

Item Bank ID

401007

Item Bank
NameSPPU Pune//.../ Dams and Hydraulic
Structures

| Item Text | Option Text 1 | Option Text 2 | Option Text 3 | Option Text 4 |
|--|------------------------------|----------------------------|-------------------------------|----------------------------|
| Which of the following dam is suitable for narrow valleys? | Arch dam | Steel dam | Coffer dam | Timber dam |
| According to the Hydraulic design, the dams are classified as _____ | Diversion and Detention Dams | Storage and Diversion dams | Overflow and Non-overflow dam | Arch and Buttress dam |
| The water stored between the zone of minimum pool level and normal pool level is known as- | dead storage | valley storage | live storage | surcharge storage |
| _____dams are designed to pass the surplus water over their crest i.e. spillway. | Rigid dams | Non-rigid dams | Overflow dams | Non-overflow dams |
| _____ is a dam constructed to detain flood | Storage dam | Debris dam | Coffer dam | Diversion dam |
| _____contains less concrete or masonry about 35 to 40% for their construction. | Earthen dams | Rockfill dam | Solid masonry gravity dam | Hollow masonry gravity dam |
| Idduki dam in Kerala State is constructed across the _____river. | Perennial river | Nile river | Periyar river | Sutlej river |

| | | | | |
|--|--|-------------------------------|---|---------------------------|
| _____ is used to measure dynamic loads in dams | Tilt Meter | Vibrating Wire Peizometer | Flow Meter | Seismometer |
| Following instrument is used to measure internal deformation and cracking | Extensometer | Joint meter | Flow meter | Tilt meter |
| Hanging pendulums are designed to monitor_____? | ground water pressure | lateral movements | uplift pressure | tilt and rotation |
| Porous tube piezometer are used to determine_____? | uplift pressure | tilt and rotation | Settlement in Foundation | lateral movements |
| Opening in the structure near the base, provided to clear the silt accumulation in the reservoir known as ___ | Spillway | Overflow portion | Gallery | Sluice way |
| What is the maximum permissible tensile stress for high concrete gravity dam under worst conditions? | 500 KN/m ² | 500 kg/cm ² | 50 KN/m ² | 50 kg/cm ² |
| Which failure occurs when the net horizontal force above any plane in the dam or at the base of the dam exceeds the frictional resistance developed at that level? | Overturning | Crushing | Sliding | BY development of tension |
| Which failure occurs when the minimum stress exceeds the allowable compressive stress of the dam material? | Overturning | Crushing | Sliding | BY development of tension |
| Tension cracks in the dam may sometimes lead to the failure of the structure by? | Crushing of concrete starting from the toe | Both overturning and crushing | Sliding of the dam at the cracked section | Overturning about the toe |

| | | | | |
|--|--|---|---|--|
| The uplift pressure on the face of a drainage gallery in a dam is taken as ? | hydrostatic pressure at toe | average of hydrostatic pressure at toe and heel | two-third of hydrostatic pressure at toe plus one-third of hydrostatic pressure at heel | hydrostatic pressure at heel |
| The bottom portion of a concrete or a masonry gravity dam is usually stepped in order to _____ | increase the overturning resistance of the dam | decrease the shear strength | increase the frictional resistance | increase the shear strength |
| The provision of drainage gallery in a gravity dam helps in reducing _____ | hydrostatic pressure | seepage pressure | silt pressure | both hydrostatic pressure and seepage pressure |
| The back water effect of a weir is best called | Retrogression | Afflux | back water curve | fall |