

B.Sc. (I. T.) Sem. - III (CBCS - 2015 Course) : WINTER - 2018

SUBJECT: OPERATING SYSTEMS

Day: Saturday
Date: 24/11/2018

W-2018-1074

Time: 10.00 a.m. to 01.00 p.m.
Max Marks. 60

N.B. :

- 1) Attempt **ANY SIX** questions.
- 2) Figures of right indicate **FULL** marks.

- Q.1** a) List out objective of Operating System. **(05)**
- b) How Operating System fulfills its different objective through services? **(05)**
- Q.2** How Operating System provides environment to perform different system operations? **(10)**
- Q.3** How the different I/O controller does helps to process any task with the help of an Operating System? **(10)**
- Q.4** a) What are the different scheduling criteria used to schedule any task? **(05)**
- b) How context switch takes place? **(05)**
- Q.5** a) How process execution takes place once it is submitted? **(05)**
- b) Describe process life cycle. **(05)**
- Q.6** a) Enlist different scheduling algorithm. **(05)**
- b) How different scheduler affects the access time? **(05)**
- Q.7** a) Which different memory management techniques are available? **(05)**
- b) Explain when different memory management gets call? **(05)**
- Q.8** Let's have string a, b, c, d, c, a, d, b, e, b, a, b, c, d and frame size 4 find page fault.

Time Required		1	2	3	4	5	6	7
Page Frames		a	b	c	d	c	a	d
0	a	a	a	a	a	a	a	a
1	b		b	b	b	b	b	b
2	c			c	c	c	c	c
3	d				d	d	d	d
Faults		X	X	X	X			
Time Required		8	9	10	11	12	13	14
Page Frames		b	e	b	a	b	c	d
0	a	a	e	e	e	e	e	d
1	b	b	a	b	a	a	a	a
2	c	e	e	c	c	b	b	d
3	d	d	d	d	d	d	c	c
Faults			X				X	X