IV

7. a) Explain about MICLASS and OPITZ coding system in group technology.   8M
   b) Explain about generative CAPP system.   6M

(OR)

8. a) What are the advantages and disadvantages of group technology?   6M
   b) What is computer aided process planning? Discuss variant CAPP in detail with an example?   8M

UNIT-V

9. a) Define FMS and state applications of FMS?   6M
   b) Sketch the layout of a typical FMS and explain the important subsystems   8M

(OR)

10. a) Describe the Scheduling and Dispatching issues related to FMS (Flexible Manufacturing System).   6M
    b) Discuss the following types of layouts in the design of FMS.
       i) Robot centred layout ii) Ladder layout iii) Loop layout iv) Free layout   8M

AR16

ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI
(AUTONOMOUS)
III B.Tech II Semester Regular & Supplementary Examinations, October / November-2020
DIGITAL SIGNAL PROCESSING
(Electronics and Communication Engineering)

Time: 3 Hours   Max Marks: 70

Answer ONE Question from each Unit
All Questions Carry Equal Marks
All parts of the Question must be answered at one place

UNIT-I
1. a) Explain linear shift invariant systems and its Stability and Causality properties   8M
    b) Find Z transform of the sequence u[n]-u[n-4]   6M
                                    (OR)
2. a) Determine whether the LTI system   y(n) +y(n-1)=x(n)+x(n-2) is linear and time   8M
        invariant
    b) Find Inverse Z-Transform of X(Z) = $\frac{Z(Z-1)}{(Z+1)^3 (Z+2)}$ RoC: |z| >2   6M

UNIT-II
3. a) Explain any four properties of Discrete Fourier transform (DFT)   7M
    b) Explain how you can find IDFT using FFT algorithm.   7M
                                    (OR)
4. a) Explain how can you perform linear convolution of Sequences using DFT   7M
    b) Find the DFT of a sequence x (n) = {1, 2, 3, 4, 4, 3, 2, 1} using DIT-FFT algorithm   7M

UNIT-III
5. a) Discuss Analog Low pass Butterworth filter   7M
    b) Explain how you can design IIR filter from analog filter using a) bilinear   7M
        transformation Method
                                    (OR)
6. a) Explain Analog Low pass Chebyshev filter   7M
    b) Design a third order Butterworth digital filter using Impulse Invariant Technique.   7M
        Assume Sample period T = 1sec.
UNIT-IV
7. a) Explain Fourier series method of designing FIR filters.   7M
    b) Design an ideal high pass filter with a frequency response   7M
        $H_d(e^{jw})$ = 1 for $\pi/4 \leq \omega \leq \pi$
                    = 0 for $|\omega| \leq \pi/4$
        Find the values of h(n) for N=11. Find H(z). Plot the magnitude response using
            a) Hanning window
                                    (OR)
8. a) Determine Frequency response of FIR filter defined by y (n) = 0.25x(n) + x(n-1) +   7M
        0.25x(n-2)
    b) Obtain the cascade realization of system function H(z) =(1+2z^{-1}-z^{-2})(1+z^{-1}-z^{-2}) .   7M
UNIT-V
9. a) Explain the architecture of TMS320C5X DSP Processor with neat block diagram   8M
    b) Discuss about various addressing modes of TMS320C5X DSP Processor   6M
                                    (OR)
10. a) Explain Pipelining in DSP Processors   7M
    b) Discuss On-Chip peripheral of DSP Processors   7M

AR16

ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI
(AUTONOMOUS)
III B.Tech II Semester Regular & Supplementary Examinations, October / November-2020

SOFTWARE TESTING AND PROJECT MANAGEMENT
(Common to CSE & IT)

Time: 3 Hours   Max Marks: 70

Answer ONE Question from each Unit
All Questions Carry Equal Marks
All parts of the Question must be answered at one place

UNIT-I

1.	a)	Explain various factors and policies of Software Testing	7M
	b)	Describe about the Economics of System Development Life Cycle (SDLC)	7M

(OR)

2.	a)	Explain briefly about eight considerations in developing testing methodologies	7M
	b)	Explain briefly about Testing tactics	7M

UNIT-II

3.	a)	Explain briefly about Cause-Effect graphing.	7M
	b)	Explain briefly about Gray-Box Testing.	7M

(OR)

4.	a)	Explain in detail about Risk-based Testing.	7M
	b)	Explain in detail about Regression Testing.	7M

UNIT-III

5.	a)	Explain briefly about Requirements Phase Testing.	7M
	b)	Explain briefly about Design Phase Testing.	7M

(OR)

6.	a)	Discuss briefly about Program Phase Testing.	7M
	b)	Discuss briefly about Execute Test and Record Results	7M

UNIT-IV

7.	a)	What are the five improvements of waterfall model	7M
	b)	Discuss briefly about Conventional software management performance	7M

(OR)

8.	a)	Explain about the five parameters of software Economics	7M
	b)	Discuss about the three generations of software economics	7M

UNIT-V

9.		How to Improve Software Economics	14M

(OR)

10.	a)	Explain the Principles of Modern Software Management	10M
	b)	Explain briefly about Transitioning to an Iterative Process	4M

AR13

CODE: 13CE3017   **SET-1**

ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI
(AUTONOMOUS)
III B.Tech II Semester Supplementary Examinations, October / November-2020

GEOTECHNICAL ENGINEERING-II
(Civil Engineering)

Time: 3 Hours   **Max Marks: 70**

PART-A

ANSWER ALL QUESTIONS   **[1 x 10 = 10 M]**

1. a) Mention the corrections applied to Standard Penetration number.
   b) Differentiate between disturbed and undisturbed Sample.
   c) What is meant by Rotational and Translational Slope Failure?
   d) Define Stability Number.
   e) Define Active Pressure.
   f) Define Earth Pressure at rest.
   g) Define Net Safe Bearing Capacity.
   h) List out the types of Shear Failure.
   i) Write down the Hiley's formula for determination of ultimate load carrying capacity of a driven Pile.
   j) Define Allowable Load.

PART-B

Answer one question from each unit   **[5x12=60M]**
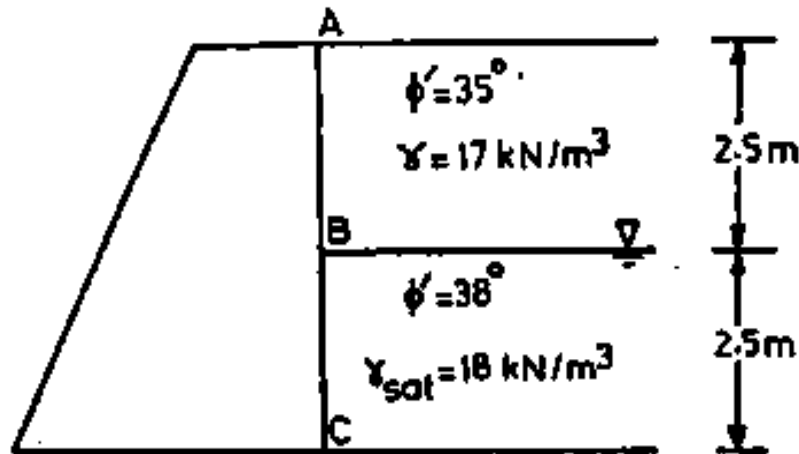
UNIT-I

2. a) Discuss Standard Penetration Test. What are the various corrections?   6M
   b) Give a brief account on seismic refraction method.   6M

(OR)

3. a) 75 mm is the external diameter of a sampling tube. If the area ratio required is 27%, determine thethickness of the sampling tube. In what type of clay would such a high area ratio be required?   6M
   b) Explain the salient features of a Geotechnical Investigation Report.   6M

UNIT-II

4. a) Explain the Swedish circle Method of slope stability analysis for cohesive frictional soil.   6M
   b) What is Taylor's stability number? Explain its use for slope stability analysis.   6M

(OR)

5. a) An embankment of 10 m high is inclined at 35º to the horizontal. A stability analysis by the method of slices gave the following forces: $\Sigma N = 900kN$, $\Sigma T = 420$ kN, $\Sigma V = 200kN$. If the length of failure is 25 m, find the factor of safety. The soil has C= 30kN/m^2 and $\phi = 15º$.   12M

UNIT-III

6. a) What are the assumptions of Rankine's Theory?   6M
    b) Derive an expression for Active Earth Pressure of Cohesionless Soil.   6M

(OR)

7. Determine the active pressure on the retaining wall as shown in figure. Take γ_w= 10   12M
    kN/m^3

UNIT-IV

8. Write brief critical notes on settlement of foundations. Describe the procedure of   12M
    determine the safe bearing capacity based on standard penetration.

(OR)

9. a) Give an account on different types of shear failure in soil and their effect on   6M
        Bearing capacity of soil.
    b) Determine the safe load carrying capacity of circular footing of size 1.50 m, if the   6M
        depth of the foundation is 1.50m. The soil has a C = 2.1 t/m^2, ϕ = 25° and γ= 1.9
        t/m^3. Water level is 1.0 m below GL.Consider Nc = 20.7, Nq = 10.7, Nγ= 6.8.

UNIT-V

10. a) Discuss about dynamic formulae and limitations.   12M

(OR)

11. a) Write the types and use of Pile Foundation.   6M
    b) Write a short note on Cyclic pile load test.   6M

ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI
(AUTONOMOUS)
III B.Tech II Semester Supplementary Examinations, October / November-2020

POWER ELECTRONICS
(Electrical and Electronics Engineering)

Time: 3 Hours   **Max Marks: 70**

PART-A
ANSWER ALL QUESTIONS   **[1 x 10 = 10 M]**

1. a) Define the latching current of thyristor?
    b) How to get $\frac{dv}{dt}$ protection of an SCR?
    c) Draw the bridge type full converter circuit?
    d) What is circuit turnoff time?
    e) What is the type of commutation in stepdown cycloconverter?
    f) Draw the step-up chopper circuit?
    g) What is forced commutation?
    h) What is rms value of A.C voltage controller for R-load?
    i) Explain time ratio control?
    j) What are the advantages of 120^0 mode 3phase VSI?

PART-B
Answer one question from each unit   **[5x12=60M]**
UNIT-I

2. a) Draw and explain the dynamic characteristics of SCR.   6M
    b) The specifications of a thyristor operating from a peak supply of 400V   6M
       is as follows: Repetitive peak current Ipk=200A, (di/dt) max=20A/US,
       (dv/dt) max=200V/US. Choosing a factor of   safety of 2 for Ipk,
       (di/dt) max and (dv/dt) max, design a suitable snubber circuit, if the
       minimum value of load resistance is 10ohms .

(OR)

3. a) Draw and discuss static characteristic of MOSFET   6M
    b) explain with relavent waveforms for class D commutation ?   6M

UNIT-II

4. a) Explain the operation of single phase half controlled rectifier with R-   6M
       L load. Draw the relevant waveforms and derive the expression for
       average load voltage.
    b) A single phase half wave converter is used to supply power to a load   6M
       of impedance 10 ohms from 230V,50Hz a.c. supply at a firing cycle
       of 30^0. Calculate. Average value of output voltage ,Effective value of
       output voltage,Line power factor.

(OR)

5. a) Explain the operation of single phase, full bridge converter with R-   6M
        load. Draw the relevant   waveforms and derive the expression for
        a average load voltage.
    b) Explain the effect of source impedance on the performance of single   6M
        phase full converter indicating clearly the conduction of various
        thyristors during one cycle

UNIT-III

6. a) Explain the operation of 3-ϕ, full converter with R-load. Draw relevant   6M
        waveforms and   derive the expression for average load voltage
    b) A 3-ϕ, semiconverter feeds power to a resistive load of 10ohms. For a   6M
        firing angle delay of 30^0, the load takes 5kW. Find the magnitude of
        per phase input supply voltage.
                              (OR)
7.   Explain the operation of 3-ϕ half controlled bridge converter with RL-   12M
        load. Draw the relevant wave forms and derive the expression for
        average load voltage for firing angle $\alpha \geq 60^0$

UNIT-IV

8. a) Explain the operation of 1-ϕ full wave ac voltage controller with RL   6M
        load.Draw the relevant waveforms and derive the expression for rms
        value of load voltage and input powerfactor.
    b) Explain the modes of operation of triac?   6M
                              (OR)
9.   Discuss the working of a single phase midpoint cyclo-converter with   12M
        RL-loads and for discontinuous operation with neat circuit diagram
        and output voltage and current waveforms for fo=1/3fs.

UNIT-V

10. a) Explain the expression for output voltage in case of step up chopper   6M
        .Draw the circuit diagram and relevant waveforms
    b) A step-up chopper has input voltage of 220V and output voltage of   6M
        660V.If the conducting Time of thyristor –chopper is 100μsec,
        compute the pulse width of output voltage. In Case output voltage
        pulse width is halved for constant frequency operation, find the
        average value of new output voltage
                              (OR)
11. a) Explain the principle of operation of parallel inverter with the help of   6M
        circuit diagram and necessary waveforms.
    b) What are the different pulse width modulation techniques used for   6M
        inverters?

AR13

ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI
(AUTONOMOUS)
III B.Tech II Semester Supplementary Examinations, October / November-2020

DIGITAL SIGNAL PROCESSING
(Electronics & Communication Engineering)

Time: 3 Hours   **Max Marks: 70**

PART-A

ANSWER ALL QUESTIONS   **[1 x 10 = 10 M]**

1. a) Check for Causality for the system y(n)= x(-n)
    b) State the BIBO stability criteria
    c) Define down sampling
    d) Define sampling rate conversion.
    e) Give any two properties of Butterworth Low pass filters
    f) Distinguish between Butterworth and Chebyshev (Type-I) filter.
    g) What is meant by Region of Convergence
    h) Explain the circular frequency shifting property of DFT.
    i) In which aspects VLIW architecture differs from P-DSP
    j) Mention few applications of TI DSPs

PART-B

Answer one question from each unit   **[5x12=60M]**

UNIT-I

2. a) Determine and sketch the magnitude and phase response of $y(n)=\frac{1}{2}\{$ x(n)+x(n-2)}   **6M**

    b) Determine the stability of the system $y(n) - \frac{5}{2}y(n-1) + y(n-2)=x(n) - x(n-1)$ **6M**

(OR)

3. a) Explain the following properties of Discrete Fourier Series   **6M**
        (i)Linearity (ii) Time Shifting (iii) Symmetry (iv) Periodic Convolution
    b) Determine whether or not the following system is i) Linear   ii) Causal   **6M**
        iii) Time invariant iv) static. $y[n] = log_{10}|x(n)|$ Justify your answer.

UNIT-II

4. a) Determine the output response y(n) if h(n) ={1,1,1}; x(n) ={1,2,3,1} by   **6M**
        using circular convolution.
    b) Find the DFT sequence of x(n)= ={1,2,3,4,4,3,2,1} using DIT algorithm   **6M**

(OR)

5. a) Compute the eight-point DFT of the sequence   **8M**
        $x(n)=\begin{cases}1 & 0 \leq n \leq T \\ 0 & otherwise\end{cases}$
        by using DIF algorithm.

    b) Find the inverse z-transform of $X(z) = \frac{1}{2z^{-2}+1+2z^{-1}}$ **4M**

UNIT-III

6. a) Discuss analog low-pass Butterworth filter design.   4M
    b) Design a Butterworth high pass filter satisfying   8M

$$f_p=0.10Hz; \ \alpha_p = 0.5dB; \ f_s=0.15Hz; \ \alpha_s=30dB; \ F=1Hz$$

(OR)

7. a) Design a digital Butterworth filter satisfying the constraints.   8M

$$0.75 \le \left| H\ (e^{j\omega}) \right| \le 1 \qquad 0 \le \omega \le \pi/2$$

$$\left| H\ (e^{j\omega}) \right| \le 0.2 \qquad 3\pi/4 \le \omega \le \pi$$

b) Obtain the direct form II for the following system   4M

$$y(n)=y(n-1)- \tfrac{1}{2} y(n-2) + \tfrac{1}{4}y(n-2)+x(n)-x(n-1)+x(n-2).$$

UNIT-IV

8. a) Design the ideal low pass filter with the frequency response   6M

$$H_d = 1 \ \text{for} \ -\tfrac{\pi}{2} \le \omega \le \tfrac{\pi}{2}$$

$$= 0 \ \text{for} \ -\tfrac{\pi}{2} \le |\omega| \le \tfrac{\pi}{2}$$

Find the value of h(n) for N=11. Find H(z). Plot the magnitude response.

b) Design a ideal high pass filter with a frequency response   6M

$$H_d\ (e^{j\omega}) = 1 \ \text{for} \ -\tfrac{\pi}{4} \le |\omega| \le \pi$$

$$= 0 \ \text{for} \ |\omega| \le \tfrac{\pi}{4}$$

Find the value of h(n) for N=11. Find H(z). Plot the magnitude response
using Hanning window.

(OR)

9. a) Distinguish between FIR and IIR filters.   6M
    b) Show that up sampler and down sampler are time variant systems.   6M

UNIT-V

10. a) Explain how a higher throughput is obtained using the VLIW architecture.   6M
         Give an example, of a DSP that has VLIW architecture.
     b) What are the different buses of TMS320C5X and their functions.   6M

(OR)

11. a) Draw the internal architecture of TMS320C5X DSP processor.   8M
     b) Explain why a MAC operation is implemented in hardware in   4M
         programmable DSPs.

AR13

ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI
(AUTONOMOUS)
III B.Tech II Semester Supplementary Examinations, October / November-2020

SOFTWARE PROJECT MANAGEMENT
(Computer Science Engineering)

Time: 3 Hours   **Max Marks: 70**

PART-A

ANSWER ALL QUESTIONS   **[1 x 10 = 10 M]**

1. a) List out various ways of measuring size of the product
   b) What are the various cost estimation models list them ?
   c) List any 3 principles of a modern process
   d) Define Peer review
   e) List the phases of life cycle process
   f) Explain in brief about minor milestone
   g) Define Roundtrip engineering.
   h) What is the role of software engineering process authority in line of business organizations
   i) List any two Management Indicators
   j) What are Architectural Risks.

PART-B

Answer one question from each unit   **[5x12=60M]**
UNIT-I

2. a) List and explain principles of conventional software management   6 M
   b) Explain in detail about the three generations of software economics   6 M
   (OR)
3. a) What are the five improvements for the waterfall model and explain   5M
   b) Explain about pragmatic software cost estimation.   7M

UNIT-II

4. a) Why Peer Inspections are considered as key aspect of a quality system explain   6 M
   b) Explain Inception and construction phases of a life cycle   6 M
   (OR)
5. a) Discuss in detail how to improve team effectiveness ?   6 M
   b) What are the principles of conventional software engineering ? Explain.   6 M

UNIT-III

6. a) Define Artifact. Write in detail about Management Artifacts.   6 M
   b) Explore the different aspects of Architecture from Technical perspective.   6 M
   (OR)
7. a) Define Workflow. Explain the seven top level workflows   7 M
   b) Explain the typical major milestones in the lifecycle of iteration.   5 M

CODE: 13CS3024   **SET-2**

UNIT-IV

8. a) With a neat diagram, explain the project organization and responsibilities   6 M
   b) Discuss the evolutionary work breakdown structures in detail.   6 M

(OR)

9. a) Write about the three discrete states in the evolution process of the project environment.   8 M
   b) Explain the stakeholder environments.   4 M

UNIT-V

10. a) Explain in detail the Quality Indicators used in software projects ?   6 M
    b) Describe the two phases of CCPDS-R life cycle   6 M

(OR)

11. a) Explain process discriminators that results from differences in project size.   6 M
    b) Define MTBF and maturity. Draw a graph for maturity expectation over a healthy project's life cycle.   6 M

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