Code: 13CE2009

ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI
(AUTONOMOUS)
II B.Tech II Semester Supplementary Examinations, August-2015

CONCRETE TECHNOLOGY
(CIVIL ENGINEERING)

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

PART-A

Answer all questions **[1 X 10 = 10M]**

1.(a) What is an admixture.
(b) Define Hydration of cement.
(c) Define coarse aggregate & fine aggregate.
(d) What is heat of hydration.
(e) What is initial setting time.
(f) Define fineness modulus.
(g) Define segregation.
(h) What is the standard size of cube used for testing of strength of concrete.
(i) What is poission's Ratio
(j) What is a Grading curve.

PART-B

Answer one question from each unit **[5 X 12=60M]**

UNIT-I

2. Explain, By flow chart, the manufacturing process of cement by dry process.

(OR)

3.Explain about oxide compounds and complex compounds during manufacturing process of cement.

UNIT-II

4.(a) Explain significance of fineness modulus.
(b) Explain gap graded and well graded aggregate sample.

(OR)

5. What is workability? Explain the procedure for measurement of workability by slump cone method.

UNIT-III

6.Explain (a) "Maturity concept of concrete".
(b) Gel space ratio

(OR)

7. Explain the procedure for "Split tensile test of cylinder" with neat sketch?

UNIT-IV

8. Define modular ratio? Explain three modular of elasticity.

(OR)

9.What is shrinkage? Explain different types of shrinkage, in detail.

UNIT-V

10.Explain the various "Statistical methods" that are useful for quality control of concrete.

(OR)

11.Explain the step wise procedure for BIS method of mix design.

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AR13 SET1

CODE: 13ME2012

ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI
(AUTONOMOUS)
II B.Tech II Semester Supplementary Examinations, August-2015

MACHINE DRAWING
(MECHANICAL ENGINEERING)

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

Answer two questions from Part-A
&
Part-B is compulsory

PART-A

Answer any two questions

[2 X 15=30Marks]

1 Draw the half-sectional front view and side view of a split-muff coupling. The diameter of the shaft is given as 40 mm.

2. Draw the following:
   - **i)** Capstan nut
   - **ii)** Sawn nut
   - **iii)** Whitworth thread
   - **iv)** Square head bolt with a square nut.

3. Draw the sectional front view and top view of a Single –riveted double strap butt joint. Assume that the thickness of the plates as 25 mm. and the diameter of the rivet = 30 mm. (Note: identify suitable thickness for the straps)

PART-B

Part-B is compulsory

[1x40=40Marks]

4. The detailed part drawings of an eccentric are shown in the Figure 1.

   Draw the following views. a) Half sectional front view and
   b) Side view of the assembly

CODE: 13ME2012

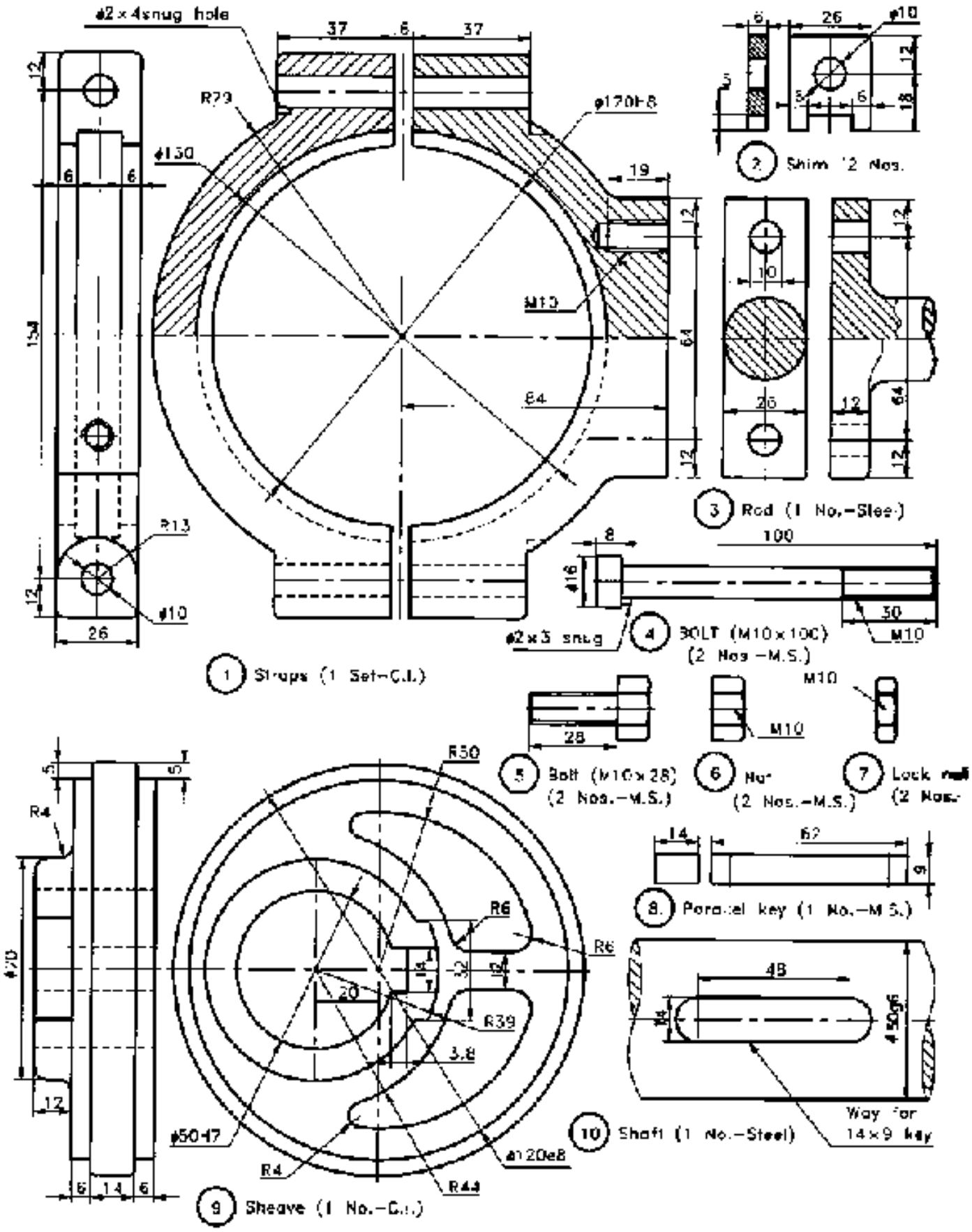

Figure 1.

AR13 SET-1

Code: 13CS2010

ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI
(AUTONOMOUS)
II B.Tech II Semester Supplementary Examinations, August-2015

PRINCIPLES OF PROGRAMMING LANGUAGES

(COMMON TO CSE & IT)

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

PART-A

Answer all questions **[1 X 10 = 10M]**

1. a) What is a Virtual Machine?
   b) Define Parsing .
   c) What is frame pointer? What is it used for?
   d) Explain about Context – Free Grammar?
   e) Write an example for multi way assignment.
   f) Explain coercion by taking any programming language as example.
   g) What is an Exception
   h) Define Macro?
   i) Define the life time of a variable
   j) What is Horn clause?

PART-B

Answer one question from each unit **[5X12=60M]**

UNIT-I

2. a) Explain in detail about various language evaluation criteria and the characteristics that affect them. [6M]
   b) Explain in detail about programming domains and language categories [6M]

(OR)

3. a) Explain in brief Backus-Naur form and EBNF? [6M]
   b) What is ambiguity in context-free grammar? Explain with an example. [6M]

UNIT-II

4. a) Explain in detail about the semantic analyzer. [6M]
   b) Explain in detail space management for attributes [6M]

(OR)

5. Define Attribute grammars. Give an attribute grammar for simple assignment statements. How is the order of evaluation of attributes determined for the trees of Attribute grammar? [12M]

UNIT-III

6. a) Explain in detail about the Compound and Guarded command control structures. [6M]
   b) Explain in detail about sequencing and recursion control flows with examples [6M]

(OR)

7. a) Explain in detail the following data types: Array [6M]
   b) Union and Pointer [6M]

AR13 SET-1

Code: 13CS2010

UNIT-IV

8.	a)	Describe three alternative means of allocating co -routine stacks. What are their relative strengths and weaknesses?	[6M]
	b)	Explain early binding and late binding.	[6M]

(OR)

9.		Discuss about the concurrency control with examples.	[12M]

UNIT-V

10.	a)	Write the Applications of Logic Programming	[6M]
	b)	What is inheritance with respect to OOP? What are its benefits?	[6M]

(OR)

11.	a)	What is unification? Why is it important in logic programming?	[6M]
	b)	Discus the Basic elements of the Prolog	[6M]

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