SR. No. 506237220

University of Mumbai

CANDIDATES SHEET (Read the Instructions given on the reverse side) (PART-I)

Use Black Ball Pen only to darken the appropriate circles. Do not fold, tear, wrinkle, staple or use whitener on the cover page of the answer book. Do not write or mark on the barcode and the timing tracks.

Exam Date: 0 7 1 2 1 6

Signature of Chief Conductor

Signature of the Candidate: [signature]

Signature & Name of the Block Supervisor with Date

College Seal & Date

CORRECT METHOD ● ○ ○ ○ WRONG METHOD ✓ ⊗ ◉ ◒

Q. P. Code (Printed on right corner of Q.P): 2 8 5 8 7

Candidate Seat Number: 1 3 1 1 7 0 8 1

Do not write/Mark on Bar Code

If Physically challenged LD ① PC ② VI ③ Regular ④

PRN/ERN

BUNDLE NO.

A/B SR. NO.

Printed on right corner of Q.P.

To be filled up by Candidate only: 2 8 5 8 7

Cut Here

To be filled by Candidate only

Exam Date: 0 7 1 2 1 6

Q. P. Code: 2 8 5 8 7

Prg. / Year / Sem.: F.E(CBCGSS)/ 2016/SEM-I

Subject Name: APPLIED MATHEMATICS-I

BARCODE

TO BE FILLED BY OFFICE ONLY

Examiner & Moderator Sheet (PART-II)

Use Black Ball Pen only to darken the appropriate circles. Do not fold, tear, wrinkle, staple or use whitener on the cover page of the answer book. Do not write or mark on the barcode and the timing tracks.

To be filled by Examiner / Moderator only

CORRECT METHOD ● ○ ○ ○ WRONG METHOD ✓ ⊗ ◉ ◒

Bundle Number

A/B No.

Total Marks in Words: Hundred | Tens | Units

Name of Examiner

Signature with Date

Questionwise Marks given by Examiner

Q. N0.	Marks
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
Total	

Total Marks by Examiner

Questionwise Marks given by Moderator

Total Marks in Words: Hundred | Tens | Units

Name of Moderator

Signature with Date

Q.N0.	Marks
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
Total	

Total Marks by Moderator

Do not write/Mark on Bar Code

SAMPLE

SAMPLE

SAMPLE

University of Mumbai

EXAMINATION HALL TICKET

Exam No.	Exam	Semester	Month & Year	College	Center	Seat No.
T0131	B.E. (F.E.)	SEM 1(Choice Base)	DEC. 2016	996	996	13117081

4

Candidate's Name	ANGANE SAILEE GANESH YOGITA

9

(1, 6)

Subject Code	Subject Name	Head	Date (TH)	Time (TH)
FEC101	APPLIED MATHEMATICS - I		07/12/2016	11.00 - 02.00pm
FEC102	APPLIED PHYSICS - I		30/12/2016	11.00 - 01.00pm
FEC103	APPLIED CHEMISTRY - I		27/12/2016	11.00 - 01.00pm
FEC104	ENGINEERING MECHANICS		14/12/2016	11.00 - 02.00pm
FEC105	BASIC ELECTRICAL ENGINEERING		20/12/2016	11.00 - 02.00pm
FEC106	ENVIRONMENTAL STUDIES (FE)		02/01/2017	11.00 - 01.00pm

SAMPLE

Note:
1. This hallticket is valid ONLY if signed by the principal of the institute.
2. The hallticket of not eligible (detained or other case) candidates shall be withheld.
3. The subjects and heads applied for examination are displayed.
4. No candidates shall be allowed without hallticket.
5. **PLEASE CHECK THE DATE AND TIME OF THE SUBJECTS.**

Candidate's Identity Photo

Controller of Examinations	Candidate's Signature	Principal's Signature

FE-SEM-I (MAY-2016)
BEE-I

Question paper Code

SAMPLE

OP Code : 28587 3,5,7

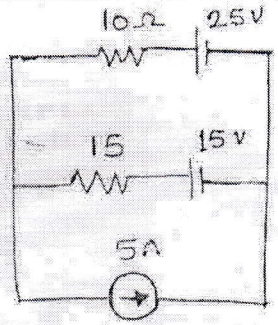
(3 Hours) Total Marks : 80

will be printed on question apper

N. B. : (1) Question No. 1 is compulsory.
(2) Solve any three questions from the remaining questions.

1. (a) A resistor of 5Ω is connected in series with a parallel combination of a number of resistors each of 5Ω. If the total resistance of the combination is 6Ω find the no. of resistors connected in parallel. 3

(b) Use mesh analysis to find current through 10Ω in the ckt. shown



(c) An alternating voltage is represented by [illegible] = 141.4 [illegible] 377 t find (i) max-value (ii) frequency (iii) time period. 3

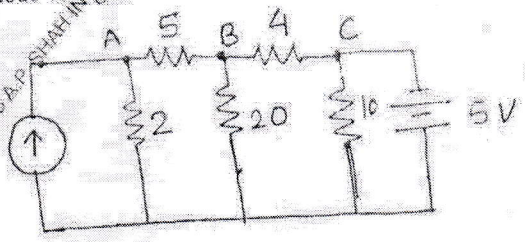
(d) What is the necessary condition for resonance in series circuit. Derive expression for resonance frequency. 3

(e) What is the relationship between line and phase values in star and delta connected load. 2

(f) Draw and explain the phasor diagram of 1-ϕ transformer on No load. 4

(g) Define rectifier and state diff. types of it. 2

2. (a) Find mode voltages. 6



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