

3.ACTIVITY: QUIZ

Subject: Strength Of Materials (SOM)

Subject Code: BCV301

Sem & Sec: 3rd, Section: A

Objective: The objective of a quiz is to assess knowledge, understanding, or skills & concept effectively in a specific subject through engaging and structured questioning.

Topics Covered: Simple Stresses and Strains & Compound stresses

Conduction Date: 17th December 2024.

Course faculty: Dr. SHASHI KUMAR A, Associate Professor, CED.

Description: Written Quiz is one of the assessment methods that describe the following:

- ❖ Students were given 25 questions.
- ❖ One minute time to answer each question.
- ❖ Who answered all the 25 questions with correct answers were checked by peers.
- ❖ Cross validation is done.
- ❖ Highest marks scorer and the student who is first to solve was complimented.

OUTCOMES:

- Knowledge Assessment: Quizzes provide a clear measure of participants' understanding and retention of specific topics or concepts.
- Skill Development: They enhance critical thinking, problem-solving, and decision-making abilities through applied questioning.
- Engagement and Motivation: Quizzes make learning interactive and enjoyable, fostering enthusiasm and interest in the subject matter.
- Feedback for Improvement: They highlight areas where learners excel or need improvement, guiding future learning efforts.
- Confidence Building: Regular quizzes boost confidence by validating learners' progress and readiness in a given domain.
- Preparation for Real-world Applications: Quizzes simulate real-world challenges, preparing participants for professional problem-solving scenarios.

Winner Group: Priyanka N (1SJ23CV034) and Amrutha A B(1SJ23CV002) won the prize

SAMPLE COPY OF ANSWER SCRIPTS OF QUIZ ACTIVITY

Priyanka . N
1SJ23CV034

QUIZ-2024

SUBJECT: STRENGTH OF MATERIALS (BCV301)

3rd Sem Dtd:17/12/24

1) Deflection of a simply supported beam when subjected to central point load is given as _____
 a. $(Wl/16EI)$ b. $(Wl^2/16EI)$ c. $(Wl^3/48EI)$ d. $(5Wl^4/384EI)$

2) The load at which a vertical compression member just buckle is known as
 (a) Critical load (b) Crippling load (c) Buckling load (d) Any one of these

3) A column that fails due to direct stress is called
 (a) Short column (b) Long column (c) Medium column (d) Slender column

4) A column whose slenderness ratio is greater than 120 is known as
 (a) Short column (b) Long column (c) Medium column (d) Composite column

5) If load is acting on the longitudinal axis of the column, it is called _____
 (A) Horizontal load (B) Axial load (C) Eccentric load (D) Vertical load

6) If the load is acting away from the longitudinal axis of the column, it is called _____
 (A) Horizontal load (B) Axial load (C) Eccentric load (D) Vertical load

7) Shaft is said to be in pure torsion if
 a. Turning moment is applied at one end and the other end is free
 b. Turning force is applied at one end and the other end is free
 c. Two opposite turning moments are applied to the shaft
 d. Combination of torsional load and bending load is applied to the shaft

8) Euler's formula holds good only for-
 A. Short columns B. Long columns C. Both short and long columns D. weak columns

9. Torsion is denoted by _____
 a) R b) Q c) T d) N

10. The SI units for torsion is _____
 (a) N m b) N c) N/m d) m

11. _____ torsion is produced when twisting couple coincides with the axis of the shaft.
 a) Exact b) Pure c) Nominal d) Mild

12. The power transmitted by shaft SI system is given by _____
 a) $2\pi NT/60$ b) $3\pi NT/60$ c) $2\pi NT/45$ d) $NT/60 W$

13. The shear stress is _____ at the axis of the shaft.
 a) Minimum b) Maximum c) Zero d) Uniform

14. The shear stress at the outer surface of hollow circular section is _____
 a) Zero b) Maximum c) Minimum d) Can't determined

15. The moment of inertia of a plane area with respect to an axis _____ to the plane is called a polar moment of inertia.

1SJ23CV034

a) Parallel b) Perpendicular c) Equal d) Opposite

16. What is the polar modulus for solid shaft?
 a) $\pi/16 D^2$ b) $\pi/12 D^3$ c) $\pi/16 D^3$ d) $\pi/16 D$

17. The units of discharge or flow rate in cylinder is equal to...
 a) m/s b) m²/s c) m³/s d) m

18. Hoop stress or in a thick cylinder must be maximum at the outermost radius.
 A. True B. False

19. Hoop stress in a thick cylinder outermost shell is maximum at it's in radius.
 A. True B. False

20. Hoop stress in the thin cylindrical shelled is...
 A. Longitudinal stress B. Radial stress C. Compressive stress D. Circumference tensile stress

21. Lame's theory is associating for which factor...
 A. Thick cylinder
 B. Thin cylinder
 C. Both of cylinder
 D. None of these

22. Which of the following assumptions are made in torsion theory?
 a) Shaft is perfectly straight b) Material of the shaft is heterogeneous
 c) Twist cannot be uniform along the length of the shaft d) All of the above

23. The ratio of stress and strain is known as _____
 A. Modulus of elasticity B. Young's modulus C. Both a. and b. D. None of the above

24. Two parallel, equal and opposite forces acting tangentially to the surface of the body is called as _____
 A. Complementary stress B. Compressive stress C. Shear stress D. Tensile stress

25. Which among the following is/are the correct assumptions made in the torsion formula?
 A. Material of the shaft is uniform throughout B. Twist along the shaft is uniform
 C. Plane sections before twisting remain plane after twisting
 D. Circular Sections before twisting remain circular even after twisting.
 A, B, C and D 2. C and D 3. A, B and C 4. B and D

1SJ23CV002
Amudha A.B

QUIZ-2024

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1SJ23 CV 002

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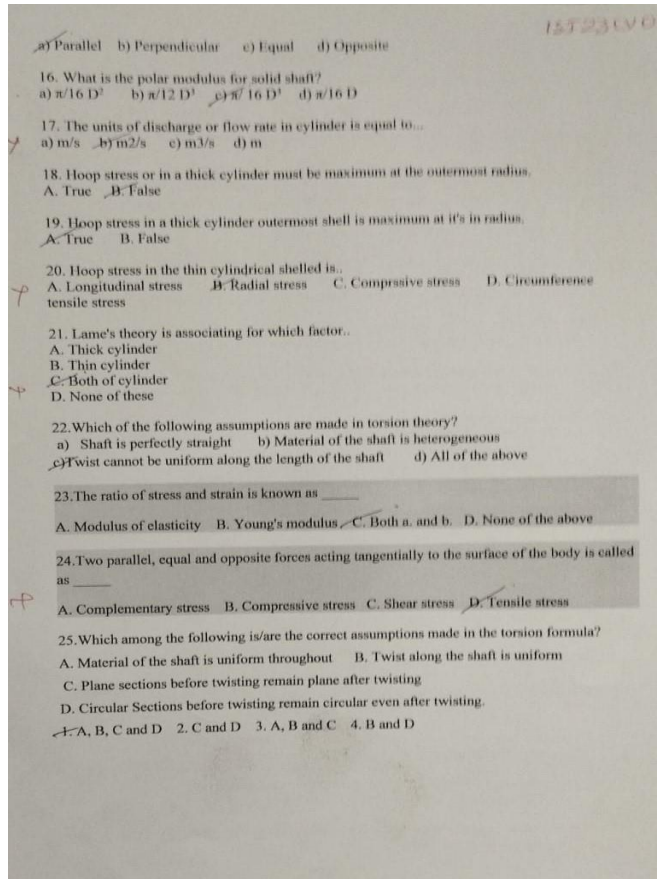
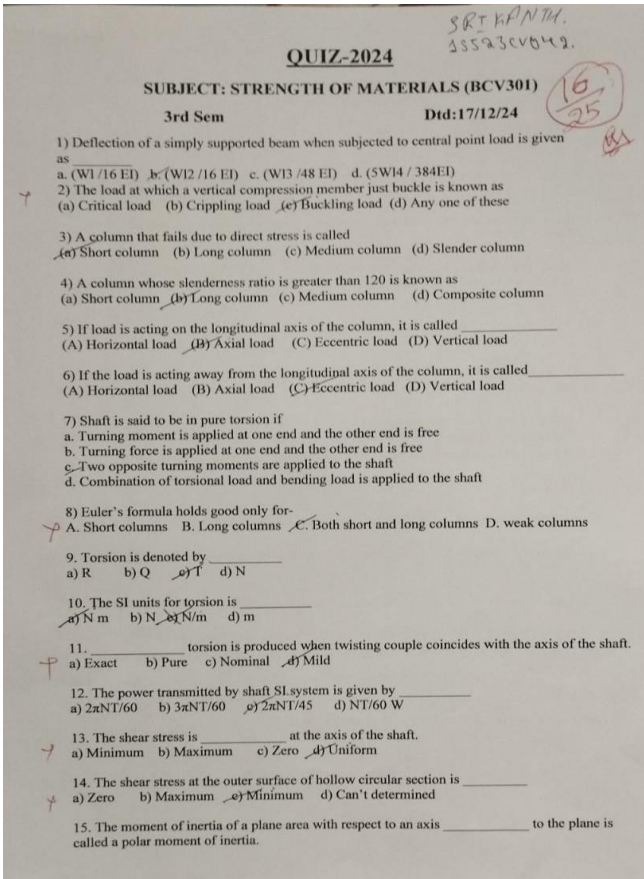
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PHOTOGALLERY OF QUIZ ACTIVITY



WINNERS OF THE ICT ACTIVITIES CODUCTED FOR 3RD SEM STUDENTS

