AR18

CODE: 18HST302 **SET-2**

ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI

(AUTONOMOUS)

III B.Tech II Semester Supplementary Examinations, January-2022

HUMAN VALUES

(Common to CE, CSE & IT)

Time: 3 Hours **Max Marks: 60**

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)	Where do we stand today with respect to problems of individual, family, society, nature levels?	6M
	b)	"Natural acceptance is innate, invariant and universal." Explain this statement with an example.	6M
		(OR)	
2.	a)	Write a short note on the need for value education in today's scenario.	6M
	b)	What is the meaning of prosperity? How can you say that you are prosperous?	6M

UNIT-II

3.	a)	Make a list of your 10 desires, thought and expectations. Categorize where they are originating from pre-condition, sensation or natural acceptance?	6M
	b)	Explain the human being is coexistence of self and body?	6M
		(OR)	
4.	a)	What is more Basic in Sanyam or Swasthya? Where are we investing most of our energy and resources today – in ensuring Sanyam or in treatment of the un healthy Body?	6M
	b)	"I am the Seer. I am the Doer. I am the Enjoyer". The Body is my essential Instrument. Explain	6M

UNIT-III

5.	a)	What is Justice? What are its four elements? Is it a continuous or a temporary need?	6M
	b)	Define 'Respect' and discuss the basis of 'Respect'?	6M
		(OR)	
6.	a)	Explain the term Excellence and discuss the difference between to be special and excellence with your examples.	6M
	b)	"Feeling of being related to all is Love" Discuss.	6M

UNIT-IV

7.	a)	What are the 4 orders of nature? Briefly explain the relationship between the 4 orders.	6M
	b)	What do you mean by 'innateness'? What is the innateness in the four orders?	6M
		(OR)	
8.	a)	What do you mean by co-existence?	6M
	b)	What are the natural characteristics (swabhava) of human order? Explain.	6M

UNIT-V

9.	a)	What would be the pragmatic implications of value-based living at the four levels? Briefly explain.	6M
	b)	Human values are universal and naturally acceptable; hence these are to be explored and realized, not to enforced" - comment.	6M
		(OR)	
10.	a)	What do you mean by definitiveness of ethical human conduct? How can it be ensured?	6M
	b)	What are the reasons of unethical practices in profession today? What is the real solution to the above problems?	6M

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AR18

CODE: 18EET314 **SET-1**

ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI

(AUTONOMOUS)

III B.Tech II Semester Supplementary Examinations, January-2022

SWITCHGEAR AND PROTECTION

(Electrical and Electronics Engineering)

Time: 3 Hours **Max Marks: 60**

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)	What are the different methods of arc interruption? Explain about recovery rate theory of arc interruption in a circuit breaker.	6M
	b)	Describe the construction, principle and operation of SF6 circuit breaker.	6M
		(OR)	
2.	a)	With a neat sketch explain cross blast and axial blast type circuit breakers.	6M
	b)	Explain the ratings of a circuit breaker.	6M
		UNIT-II	
3.	a)	Describe the construction and principle of operation of induction disc type relay.	6M
	b)	What are the advantages of static relays over electromagnetic relays?	6M
		(OR)	
4.	a)	Explain the working principle, operation and characteristics of impedance relay with neat diagram.	6M
	b)	Explain the operation of a directional relay with a neat sketch.	6M
		UNIT-III	
5.	a)	What are the different types of faults for alternator? Explain the stator inter turn fault protection of alternators	6M
	b)	A 6.6 KV , 3 phase turbo alternator has a maximum continuous rating of 2000KW at 0.8 power factor and its reactance is 12.5%. It is equipped with Mertz-Price circulating current protection which is set to operate at fault current not less than 200 amperes. Find what value of neutral earthing resistance leaves 10% of the winding unprotected?	6M
		(OR)	
6.	a)	Describe the working principle of a Buchholz relay.	6M
	b)	Draw and explain Mertz-Price protection scheme for star/delta transformer.	6M
		UNIT-IV	
7.	a)	Explain carrier aided distance protection scheme with a neat diagram.	6M
	b)	Explain the Translay scheme of protection of feeder with a neat sketch.	6M
		(OR)	
8.	a)	Describe differential protection for bus bars.	6M
	b)	Explain how three zone distance relay protection can be used with impedance relays.	6M
		UNIT-V	
9.	a)	What are the causes of over voltages arising on a power system? Explain.	6M
	b)	Describe the principle of valve type lightning arrester.	6M
		(OR)	
10.	a)	What is the effect of ungrounded neutral on system performance? Explain.	6M
	b)	What is insulation coordination? Describe the construction of volt-time curve and terminology associated with impulse testing.	6M

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AR18

CODE: 18MET313 **SET-1**

ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI

(AUTONOMOUS)

III B.Tech II Semester Supplementary Examinations, January-2022

CAD/CAM

(Mechanical Engineering)

Time: 3 Hours **Max Marks: 60**

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)	Draw and explain the CAD/CAM product life cycle.	6M
	b)	Briefly explain the transformations scaling, translation and rotation used in Graphics.	6M
		(OR)	
2.	a)	What are the input devices more commonly employed for general graphics Applications? Present their merits and demerits.	6M
	b)	Write short notes on the following: i) Random scan graphic terminal ii) Digitizers and Image scanners iii) CPU	6M

UNIT-II

3.	a)	Explain the concept of drawing Bezier curve in CAD?	6M
	b)	Illustrate Boundary representation and constructive solid geometry with suitable sketches	6M
		(OR)	
4.		Describe at least two editing and solid modelling commands	12M

UNIT-III

5.	a)	What are the basic components of NC system and explain the function of each Component?	6M
	b)	Explain the modes of NC.	6M
		(OR)	
6.	a)	Describe the axis representation system used for CNC Milling machines. Discuss the various interpolation methods used in NC machines	6M
	b)	Describe various G and M codes used in CNC machines?	6M

UNIT-IV

7.	a)	What is group technology? Discuss machine cell design in G.T.?	6M
	b)	Differentiate between retrieval type and generative type CAPP systems? List out the merits and demerits of each type.	6M
		(OR)	
8.	a)	Explain the Optiz coding system generally used in group technology	6M
	b)	Explain about the production flow analysis	6M

UNIT-V

9.	a)	Describe the principle of flexible manufacturing systems. Why is a flexible Manufacturing system capable of producing a wide range of lot sizes? Explain.	6M
	b)	Discuss the physical components of an FMS	6M
		(OR)	
10.	a)	Discuss the importance of material handling devices used in an FMS.	6M
	b)	Explain dedicated FMS and random order FMS applied in manufacturing Industry.	6M

AR18

CODE: 18BST309 **SET-2**

ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI

(AUTONOMOUS)

III B.Tech II Semester Supplementary Examinations, January-2022

BIOLOGY

(Electronics and Communication Engineering)

Time: 3 Hours **Max Marks: 60**

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)	Biology is an Independent Discipline of science Explain.	6 M
	b)	Define Science ? Differentiate between science and Engineering using live examples.	6 M

(OR)

2.	a)	How did Julius mayor discover the Law of Conservation of Energy ? And How did Brown observe nucleus.	6 M
	b)	What are the Branches of biology and explain biological observations with examples.	6 M

UNIT-II

3.	a)	Define microbiology and draw neat and Labelled diagrams of (A) Different types of bacteria (B) Paramecium (C) Bacteria phage.	6 M
	b)	Explain the Molecular Taxonomy with examples .What are the tools used in Molecular Taxonomy?	6 M

(OR)

4.	a)	What is the composition of media and explain the bacteria culture.?	6 M
	b)	Elucidate the Aquatic and terrestrial habitate ? And How are aquatic and terrestrial ecosystems linked?	6 M

UNIT-III

5.	a)	Define Nucleotide ? What is the differences between DNA and RNA.	6 M
	b)	What is genetic recombination ? And Elucidate the Advantages of genetic recombination during meiosis.	6 M

(OR)

6.	a)	Describe the functions of proteins.	6 M
	b)	Explain the law of saggrigation with example.	6 M

UNIT-IV

7.	a)	Describe the functions of enzymes.	6 M
	b)	What are the Kinetic parameters of enzymes? and Explain Tertiary structure of proteins	6 M

(OR)

8.	a)	All enzymes are proteins but all proteins are not enzymes Explain .and what type of enzymes breack down the fats?	6 M
	b)	Summary the Different types of protein structures	6 M

UNIT-V

9.	a)	Define Exergonic reactions and Explain cellular respiration?	6 M
	b)	Explain the krebs (Citric acid) cycle.	6 M

(OR)

10.	a)	Elucidate the metabolism. What are the differences between Anabolic process and catabolic process.	6 M
	b)	What is Endergonic reaction ? And Explain their functions with suitable examples?	6 M

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AR16

CODE: 16CE3019 **SET-2**

ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI

(AUTONOMOUS)

III B.Tech II Semester Supplementary Examinations, January-2022

Pre-stressed Concrete

(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)	What are the applications of prestressed concrete?	7M
	b)	What is the necessity of using high strength concrete and high tensile steel in prestressed concrete?	7M
		(OR)	
2.	a)	Distinguish between pre-tensioning and post tensioning.	7M
	b)	What are the advantages of prestressed concrete?	7M

UNIT-II

3.	a)	Derive the loss due to elastic shortening of concrete.	4M
	b)	A prestressed concrete beam 500mm x 500mm, is prestressed by 12 wires, each of 8mm diameter. The wires are initially stressed to 1600N/mm^2 with their centriods located 80mm from the soffit. Calculate the final percentage loss of stress due to elastic deformation, creep, shrinkage and relaxation using given the following data ES =210kN/mm^2 and Ec = 32kN/mm^2 Creep co-efficient =1.6 , Residual shear strain = 3 x 10-4 Relaxation of steel stress = 90N/mm^2	10M
		(OR)	
4.	a)	Derive the loss due to creep of concrete.	7M
	b)	A concrete beam of dimension 100 mm × 300 mm is post-tensioned with 5 straight wires of 7mm diameter. The average prestress after short-term losses is 0.7fpk = 1200 N/mm2 and the age of loading is given as 28 days. Given that Ep =200 × 103 MPa, Ec = 35000 MPa, find out the losses of Prestreses due to creep, Shrinkage and relaxation. Neglect the weight of the beam in the computation of the stresses.	7M

UNIT-III

5.	a)	Explain with sketches the IS CODE method of computing the moment of resistance of rectangular sections.	7M
	b)	What are the different ways of improving the shear resistance of structural concrete members by prestressing techniques?	7M
		(OR)	
6.	a)	The horizontal prestress at the centriod of a concrete beam of rectangular cross section 340mm by 600mm, is 10N/mm2 and maximum shearing force on the beam is 90kN.Calculate the maximum principal tensile stress	12M
	b)	Explain the various modes of failure encountered in prestressed concrete beams subjected to bending moment, shear and torsion.	2M

UNIT-IV

7. a) Explain with sketches the effect of varying the ratio of depth anchorage to the on the distribution of bursting tension. 7M

   b) Illustrate with sketches the effect of varying the ratio of end block on the distribution of bursting tension. 7M

(OR)

8. a) Derive the equation of short term deflections of uncracked members by Mohr's theorems. 7M

   b) What are the codal recommendations regarding the design of reinforcements in prestressed sections subjected to moment shear and torsion? 7M

UNIT-V

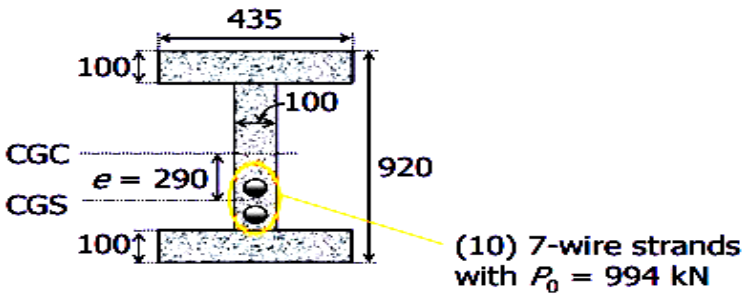
9. a) Draw and briefly explain the stress distribution in end block. 4M

   b) Design the bearing plate and the end zone reinforcement for the following bonded Post-tensioned beam. The strength of concrete at transfer is 50 N/mm2.A prestressing force of 1055 kN is applied by a single tendon. There is no eccentricity of the tendon at the ends. 10M

(OR)

10. a) The section shown is designed as a Type 1 member with MT = 435 kNm (including an estimated MSW = 55 kNm). The height of the beam is restricted to 920 mm. The prestress at transfer fp0 = 1035 N/mm2 and the prestress at service fpe = 860 N/mm2Based on the grade of concrete, the allowable compressive stresses are 12.5N/mm2 at transfer and 11.0 N/mm2 at service. The properties of the prestressing strands are given below. Type of prestressing tendon : 7-wire strand
Nominal diameter = 12.8 mm , Nominal area = 99.3 mm^2
For the section,
find the acceptable zone by Magnel's graphical method.
Compare the designed values of eccentricity (e) and the inverse of pre-stressing force at transfer (1/P0) with the acceptable zone. 12M

.



   b) Explain the term End blocks. 2M

AR16

CODE: 16ME3020 **SET-1**

ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI

(AUTONOMOUS)

III B.Tech II Semester Supplementary Examinations, January-2022

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)	Briefly explain the Input devices and Output devices in CAD/ CAM.	8M
	b)	State the benefits of CAD / CAM	6M

(OR)

2.	a)	Explain the following transformations in 3 D concept of Computer graphics with an example. i. Translation. iii. Rotation.	8M
	b)	Perform a 30^0 rotation of the triangle A (0, 0), B (1, 2), C (5, 2). i. about origin. ii. About point P (-1,-2).	6M

UNIT-II

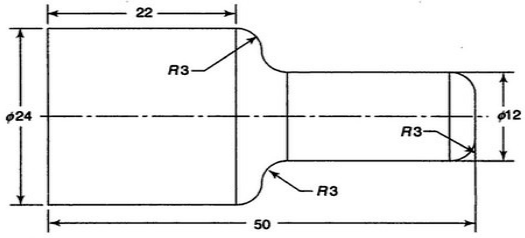
3.	a)	Give a classification of the different surfaces that can be used in Geometric modeling applications.	7M
	b)	Derive the parametric equation of cubic spline.	7M

(OR)

4.	a)	In detail explain the salient features of solid modeling.	6M
	b)	Define Bezier surface? Explain various characteristics of this surface.	8M

UNIT-III

5.	a)	Explain the principle of CNC system with a block diagram.	6M
	b)	Write NC part program for the part shown in the below figure. All the dimensions are in mm only.	8M



(OR)

6.	a)	Explain CNC part programming with a suitable example.	8M
	b)	Describe various NC elements?	6M

UNIT-IV

7.	a)	What is part family? State advantages and limitations of Group Technology.	8M
	b)	Briefly explain the need of CAPP (Computer Aided Process Planning).	6M

(OR)

8.	a)	Explain about the OPITZ coding system generally used in Group Technology.	8M
	b)	Describe the composite part concept in Group Technology.	6M

UNIT-V

9.	a)	Describe the Scheduling and Dispatching issues related to FMS (Flexible Manufacturing System).	8M
	b)	Define computer aided quality control. Explain how it is implemented.	6M

(OR)

10.	a)	What is FMS and explain its components.	7M
	b)	Explain material handling and storage systems.	7M

AR16

CODE: 16EC3019 **SET-2**

ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI

(AUTONOMOUS)

III B.Tech II Semester Supplementary Examinations, January-2022

ANTENNA AND WAVE PROPAGATION

(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. Derive the expression for the total power radiated by the current element, I ***dl*** cosωt and hence deduce the expression for the radiation resistance, R_{rad}. 14M

(OR)

2. Discusses about the power radiated by half wave dipole is twice the power radiated by the Quarter wave monopole. 14M

UNIT-II

3. a) Describe the array with n isotropic point sources of equal amplitude and spacing 7M
   b) What is broad side array? Evaluate the expression for the radiation pattern for an end fire array of N identical elements 7M

(OR)

4. Design a four element ordinary end-fire array with the elements spacing along the z-axis a distance d apart. For a spacing of d=$\frac{\lambda}{2}$ between the elements find the 14M
   a) Progressive phase excitation between the elements b) Nulls
   c) Maximum Directivity d) Band-width between the nulls

UNIT-III

5. a) Derive the expression for the radiation resistance of the Loop antenna 7M
   b) Discusses about the design procedure and parameters of the Rhombic antenna 7M

(OR)

6. a) Discusses about the construction & radiation mechanism of Helical antenna 7M
   b) Illustrate the reciprocity in antenna measurements. 7M

UNIT-IV

7. a) Show that a point source at the focus of a parabolic reflector produces a plane wave at the aperture of the reflector. 7M
   b) Illustrate the condition required for the constructive addition between the reflected and direct fields of a parabolic reflector 7M

(OR)

8. a) How the radiation pattern of an antenna are measured. Support with neat diagram 7M
   b) Design a 6 element Yagi Uda antenna at 475 MHz, explain its functioning with neat sketch and necessary equations 7M

UNIT-V

9. a) Distinguish the characteristics of various ionized regions. 7M
   b) For a given frequency of propagation calculate skip distance 7M

(OR)

10. a) Write short notes on lowest usable frequency; also mention the mechanisms of signal absorptions through free space. 7M
    b) Comment on the phenomenon of merging of F_1 and F_2 layers during dark night hours 7M

AR16

CODE: 16CS3016 **SET-1**

ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI

(AUTONOMOUS)

III B.Tech II Semester Supplementary Examinations, January-2022

WEB TECHNOLOGIES

(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) Write an HTML program that displays a registration page using forms with four fields, username, password, mobile number (maximum ten digits) and gender with radio buttons. 7M

   b) Define Cascading Style Sheet? Explain the types of Cascading Style Sheets. 7 M

(OR)

2. a) Create the following table using html table and it's sub tags. 7M

Column 1	Column 2	Column 3
Row 1 Cell 1	Row 1 Cell 2	Row 1 Cell 3
	Row 2 Cell 2	Row 2 Cell 3
Row 3 Cell 1		

   b) How to use the class and id selector in CSS. Explain with an example. 7M

UNIT-II

3. a) Write a JavaScript program that displays Prime Numbers between 1 to 100. 7M

   b) Write a javascript to change the color and background of text and page using two buttons labeled with color names "yellow", "purple". 7M

(OR)

4. a) Write a javascript program to validate Login form consisting of username and password. 7M

   b) Mention the features of Java Script. What are the advantages and limitations of Java Script. 7M

UNIT-III

5. a) Define DTD. Design DTD for the following XML file: 7M

students.xml:

```
<student>
    <rollno>10</rollno>
    <personal_info>
        <name>CSE</name>
        <address>GEC</address>
    </personal_info>
    <class>3rd Year</class>
    <subject id="CS01">Web Technologies</subject>
    <grade>O</grade>
</student>
```

b) Compare XML and HTML in different aspects. 7M

(OR)

6. a) What is an XML Schema? Write an XML Schema that displays a book details Book name, author, edition, Number of Pages, Version and Cost of the book. 7M

b) Differentiate SAX parser and DOM Parser. 7M

UNIT-IV

7. a) Illustrate different JDBC drivers with their architectures, advantages and disadvantages. 10M

b) Explain the following: 4M

i) DriverManager class ii) ResultSet Interface

(OR)

8. a) Explain Servlet Life Cycle stages and methods with a neat diagram. 7M

b) Write the basic steps for connecting a Servlet with a database with a sample code. 7M

UNIT-V

9. a) List and explain rolls of the JSP Implicit Objects. 7M

b) Write a file to insert data into a table using JDBC. 7M

(OR)

10. a) Explain about anatomy of JSP page. 7M

b) What is MVC Architecture? Explain the modules in it. 7M

AR13

CODE: 13ME3018 SET-1

ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI

(AUTONOMOUS)

III B.Tech II Semester Supplementary Examinations, January-2022

METROLOGY

(Mechanical Engineering)

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

PART-A

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

1. a) Define basic size, upper and lower limit of size?
   b) Name some linear measurement instruments?
   c) What do you mean by interferometers?
   d) What are uses of optical flat?
   e) Describe a method to find out the flatness of surface plate?
   f) Differentiate between primary and secondary texture?
   g) List the advantages of electronic comparators?
   h) What is the principle of involute profile measurement?
   i) Describe in detail various types of errors occurring in gears?
   j) Name some instruments required for alignment tests?

PART-B

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

UNIT-I

2. a) Differentiate between hole basis and shaft basis systems? [6M]
   b) Define fit and with the help of neat sketches, explain the different types of fits? [6M]

(OR)

3. a) Discuss the International standard system of tolerances? [4M]
   b) Tolerances for a hole and shaft assembly having a nominal size of 50 mm are as follows: [8M]

   Hole = $50^{+0.02}_{+0.00}$ mm and shaft = $50^{-0.05}_{-0.08}$ mm ,

   Determine the following:
   (a) Maximum and minimum clearances
   (b) Tolerances on shaft and hole
   (c) Allowance
   (d) MML(Maximum Metal Limit) of hole and shaft
   (e) Type of fit

UNIT-II

4. a) Explain with a neat sketch, the construction and uses of Sine bar? [6M]
   b) With the help of sketches explain the working of an external micrometer? [6M]

(OR)

5. a) Write detailed notes on progressive and positional limit gauges? [6M]
   b) State and explain Taylor's principle of gauge design? [6M]

AR13

CODE: 13ME3018 SET-1

UNIT-III

6.	a)	Describe the working of an optical projector? What are its applications?	[6M]
	b)	Explain the working of Michelson's interferometer with neat sketch?	[6M]
		(OR)	
7.	a)	What is a principle of autocollimator? Discuss on applications of autocollimator?	[6M]
	b)	What is flatness? What are the various methods of checking flatness of surfaces?	[6M]

UNIT-IV

8.	a)	Describe the various numerical methods for assessment of surface Finish?	[6M]
	b)	Describe with a neat sketch the principle, construction and operation of Talysurf?	[6M]
		(OR)	
9.	a)	With the help of neat sketch explain the working principle of a sigma comparator?	[6M]
	b)	Describe the working principle of a pneumatic comparator?	[6M]

UNIT-V

10.	a)	Describe the following terms in screw threads: (i) Major diameter (ii) Minor diameter (iii) Angle of thread and (iv) Pitch	[6M]
	b)	Describe with the help of a neat sketch the working principle of Gear tooth vernier caliper?	[6M]
		(OR)	
11.	a)	What are the various alignment tests performed on lathe machine and discuss any two of them in detail?	[6M]
	b)	Briefly explain the three basic types of CMMs?	[6M]

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AR13

CODE: 13CS3016 SET-2

ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI

(AUTONOMOUS)

III B.Tech II Semester Supplementary Examinations, January-2022

WEB TECHNOLOGIES

(Computer Science & Engineering)

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

PART-A

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

1. a) Write the syntax for displaying image in web page
   b) Difference between id and class selectors
   c) Define XML schema
   d) Write different types of DTD declarations
   e) List any 2 interfaces available in javax.servlet.http
   f) Write any two differences between get and post methods
   g) Write any one advantage of the JSP over servlet
   h) Define custom tags in JSP
   i) How many parameters are passed to the get Connection()? What are they?
   j) List 2 types of drivers in JDBC

PART-B

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

UNIT-I

2. a) Explain different form components in HTML? 6M
   b) How to create three pop boxes JAVAscript? 6M

(OR)

3. a) Design simple web page consist of three buttons named with Blue, Red, Green. Upon clicking on these buttons the page will be displayed in the corresponding colors. 6M
   b) What is an event? How to handle events in JAVAscript? 6M

UNIT-II

4. a) Differentiate between DOM & SAX. 4M
   b) Explain working with DTD. 8M

(OR)

5. a) Write the importance of SAX parser in XML 6M
   b) Explain in brief about XSLT 6M

UNIT-III

6. Explain about servlet life cycle with suitable example. 12M

(OR)

7. Write a servlet for checking the authentication of the user with username and passwords available in cookies 12M

UNIT-IV

8. a) Explain how to handle exceptions in JSP 6M
   b) Explain about JSP directives 6M

(OR)

9. a) Explain about anatomy of JSP page. 6M
   b) Explain about implicit objects in JSP. 6M

UNIT-V

10. Explain the steps for connecting database server 12M

(OR)

11. Write a JSP to store the details of the username and password entered in HTML form 12M

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