



**Chettinad**

College of Engineering & Technology

Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai.

**Department of Civil Engineering**

**CE8022 – Prefabricated Structures**

**Unit IV – MCQ Bank**

1. Function of Joints in Precast structure is

- a. To connect various Pre cast elements
- b. To relieve the stresses due to temperature
- c. To relieve the stresses due to shrinkage

**d. All the above**

Answer: d

2. Need of Expansion joint is

- a. To allow expansion of a member due to temperature
- b. To allow contraction of a member due to temperature

**c. Both a and b**

d. None of the above

Answer: c

3. Joint Based on load transfer are

- a. Tension joint
- b. Compression joint
- c. Shear joint

**d. All the above**

Answer: d

4. Adhesion and bonding comes under which of the following joint

- a. Tension joint

b. Compression joint

**c. Shear joint**

5.----- Elastomeric bearing pad is used in joints

a. Tension joint

**b. Compression joint**

c. Shear joint

Answer: b

6. Lapping and looping done in which type of joints

**a. Tension joint**

b. Compression joint

c. Shear joint

Answer: a

7. In the following which is not a rigid joint

a. Welded joint

b. Concrete joint

**c. Bolted joint**

Answer: c

8. Which one of the following is the wet joint

**a. Grouting**

b. Welding

c. Bolting

Answer: a

9. Beam positioned on a corbel ---- type of connection

a. Fixed

**b. Pinned**

Answer: b

10. ----- By using post tensioning we can achieve type of connections

**a. Moment resisting**

b. Pinned

Answer: a

11. Types of Expansion joints used in Bridges are

a. Open type

b. Sealed type

**c. Both**

Answer: c

12. Required properties of sealants

a. Be relatively impermeable

b. Deform to accommodate the movement and rate of movement occurring at the joint

c. Sufficiently recover its original properties and shape after cyclical deformations

**d. All the above**

Answer: d

13. Thermal movement ( $\Delta\text{temp}$ ) is calculated as

( $\alpha$  = coefficient of thermal expansion,  $L$  –length  $B$ -Breath ,  $\delta T$  = temperature variation

a.  $(\alpha) \cdot (B) \cdot (\delta T)$

**b.  $(\alpha) \cdot (L) \cdot (\delta T)$**

c.  $(\alpha) \cdot (L) (B) \cdot (\delta T)$

Answer: b

14. Allowable bearing stress in mortar bed is

- a.  $2.5\text{N/mm}^2$
- b.  $5.0\text{N/mm}^2$
- c.  $15.0\text{ N/mm}^2$

Answer: a

15. Pick the draw backs of improperly designed joints

- a. May hamper the function of structure
- b. May lead structural failure.
- c May leads to leakage problem

**c. All the above**

Answer: d

16. Water stopper is

- a. A tap used to stop water
- b. Material embedded in concrete to obstruct passage of water through joint**
- b) Valve used to regulate water supply

Answer: b

17. Construction joints are provided in Prefabricated Structures.

- a. True
- b. False**

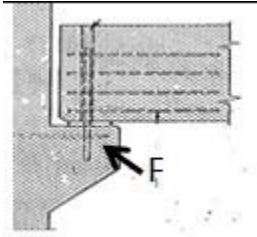
Answer: b

18. Bitumen is used as a sealant material.

- a. True**
- b. False

Answer: a

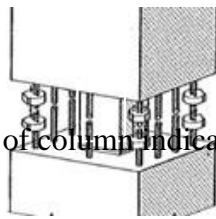
19.



Name the element indicated as F

- a. Beam
- b. Column
- c. Corbel**
- d. None of the above

Answer: c



20. Name the portion of column indicated as A

- a. Strut
- b. Tie
- c. Stub**

Answer: c

21. The joint which are placed in concrete slab to control the random cracking is

- a. Compression joint**
- b. Expansion joint
- c. Shear joint

Answer: a

22. Shear key also known as

- a. Castellated joint**

- b. Shear joint
- c. Tension joint

Answer: a

23. How many types of joint in structural members

**a. 3**

b. 4

c. 2

Answer: a

24. How many types of connection in structural members

**a. 3**

b. 4

c. 2

Answer: a

25. Bearing pads are used to distribute

**a. Concentrated load**

b. Lateral load

c. UDL

Answer: a