



M V S R Engineering College, Nadergul, Hyderabad
EEE Department

Date: 01-03-2018

The following members of ERAC and course coordinators are requested to attend a meeting on date 02/03/2018 at 11am .in HOD cabin. The agenda is as follows

1. Evaluation of quality of internal question papers for II internal
2. Finalizing the distribution of marks with respect to attainment of COs.
3. Evaluation of quality of Assignments.
4. Any other matter with the permission of chair.

Name of Faculty

Dr. DVM Chary

Dr. D. Hari Krishna

Mr. PVV Raghava Sarma

Mr. S. Shyam Mohan

Mr. G. Satyanarayana

Mr. P B Guru Prasanna

Designation

Prof. & HOD



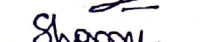
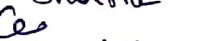
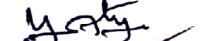

Assoc. Professor

Asst. Professor

Asst. Professor

Asst. Professor

Asst. Professor

M.V.S.R. Engineering College- Nadergul

Department of EEE

B.E. 4TH SEM, I –Internal Examination, February, 2019

ACAD.YEAR 2018-19-II SEM

POWER SYSTEM-I

Teacher Name: I.N.SWAMY

Max.Time : 60 Mints

Section: 'A'

Max.Marks:20M

Note: 1) Answer ALL the questions from Part –A

2) Answer any TWO questions from Part –B

Part-A

(Marks 2×3=6M)

1. Define base load and peak load plant (CO.PC403EE.2) 2M
2. Explain the function of economizer and air pre heater (CO.PC403EE.2) 2M
3. Define cold reserve, hot reserve and spinning reserve capacity of the plant (CO.PCEE403EE.1) 2M

Part-B

(Marks 7×2=14M)

1. a) Show the schematic diagram of a modern thermal power station (CO.PC403EE.2) 4M
b) Explain the concept of cooling towers and condenser in steam power station (CO.PC403EE.2) 3M
2. The run off data of a river at a particular site is tabulated below. (CO.PC403EE.1)

| Month | Mean of discharge per month m ³ /sec | Month | Mean of discharge per month m ³ /sec |
|----------|---|-----------|---|
| January | 200 | July | 1600 |
| February | 400 | August | 1200 |
| March | 600 | September | 2000 |
| April | 2400 | October | 1200 |
| May | 1200 | November | 800 |
| June | 1800 | December | 800 |

- a) Plot the hydrograph and calculate the mean flow
b) Plot the flow duration curve
3. a) Define electrical tariff and explain block rate, flat rate, two part and power factor tariff (CO.PC403EE.1)
b) Explain depreciation by Diminishing value method (CO.PC403EE.1)

M V S R Engineering College, Nadergul, Hyderabad
EEE Department
Internal Test - I

Class: IV semester Section - A
Time: 1 Hr

Sub: Electrical Machines 1 (PC 402EE)
Marks: 20

Part - A (Answer All) (3 x 2 marks= 6)

1. Compare lap and wave windings in any 5 aspects. [CO EE.402.2]
2. Define critical resistance. [CO EE.402.3]
3. What is delayed commutation and why does it occur? [CO EE.402. 2]

Part - B (Answer Any two) (2 x 7 marks = 14)

4. a) Derive EMF equation of dc generator. (3 M) [CO EE.402. 2]
b) A 5 kW, 200 V dc compound generator supplies a load consisting of 50 lamps, each rated at 100 W, 200 V. Its armature, series field and shunt field resistances are 0.1Ω , 0.05Ω and 50Ω respectively. Determine the generated emf when it is connected as i) long shunt ii) short shunt. (4M) [CO EE.402. 3]
5. a) Explain armature reaction and its effects with neat diagrams. (4M) [CO EE.402. 2]
b) A 4 pole DC generator has 600 lap connected conductors. The armature current is 300 A. If the brushes are given a lead of 7.2° (electrical) from MNA, find AT_d/Pole and AT_a/Pole . (3 M) [CO EE.402. 2]
6. a) A shunt generator fails to excite when it is speeded up, state the reasons. (3 M) [CO EE.402.3]
b) Explain various characteristics of DC shunt generator. (4M) [CO EE.402.3]

Dr. D V M Chary