AR: Architecture and Planning

GA - General Aptitude

Q1 - Q5 carry one mark each.

Q.No. 1 Rajiv Gandhi Khel Ratna Award was conferred_____Mary Kom, a six-time world champion in boxing, recently in a ceremony_____the Rashtrapati Bhawan (the President's official residence) in New Delhi.

(A) with, at

(B) on, in

(C) on, at

(D) to, at

Q.No. 2 Despite a string of poor performances, the chances of K. L. Rahul's selection in the team are_____.

(A) slim

(B) bright

(C) obvious

(D) uncertain

Q.No. 3 Select the word that fits the analogy:

Cover : Uncover :: Associate : _____

(A) Unassociate

(B) Inassociate

(C) Misassociate

(D) Dissociate

Q.No. 4 Hit by floods, the kharif (summer sown) crops in various parts of the country have been affected. Officials believe that the loss in production of the kharif crops can be recovered in the output of the rabi (winter sown) crops so that the country can achieve its food-grain production target of 291 million tons in the crop year 2019-20 (July-June). They are hopeful that good rains in July-August will help the soil retain moisture for a longer period, helping winter sown crops such as wheat and pulses during the November-February period.

Which of the following statements can be inferred from the given passage?

(A) Officials declared that the food-grain production target will be met due to good rains.

(B) Officials want the food-grain production target to be met by the November-February period.

(C) Officials feel that the food-grain production target cannot be met due to floods.

(D) Officials hope that the food-grain production target will be met due to a good rabi produce.

Q.No. 5 The difference between the sum of the first $2n$ natural numbers and the sum of the first n odd natural numbers is _____.

(A) $n^2 - n$

(B) $n^2 + n$

(C) $2n^2 - n$

(D) $2n^2 + n$

Q6 - Q10 carry two marks each.

Q.No. 6 Repo rate is the rate at which Reserve Bank of India (RBI) lends commercial banks, and reverse repo rate is the rate at which RBI borrows money from commercial banks.

Which of the following statements can be inferred from the above passage?

(A) Decrease in repo rate will increase cost of borrowing and decrease lending by commercial banks.

(B) Increase in repo rate will decrease cost of borrowing and increase lending by commercial banks.

(C) Increase in repo rate will decrease cost of borrowing and decrease lending by commercial banks.

(D) Decrease in repo rate will decrease cost of borrowing and increase lending by commercial banks.

Q.No. 7 P, Q, R, S, T, U, V, and W are seated around a circular table.

I. S is seated opposite to W.
II. U is seated at the second place to the right of R.
III. T is seated at the third place to the left of R.
IV. V is a neighbour of S.

Which of the following must be true?

(A) P is a neighbour of R.

(B) Q is a neighbour of R.

(C) P is not seated opposite to Q.

(D) R is the left neighbour of S.

Q.No. 8 The distance between Delhi and Agra is 233 km. A car P started travelling from Delhi to Agra and another car Q started from Agra to Delhi along the same road 1 hour after the car P started. The two cars crossed each other 75 minutes after the car Q started. Both cars were travelling at constant speed. The speed of car P was 10 km/hr more than the speed of car Q. How many kilometers the car Q had travelled when the cars crossed each other?

(A) 66.6

(B) 75.2

(C) 88.2

(D) 116.5

Q.No. 9 For a matrix $M = [m_{ij}]$; $i, j = 1,2,3,4$, the diagonal elements are all zero and $m_{ij} = -m_{ji}$. The minimum number of elements required to fully specify the matrix is_____.

(A) 0

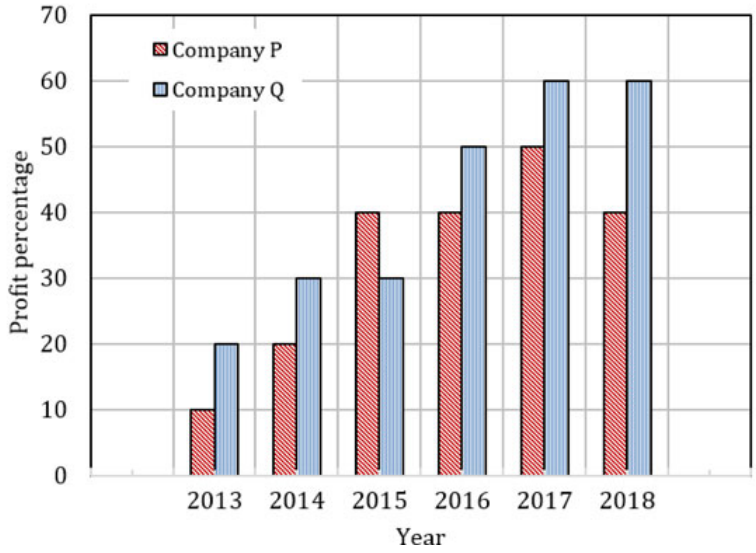
(B) 6

(C) 12

(D) 16

Q.No. 10

The profit shares of two companies P and Q are shown in the figure. If the two companies have invested a fixed and equal amount every year, then the ratio of the total revenue of company P to the total revenue of company Q, during 2013 - 2018 is_____.



(A) 15 : 17
(B) 16 : 17
(C) 17 : 15
(D) 17 : 16

AR: Architecture and Planning

Q1 - Q25 carry one mark each.

Q.No. 1 In the architectural style of ancient North Indian Temples, the term 'Adhisthana' refers to

(A) Pinnacle
(B) Base Platform
(C) Vestibule
(D) Transept

Q.No. 2 Who among the following architects has **NOT** won the Pritzker Architecture Prize till 2019?

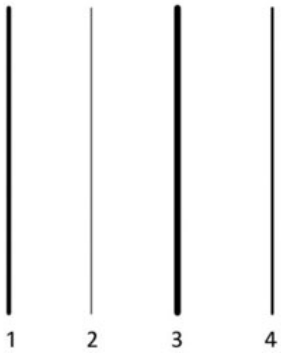
(A) Arata Isozaki
(B) I. M. Pei
(C) B. V. Doshi
(D) Moshe Safdie

Q.No. 3 The stone used in the construction of Kailasa temple at Ellora is

(A) Limestone
(B) Marble
(C) Sandstone
(D) Basalt

Q.No. 4

Four vertical lines having same thickness appear to be of the same height in perspective as shown in the figure. Which line actually has the maximum height?

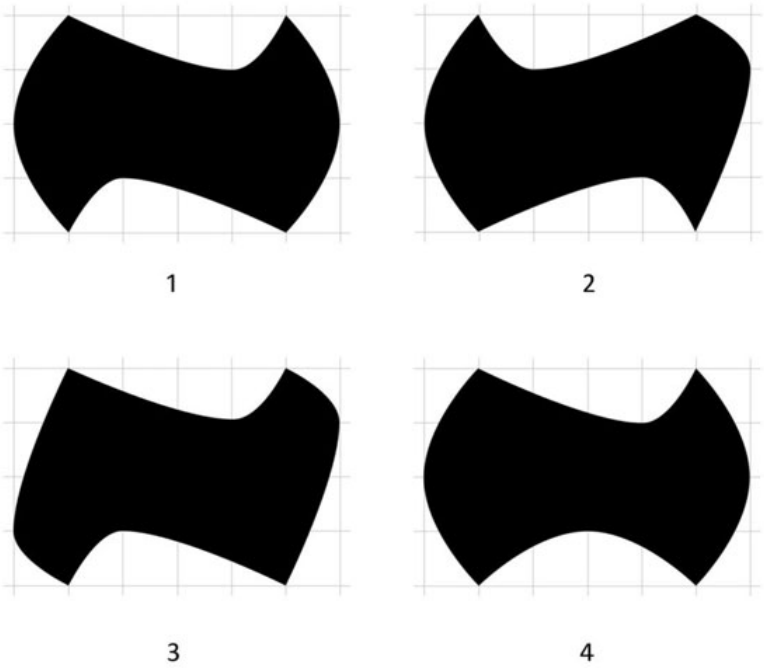


(A) 1
(B) 2
(C) 3
(D) 4

Q.No. 5 As per URDPFI Guidelines 2015, Government of India, choose the correct hierarchy of plans from higher to lower order.

(A) Perspective plan, Development plan, Regional plan, Zonal plan
(B) Perspective plan, Regional plan, Development plan, Zonal plan
(C) Regional plan, Perspective plan, Development plan, Zonal plan
(D) Zonal plan, Development plan, Regional plan, Perspective plan

Q.No. 6 Which of the following shapes can be used as an interlocking paver block without adding any other shape?



(A) 1
(B) 2
(C) 3
(D) 4

Q.No. 7 In India, the Constitution (Seventy Fourth Amendment) Act, 1992, delegates powers to institutions forming the third tier of government, which are

(A) Municipal Corporation, Municipality and Nagar Panchayat

(B) Development Authority, Municipal Corporation and Municipality

(C) Improvement Trust, Nagar Panchayat and Panchayat

(D) Development Authority, Improvement Trust and Panchayat

Q.No. 8 As on 2018, 'Right to Property' in India is a

(A) Fundamental Right

(B) Secondary Right

(C) Constitutional Right

(D) Tertiary Right

Q.No. 9 'Tendon' is primarily used

(A) as a compression member

(B) to pre-stress concrete

(C) as roof sheathing

(D) to prepare a tender document

Q.No. 10 Emergency preparedness for risk reduction does **NOT** include

(A) rescue

(B) relief distribution

(C) rehabilitation

(D) revision of code

Q.No. 11 If **Beam : Column :: Transom : X**,

which of the following options can replace '**X**'?

(A) Balustrade

(B) Sill

(C) Mullion

(D) Ceiling

Q.No. 12 The correct chronological order of the given architectural movements is

(A) Romanesque; Roman; Baroque; Gothic ; Renaissance

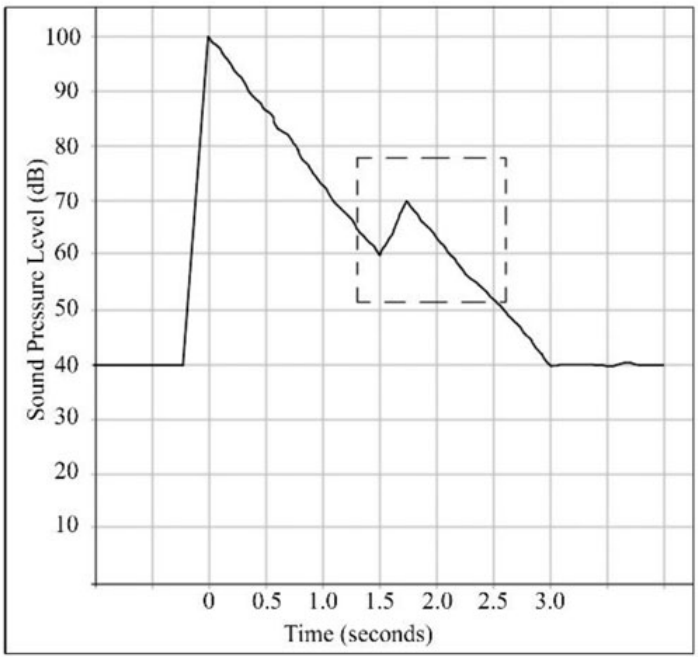
(B) Romanesque; Roman; Renaissance; Gothic ; Baroque

(C) Roman; Romanesque; Gothic; Renaissance; Baroque

(D) Roman; Romanesque; Gothic; Baroque ; Renaissance

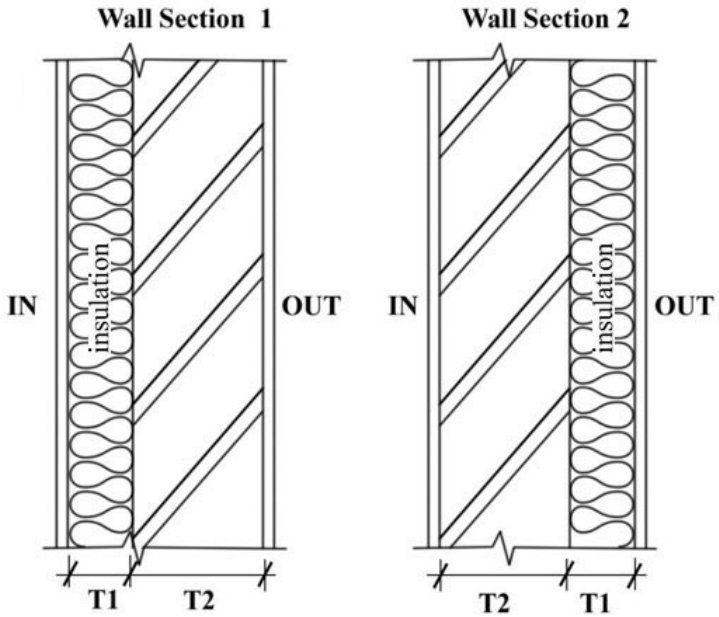
Q.No. 13

The decay of sound in a large room is indicated in the following figure. The spike within the dashed zone denotes



(A) Flutter echo
(B) Perfect sound diffusion
(C) Echo
(D) Early reflection

Q.No. 14 For the same thickness of material layers, relative position of insulation in the wall sections 1 and 2 shown below will have an impact on



(A) Thermal Time Constant
(B) Thermal Conductivity
(C) Thermal Resistivity
(D) Thermal Transmittance

Q.No. 15 The solar altitude angle on April 16 at 7:00 AM in Kochi is 16°. The same solar altitude angle will occur at the same time in the same year at the same location on

(A) July 21

(B) August 27

(C) September 23

(D) October 21

Q.No. 16 In a perspective drawing, the Picture Plane is in between the Object and the Observer. If the Observer comes closer straight towards the Picture Plane, without changing the distance between Object and Picture Plane, the perspective image will be

(A) Bigger than the previous image

(B) Smaller than the previous image

(C) Will remain the same as previous image

(D) Will become the mirror image of the previous

Q.No. 17 Shyam-Rai temple of Bishnupur in West Bengal, is an example of

(A) Nava-ratna type terracotta temple

(B) Stone carved Nagara type temple

(C) Pancha-ratna type terracotta temple

(D) Stone carved Dravidian type temple

Q.No. 18 Which one of the following is **NOT** a land use zone?

(A) Industrial Zone

(B) Agriculture Zone

(C) Heritage Zone

(D) Commercial Zone

Q.No. 19 'Formulation of GIS based master plan' is a sub-scheme of

(A) Atal Mission for Rejuvenation and Urban Transformation

(B) Smart Cities Mission

(C) Jawaharlal Nehru National Urban Renewal Mission

(D) Shyama Prasad Mukherji Rurban Mission

Q.No. 20 One hectare is equal to

(A) 4000 m^2

(B) 4048 m^2

(C) 4840 m^2

(D) 10000 m^2

Q.No. 21 One of the sites added to the list of UNESCO World Heritage Sites in 2019 is

(A) Walled City, Ahmedabad

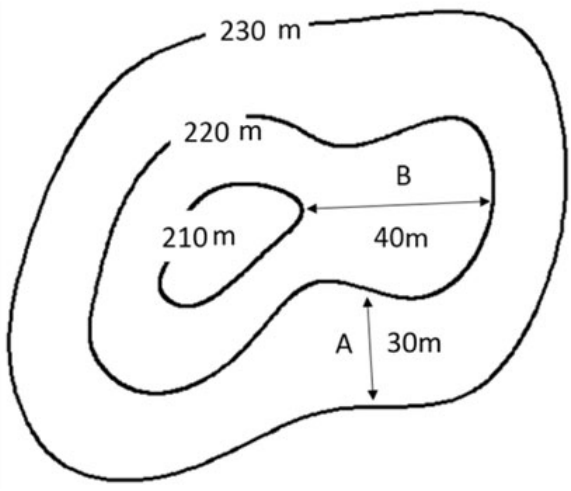
(B) Walled City, Jaipur

(C) Chandigarh

(D) Fatehpur Sikri

Q.No. 22

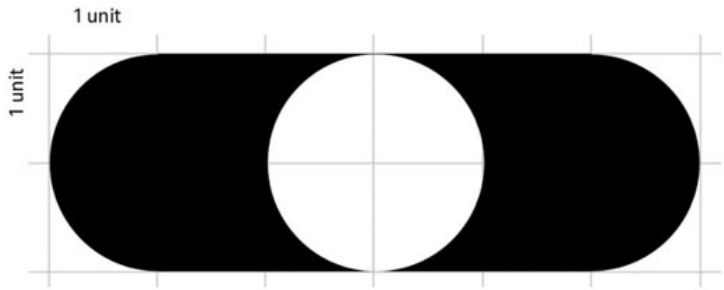
In the given contour map, the angle at 'A' (in degrees, *rounded off to two decimal places*) is _____



Q.No. 23 A 1.2 m high window is located on a south facing wall. The solar azimuth angle is equal to the wall azimuth angle and the solar altitude angle is 60°. The minimum depth (in metres, *rounded off to two decimal places*) of overhang required to completely shade the window is _____

(Assume that the overhang is located at the lintel level of the window)

Q.No. 24 In the given figure, the area of the shaded portion is _____



Q.No. 25 Average density of a highway is 25 vehicles per km. Average volume of the vehicles on the highway is 520 vehicles per hour. The mean speed (in km/hour, *rounded off to one decimal place*) is _____

Q26 - Q55 carry two marks each.

Q.No. 26

Match the terminologies of Munsell colour wheel in **Group I** with their corresponding descriptions in **Group II**

Group I	**Group II**
(P) Hue	(1) Addition of black to the base colour
(Q) Chroma	(2) Radial colour variation
(R) Value	(3) Addition of white to the base colour
(S) Tint	(4) Colour variation through angular difference
	(5) Vertical colour variation

(A) P-2, Q-4, R-5, S-1
(B) P-4, Q-2, R-5, S-3
(C) P-4, Q-2, R-3, S-1
(D) P-2, Q-4, R-1, S-3

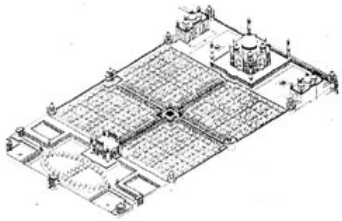
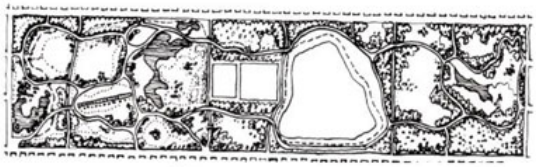
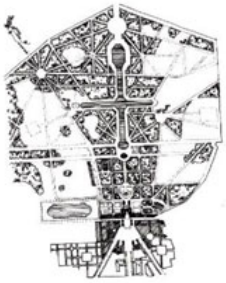
Q.No. 27 Match the plant forms in **Group I** with the botanical names in **Group II**, as per 'A Handbook of Landscape', CPWD 2013, Government of India

Group I	**Group II**
(P) Columnar	(1) *Pinus roxburghii*
(Q) Globular	(2) *Ipomoea grandiflora*
(R) Weeping	(3) *Juniperus chinensis*
(S) Pyramidal	(4) *Salix babylonica*
	(5) *Mimusops elengi*

(A) P-1, Q-5, R-2, S-3
(B) P-3, Q-4, R-2, S-1
(C) P-3, Q-5, R-4, S-1
(D) P-1, Q-3, R-4, S-5

Q.No. 28

Match the images of gardens in **Group I** with their names in **Group II**

Group I		**Group II**
(P)		(1) Central Park, New York
(Q)		(2) Versailles, Paris
(R)		(3) Nishat Bagh, Srinagar
(S)		(4) Katsura Imperial Garden, Kyoto
		(5) Alhambra Moorish Garden, Granada

(A) P-5, Q-3, R-1, S-4

(B) P-3, Q-4, R-1, S-2

(C) P-1, Q-4, R-3, S-2

(D) P-3, Q-2, R-4, S-5

Q.No. 29 Match the Architects in **Group I** with their projects in **Group II**

Group I	**Group II**
(P) Victor Horta	(1) Farnsworth House
(Q) Gerrit Rietvelt	(2) Robie House
(R) Mies van der Rohe	(3) Tassel House
(S) Frank Lloyd Wright	(4) Schroder House
	(5) Vanna Ventury House

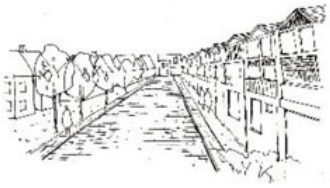
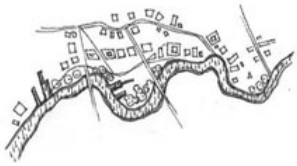
(A) P-3, Q-4, R-1, S-2

(B) P-2, Q-5, R-4, S-1

(C) P-4, Q-3, R-1, S-2

(D) P-3, Q-4, R-5, S-2

Q.No. 30 Match the graphical representations in **Group I** with corresponding elements in **Group II**

Group I		**Group II**
(P)		(1) Pathway
(Q)		(2) Node
(R)		(3) District
(S)		(4) Edge
		(5) Landmark

(A) P-1, Q-2, R-3, S-5

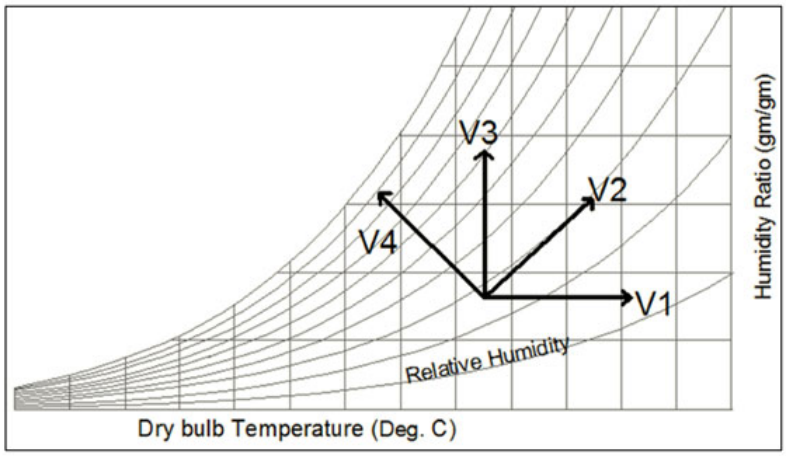
(B) P-4, Q-1, R-3, S-2

(C) P-2, Q-3, R-4, S-5

(D) P-2, Q-1, R-4, S-5

Q.No. 31

Based on the psychrometric chart given below, match the vector in **Group I** with the respective process in **Group II**



Group I		**Group II**
(P)	V1	(1) Heating and humidification
(Q)	V2	(2) Cooling and humidification
(R)	V3	(3) Heating and dehumidification
(S)	V4	(4) Sensible heating
		(5) Humidification

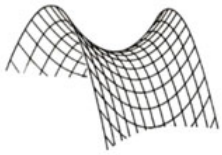
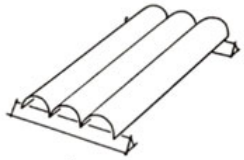
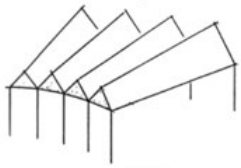
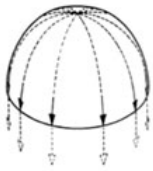
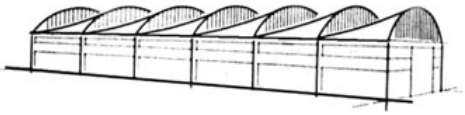
(A) P-4, Q-1, R-5, S-2
(B) P-4, Q-3, R-1, S-5
(C) P-5, Q-3, R-4, S-1
(D) P-3, Q-1, R-5, S-2

Q.No. 32 Match the software tools in **Group I** with their primary applications in **Group II**

Group I		**Group II**
(P)	ETabs	(1) Acoustic analysis
(Q)	Carto	(2) Structural analysis
(R)	eQuest	(3) Statistical analysis
(S)	SPSS	(4) Energy simulation
		(5) Geo-spatial analysis

(A) P-2, Q-5, R-4, S-3
(B) P-4, Q-1, R-2, S-3
(C) P-4, Q-5, R-1, S-3
(D) P-2, Q-4, R-5, S-1

Q.No. 33 Match the structural form in **Group I** with their corresponding illustration in **Group II**

Group I	**Group II**	
(P) Cylindrical shell	(1)	
(Q) Dome	(2)	
(R) Conoid	(3)	
(S) Hyperbolic paraboloid	(4)	
	(5)	

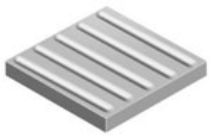
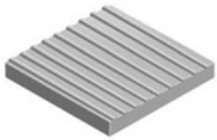
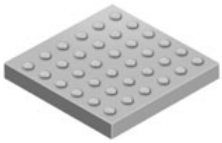
(A) P-2, Q-4, R-5, S-1
(B) P-2, Q-4, R-1, S-5
(C) P-5, Q-4, R-2, S-1
(D) P-4, Q-1, R-5, S-2

Q.No. 34 Match the books in **Group I** with the corresponding authors in **Group II**

Group I	**Group II**
(P) The Autobiography of an Idea	(1) Christopher Charles Benninger
(Q) Letters to a Young Architect	(2) Sunil Khilnani
(R) A Pattern Language	(3) Francis D. K. Ching
(S) Architecture: Forms, Space and Order	(4) Louis H. Sullivan
	(5) Christopher Alexander

(A) P-3, Q-2, R-1, S-4
(B) P-4, Q-1, R-5, S-3
(C) P-3, Q-1, R-5, S-4
(D) P-4, Q-2, R-1, S-3

Q.No. 35 Match the names of tactile paving in **Group I** with their patterns in **Group II**

Group I	**Group II**	
(P) Lozenge	(1)	
(Q) Offset blister	(2)	
(R) Corduroy	(3)	
(S) Directional	(4)	
	(5)	

(A) P-4, Q-2, R-3, S-1

(B) P-3, Q-5, R-4, S-1

(C) P-3, Q-2, R-4, S-1

(D) P-2, Q-5, R-1, S-4

Q.No. 36 Match the name of architects in **Group I** with the buildings designed by them in **Group II**

Group I	**Group II**
(P) Brinda Somaya	(1) Museum of Tribal Heritage, Bhopal
(Q) Sheila Sai Prakash	(2) St. Thomas Cathedral, Mumbai
(R) Revathy Kamath	(3) Bait-ur-Rauf Mosque, Dhaka
(S) Marina Tabassum	(4) Indian Naval Academy, Kerala
	(5) Cholamandal Artists' Village, Chennai

(A) P-3, Q-1, R-4, S-2

(B) P-2, Q-5, R-1, S-3

(C)

P-2, Q-1, R-4, S-5

(D) P-4, Q-5, R-1, S-3

Q.No. 37 Match the terms in **Group I** with the parameters in **Group II**

Group I	**Group II**
(P) Frontal Area Density	(1) Active Green Area
(Q) Sky View Factor	(2) Urban Density in Third Dimension
(R) Drift Index	(3) Built Density in Two Dimension
(S) Biotope Factor	(4) Lateral Stiffness
	(5) Cross Sectional Property of Urban Canyon

(A) P-2, Q-5, R-4, S-1

(B) P-3, Q-2, R-1, S-4

(C) P-2, Q-3, R-4, S-5

(D) P-3, Q-4, R-5, S-1

Q.No. 38 Match the structural system in **Group I** with their potential causes of failure in **Group II**

Group I	**Group II**
(P) Flat Slab	(1) Thrust
(Q) Long Column	(2) Flutter
(R) Arch	(3) Punching Shear
(S) Tensile Fabric	(4) Buckling
	(5) Moment

(A) P-3, Q-4, R-1, S-2

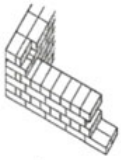
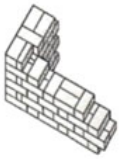
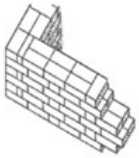
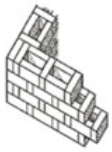
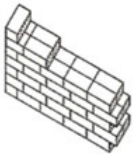
(B) P-1, Q-3, R-5, S-2

(C) P-2, Q-4, R-1, S-3

(D) P-3, Q-5, R-4, S-1

Q.No. 39

Match the brick masonry bond type in **Group I** with the corresponding illustration in **Group II**

Group I	**Group II**	
(P) Rat Trap	(1)	
(Q) English	(2)	
(R) Flemish	(3)	
(S) Stretcher	(4)	
	(5)	

(A) P-2, Q-1, R-4, S-5

(B) P-4, Q-1, R-2, S-3

(C) P-2, Q-5, R-1, S-3

(D) P-4, Q-1, R-2, S-5

Q.No. 40

Match the characteristics in **Group I** with the type of settlements in **Group II** as given in URDPFI Guidelines 2015, Government of India

Group I	**Group II**
(P) Zones of transition from rural to urban land uses located between the outer limits of urban and regional centres and rural environment	(1) Counter-Magnets
(Q) Towns having potential for investment and development; identified on the basis of their inter-aerial relationship with the regional nodal centre	(2) Satellite Towns
(R) Settlements that are growing sub-nodal centres but located out of the direct functionally linked areas of the growth node / nodal centre in the region	(3) Peri-Urban Areas
(S) Located near or within reasonable distance, well connected by transportation route of the growth node or metropolitan city and dependent on growth node largely for employment	(4) Priority Towns
	(5) Statutory Towns

(A) P-4, Q-3, R-1, S-5

(B) P-3, Q-5, R-1, S-4

(C) P-3, Q-5, R-2, S-4

(D) P-3, Q-4, R-1, S-2

Q.No. 41 A population of 2500 persons requires a minimum area of 3000 m^2 for primary schools. For the population in four different sectors given in the table below, the **Sector** having maximum shortage of school area per person is _____

Sector	**Population**	**Number of existing schools**	**Existing area of each school (m^2)**
1	20000	5	2000
2	15000	4	4500
3	12500	2	2500
4	10000	4	1500

Q.No. 42

Number of married couples in a household along with number of rooms (for a household) are given in the table. Assuming each married couple needs one separate room, the total number of **additional rooms** required for them is _____

Number of Married couples in a household	Number of households with		
	1 Room	2 Room	3 Room
0	2500	450	100
1	4700	3000	2000
2	3600	5500	1100
3	432	750	400

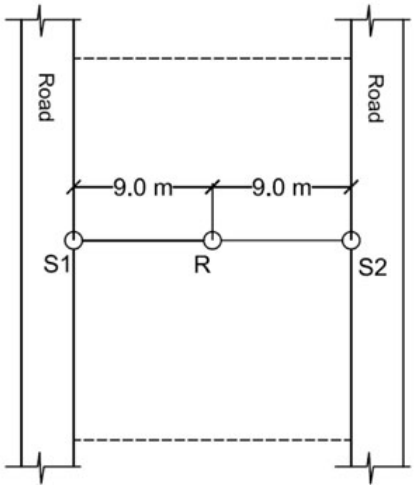
Q.No. 43 In a residential complex, the central play area is to be converted as a detention pond for storm water management. For a 24 hour rainfall event of 100 mm, 100% storm water of central play area and 70% storm water run-off from rest of the complex is to be held at the detention pond. Area distribution in the residential complex is given in the table.

Type	Area (m^2)	Run-off coefficient
Apartment Blocks	1250	0.80
Central Play Area	150	0.60
Other Permeable Areas	200	0.70
Other Impermeable Areas	400	0.90

The required depth of the detention pond (in mm) is _____

Q.No. 44 In the plot shown below, 'S1' and 'S2' are two non-directional point sources, having a sound intensity level of 95 dB and 60 dB, respectively, at a distance of 1 m from each point source. Considering free field conditions, the effective sound intensity level at the receiver location 'R' (in dB, *rounded off to two decimal places*) is

_____



Q.No. 45

A room measures 5m × 10m × 3m (L×B×H). Consider the following conditions,

Total solar radiation incident on the roof surface = 800 W/m^2

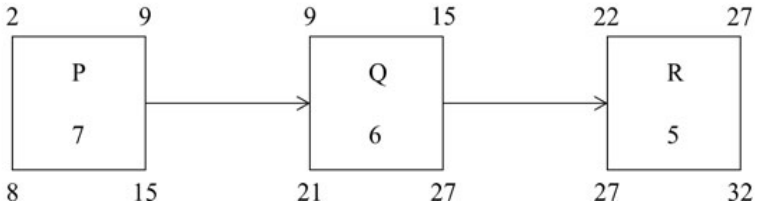
Outdoor air temperature = 40^{o}C

Outside film coefficient of the roof surface = 18 W/m^2

The outdoor mean radiant temperature is equal to outdoor air temperature

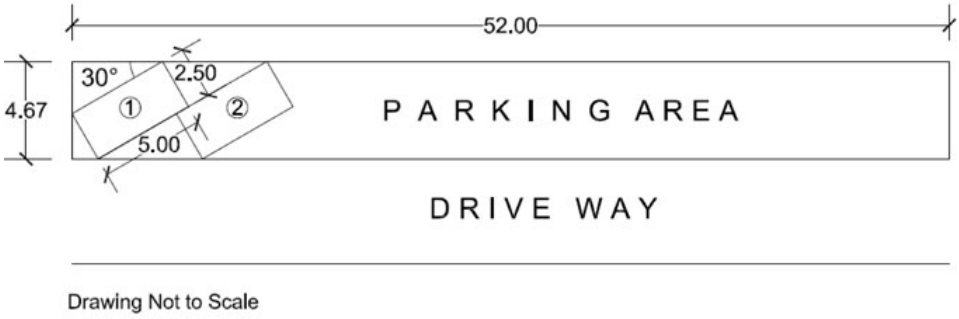
The minimum reduction required in solar absorptance of the roof (*rounded off to two decimal places*) to achieve a 20^o reduction in sol-air temperature is _____

Q.No. 46 The activity duration, early start, early finish, late start and late finish of the three activities 'P', 'Q' and 'R' are shown in the following figure. The **independent float** of activity 'Q' is _____



Q.No. 47 A square based regular pyramid has all sides equal to 10 units. Its height (in the same units, *rounded off to two decimal places*) is _____

Q.No. 48 A parking area measuring 52 m × 4.67 m is approached through a driveway as shown in the given illustration. The parking is designed at an angle of 30° with the parking bay of 2.5m × 5m.

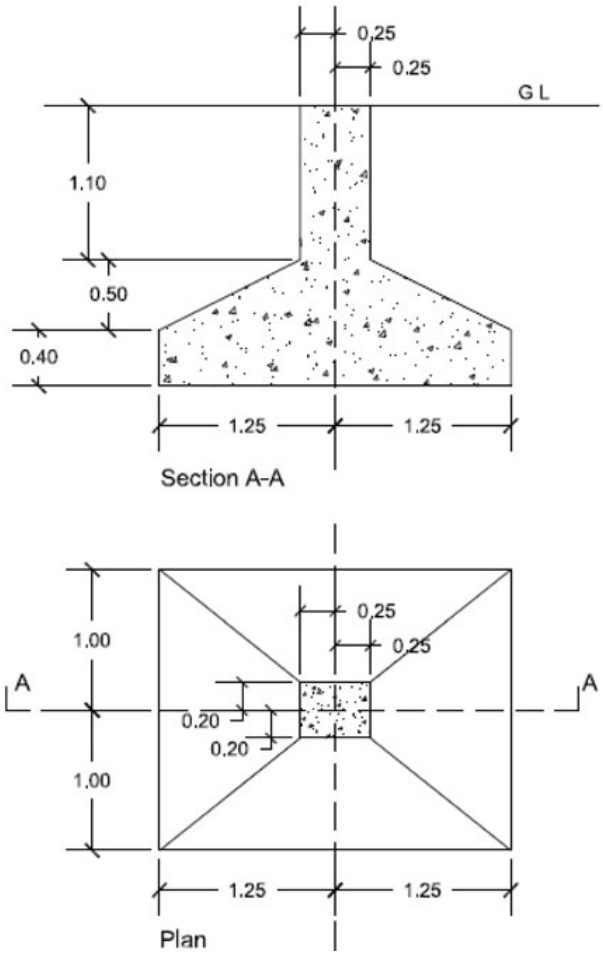


Drawing Not to Scale

The number of cars that can be parked in the designated parking area considering no car overshoots the length of the parking area is _____

Q.No. 49

Plan and section of an isolated foundation is given below. The volume of concrete up to Ground Level (GL) (in m^3, *rounded off to two decimal places*) is _____



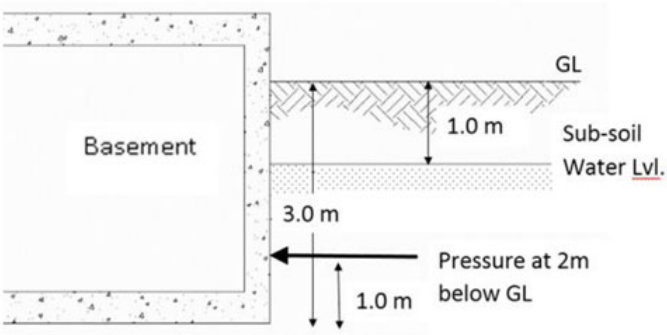
Q.No. 50 Top floor of a 25 story building is using a flush valve system with a minimum fixture pressure of 1.0 kg/cm^2. If static pressure increases by 0.3 kg/cm^2 per metre length and friction loss is zero, then height of bottom of the water tank from the top fixture (in metres, *rounded off to two decimal places)* is _____

Q.No. 51 In a single phase alternate current circuit, an electric lamp is rated 100 watts. If 220 volts is impressed on it and the power factor is 0.85, the energy (in watt hour, *rounded off to one decimal place*) delivered in an hour is _____

Q.No. 52 A simply supported RCC beam of cross section 0.4 m × 0.6 m covers a span of 8 m. It is subjected to a uniformly distributed load of 30 kN/m. If the unit weight of concrete is 24 kN/m^3, the tensile stress (in N/mm^2, *rounded off to two decimal places*) at the bottom of the beam at mid-span is _____

Q.No. 53

A basement wall resists lateral pressure exerted by soil and water. The soil pressure amounts to 4.5 kN/m^2 for every metre of depth below Ground Level (GL). The sub-soil water level is 1.0 m below GL and hydrostatic pressure of water is 9.8 kN/m^2 for every metre of depth below GL. The total lateral pressure (in kN/m^2, *rounded off to one decimal place*) exerted on the wall 2 m below GL is _____



Q.No. 54 Assuming that the population growth trend given in the table will continue, the population (in persons) for the year 2031 will be _____

S.No.	Year	Population (in persons)
1	1981	1,30,440
2	1991	1,69,572
3	2001	2,20,444
4	2011	2,86,577

Q.No. 55 A developer would like to select a residential plot of 3000 m^2 for group housing in a city. Different options with varying development controls are given. In every group housing plot, 15% of the Floor Area Ratio (FAR) over and above the maximum permissible FAR has to be utilized for Economically Weaker Section (EWS) units. The maximum built-up area (in m^2) available from the options given below is

_____

Area	Ground Coverage (%)	FAR
1	30	1.5
2	20	2.0
3	40	2.0
4	15	3.0

Answer Key - AR: Architecture and Planning

Q.No.	Session	Que.Type	Sec. Name	Key	Marks
1	3	MCQ	GA	C	1
2	3	MCQ	GA	B	1
3	3	MCQ	GA	D	1
4	3	MCQ	GA	D	1
5	3	MCQ	GA	B	1
6	3	MCQ	GA	D	2
7	3	MCQ	GA	C	2
8	3	MCQ	GA	B	2
9	3	MCQ	GA	B	2
10	3	MCQ	GA	B	2
1	3	MCQ	AR	B	1
2	3	MCQ	AR	A OR D	1
3	3	MCQ	AR	D	1
4	3	MCQ	AR	B	1
5	3	MCQ	AR	B	1
6	3	MCQ	AR	C	1
7	3	MCQ	AR	A	1
8	3	MCQ	AR	C	1
9	3	MCQ	AR	B	1
10	3	MCQ	AR	D	1
11	3	MCQ	AR	C	1
12	3	MCQ	AR	C	1
13	3	MCQ	AR	C	1
14	3	MCQ	AR	A	1
15	3	MCQ	AR	B	1
16	3	MCQ	AR	B	1
17	3	MCQ	AR	C	1
18	3	MCQ	AR	C	1
19	3	MCQ	AR	A	1
20	3	MCQ	AR	D	1
21	3	MCQ	AR	B	1
22	3	NAT	AR	18.2 to 18.5	1
23	3	NAT	AR	0.68 to 0.70	1
24	3	NAT	AR	8 to 8	1
25	3	NAT	AR	20.8 to 20.8	1
26	3	MCQ	AR	B	2
27	3	MCQ	AR	C	2
28	3	MCQ	AR	B	2
29	3	MCQ	AR	A	2
30	3	MCQ	AR	D	2
31	3	MCQ	AR	A	2
32	3	MCQ	AR	A	2
33	3	MCQ	AR	A	2

34	3	MCQ	AR	B	2
35	3	MCQ	AR	C	2
36	3	MCQ	AR	B	2
37	3	MCQ	AR	A	2
38	3	MCQ	AR	A	2
39	3	MCQ	AR	D	2
40	3	MCQ	AR	D	2
41	3	NAT	AR	3 to 3	2
42	3	NAT	AR	5214 to 5214	2
43	3	NAT	AR	760 to 760	2
44	3	NAT	AR	75.00 to 79.00	2
45	3	NAT	AR	0.43 to 0.47	2
46	3	NAT	AR	1 to 1	2
47	3	NAT	AR	7.00 to 7.10	2
48	3	NAT	AR	9 to 10	2
49	3	NAT	AR	3.10 to 3.40	2
50	3	NAT	AR	3.30 to 3.40	2
51	3	NAT	AR	100 to 100	2
52	3	NAT	AR	11.80 to 12.00	2
53	3	NAT	AR	14.3 to 18.8	2
54	3	NAT	AR	484315 to 484316	2
55	3	NAT	AR	10350 to 10350	2