

BRIDGE COURSE- UG (2019-2020)

FIRST SEMESTER B.Sc. ELECTRONICS

13, 14 JUNE 2019

EVALUATION REPORT

SL. NO.	STUDENT NAME	MARK (OUT OF 60)
1	SUDEEP M	52
2	ANTON J MANNUKADAN	56
3	NAIJIL T J	40
4	VISHNU VIJAYAN	44
5	NIKHIL MT	40
6	ARJUN ASHOK	50
7	MEKHA K M	42
8	SIVAKRISHNA MS	48
9	JOSEPH DOMINI	38
10	ELDHO JOHN	44
11	DIJO JOBI T	50
12	VELMIN VARGHESE K	36
13	SREEKUMAR S	44
14	AMRITHALAKSHMI V P	46
15	NIKHIL E V	38
16	MELVIN MARTIN	34
17	ATHUL AJI	44
18	JANAKI P R	42
19	EMMANUEL K T	28
20	DANIYA C T	40
21	GODSON LAWRENCE	36

<u>ADVANCED LEARNERS</u> (SCORE OF 48 AND ABOVE)	<u>AVERAGE LEARNERS</u> (36 AND ABOVE)	<u>SLOW LEARNERS</u> (BELOW 36)
ANTON MANNUKADAN	AMRUTHALAKSHMI V P	MELVIN MARTIN
SUDEEP M	SREEKUMAR S	EMMANUEL KT
ARJUN ASHOK	ATHUL AJI	
DIJO JOBI T	VISHNU VIJAYAN	
SIVAKRISHNA MS	ELDHO JOHN	
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ST. THOMAS' COLLEGE (AUTONOMOUS), THRISSUR

DEPARTMENT OF ELECTRONICS

SYLLABUS FOR BRIDGE COURSE (2019-2020)

NB:

- The syllabus and questions for 'Reasoning & Logical Ability' and 'Communication Skills & Language Aptitude' is attached herewith.
- Each department is requested to complete the syllabus and question paper for the bridge course with questions from respective disciplines and return to the Coordinator of Students' Induction Programme.
- The faculty is requested to maintain the confidentiality of question paper.

Reasoning & Logical Ability

Verbal reasoning, letter and symbol series, verbal classification, logical reasoning etc.

Communication Skills & Language Aptitude

Module I: Communication – introduction – in animals, including human beings.

Human Communication: purpose (ideas, feelings, data...)

Communication: oral, written and visual.

Module II: Oral: way of speech – formal / informal – formal: formal settings (official)- informal: between/among peers.

Written: all forms of writing letters: business, official, minutes, applications, notifications, certificates etc.

Visual: pictures, graphs, charts, signs, hoardings, posters, maps, photographs etc.

Audio-visual: sound and visuals.

Module III: Non-verbal Communication: 1) Body language (emotions, feelings, eye contact, gestures, posture etc.) (2) Paralanguage: pitch, intonation, stress etc.

Syllabus of Core & Complementary Course

Electronics

Introduction to Electronics .Applications of electronics in different fields. Understanding of passive components -resistors, capacitors, inductors, Understanding of active components – diodes ,transistors etc . Familiarize rectifiers, amplifiers, Basics of logic gates.

Mathematics

Matrices- Definition and examples, Rank of matrix, Singular and non singular matrices, Characteristic equation : Basic formulas in Differentiation, Application of Differentiation Basic formulas in Integration, Application of Integration

Physics

Basic concepts of elasticity, Stress, Strain, Elastic moduli (Elementary ideas & Applications) Surface tension and Viscosity (Elementary ideas & Applications), Introduction to Thermodynamics, Thermodynamic processes

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Bridge Course Evaluation 2019-2020

No of Questions: 30

Marks: 60

Section I Reasoning & Logical Ability (7)

- Find the next term of the series 1,5,11,19, ...
(a)32 (b)28 (c)29 (d)33.
- $234 \times 0 \times 11 \times 22 =$
(a)555 (b)0 (c)310 (d)None of these.
- Find the odd one out.
(a)Rabbit (b) Cat (c)Elephant (d)Deer.
- A fruit basket contains more apples than lemons.
There are more lemons in the basket than there are oranges.
The basket contains more apples than oranges.
If the first two statements are true, the third statement is
(a)True (b) False (c) Need not be true (d) None of these
- Choose an answer based on given information:
"When they heard news of the hurricane, Maya and Julian decided to change their vacation plans. Instead of traveling to the island beach resort, they booked a room at a fancy new spa in the mountains. Their plans were a bit more expensive, but they'd heard wonderful things about the spa and they were relieved to find availability on such short notice".
(a) Maya and Julian take beach vacations every year
(b) The spa is overpriced.
(c) It is usually necessary to book at least six months in advance at the spa.
(d) Maya and Julian decided to change their vacation plans because of the hurricane.
- Which word does NOT belong with the others?
(a) Tyre. (b) Steering wheel (c) Engine (d) Car
- Fill the blank in the end of the series.
FAG. GAF. HAI. IAH. ____
(a)JAK. (b) HAL (c) MAN (d) PAQ

Section II Communication Skills & Language Aptitude (5)

-is the act of expressing ideas, feelings, and transferring data to others.
a) music b) communication c) pronunciation d) transformation
- Greetings, chats and casual conversations are generally considered communication.
a) informal b) formal c) official d) structural
- The branch of linguistics that comprises the study of the sounds of human speech is.....
a) kinetics b) appendix c) cybernetics d) phonetics
-is the way human body communicates through its physical movements and changes in demeanour.
a) proxemics b) sign language c) body language d) arbitrariness

12. The particular feature of human language to refer to past and future time is called

- a) displacement b) reflexivity c) creativity d) duality

Section III Questions from Qualifying Course

(10)

13. Universal gates are.....

- a. AND and NAND gates b. NAND and NOR gates
c. OR and NOR gates d. AND and OR gates

14. Unit of Capacitor.....

- a. Farad b. Henry c. ohm d. coulomb

15. Device used for amplification purpose.

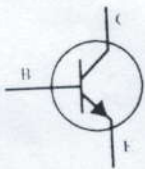
- a. LED b. Diode c. Transistor d. Thermistor

16. Application of PN junction diode

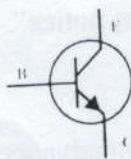
- a. voltage regulator b. rectifier c. amplifier d. oscillator

17. Draw the correct symbol of transistor?

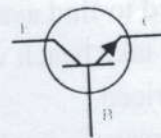
a.



b.



c.

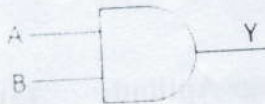


18. Draw the symbol of AND gate?

a.



b.



c.



19. Thegate gives a high output only if all its inputs are high.

- a. OR gate b. AND gate c. NAND gate d. NOR gate

20. Unit of Resistor.....

- a. Farad b. Henry c. ohm d. coulomb

21. is a passive component.

- a. transistor b. resistor c. diode d. NOR gate

22. Value of milli is

- a. 10^{-3} b. 10^3 c. 10^{-6} d. 10^2

Section IV Questions from Introductory Topics of UG (8)

23. $A = [a_{ij}]_{m \times n}$ is a square matrix if
 a. $m = n$ b. $m > n$ c. $m < n$ d. none of these
24. A square matrix of order n is nonsingular then
 a. $r < n$ b. $r = n$ c. $r > n$ d. $r \neq n$
25. Derivative of $4 - x^2$ at $x = -3$
 a. 3 b. 9 c. -6 d. -9
26. Characteristic root of $\begin{bmatrix} 2 & 1 \\ 1 & 2 \end{bmatrix}$ is
 a. 1,3 b. 2,4 c. 3,5 d. 1,2
27. The internal force per unit of cross section of a strained body is
 a. Strain b. Pressure c. Force d. Stress
28. Unit of stress is
 a. N/m^2 b. N/m c. Nm d. N/m^3
29. Modulus of elasticity of plastic material is
 a. Unity b. Zero c. Square d. inverse
30. The ratio of change in dimension to the original dimension
 a. Strain b. Stress c. Energy d. Bouyancy

STUDENT NAME	MARK (OUT OF 80)
23	52
24	56
25	40
26	54
27	40
28	50
29	44
30	46
18	62
19	28
20	40
21	16

ADVANCED LEARNERS (SCORE 26 AND ABOVE)	AVERAGE LEARNERS (16 AND ABOVE)	LOW LEARNERS (SCORE 5)
ANTON MANNUKADAN	ALABUTHAL SUDHIV P	ARAVIND MARTIN
SUDEEP M	SHEELUJAN S	EMMANUEL JT
ARIJUN ASHOK	ATHUL AN	
DINO JOBIT	VENKUN YUDHAN	
SIVAKRISHNA MS	EDDHO JOHN	
	JAYAN P K	
	MEXHA KM	
	DANISHA CT	
	NABIL T S	
	NIKHIL M T	
	GODSON LAWRENCE	
	VPLMIV VARGHSE	