

# KADI SARVA VISHWAVIDHYALAYA

## B.E. Semester VI Electrical

Subject Code: - EE-601

Subject Name: - SWITCHGEAR

Date:- 28/02/2015

Time:- 12:00 pm To 1:30 pm

Total Marks:- 30

### Instructions:

1. Answer each section in separate Answer Sheet.
2. Use of scientific calculator is permitted.
3. All questions are **Compulsory**.
4. Indicate **clearly**, the options you attempt along with it's with respective question number.
5. Use the last page of main supplementary of **rough work**.

**Q.1** (A) State and explain various Arc interruption theories. 5

(B) Define (i) Breaking capacity (ii) Making capacity (iii) Recovery voltage (iv) Ristriking voltage (v) short time rating 5

**Q.2** (A) What are the different types of air blast circuit breaker? Also state the difference between them. 5

(B) The specification of oil C.B is given as, 1500amps, 1000mva, 33kv, 3 second, 3phase system. Find: 5  
a. rated normal current  
b. rated making current  
c. rated symmetrical breaking current  
d. short time current rating.

**OR**

(A) What are the various duties of circuit breaker. 5

(B) State the function of reactors in power system? Discuss their advantage. 5

**Q.3** (A) Explain working and disadvantage of oil circuit breaker. 5

(B) Write a note on arc phenomenon. 5

**OR**

(A) Explain construction, operation of Air break circuit breaker. 5

(B) Difference between: (a). Circuit breaker (b). Isolator 5