1. Foreign Direct Investment in housing and real estate sector was permitted through :
A. National Housing Policy 1988
B. National Housing Policy 1994
C. National Housing \& Habitat Policy 1998
D. None of the above
2. In India, one of the slum improvement initiatives is
A. Special Residential Zone
B. Valmiki Ambedkar Awas Yojana
C.Indira Awas Yojona
D. Rajiv Awas Yojona
3. 'Aranya Community Housing ' project was designed by
A. Charles Correa B. Laurie Baker C
C. B.V Doshi
D.None of the above
4. In the Census of India 2001, the urban area is defined as a place satisfying the following criteria :
A. a minimum population of 5,000
B. at least 75 per cent of male working population engaged in non- agricultural pursuits
C. a density of population of at least 400 per sq. km. (1,000 per sq. mile).
D. All the above
5. A settlement with a population of $1,10,000$ has an average household size of 5.5 . The number of occupied dwelling units is 16500 of which $15 \%$ is in dilapidated condition. The housing demand of the area is
A. 17,525
B. 5,975
C. 22,475
D. 3500
6. The Bhubaneswar city was designed by
A. Le Corbusier B.Louis Kahn C. Otto Königsberger
D. Edwin Lutyens
7. The ' sector' model of urban land use was proposed by
A. Ernest Burgess
B. William Reilley
C. Homer Hoyt
D. None
8. The planning document required for receiving JNNURM funding is
A. Basic Development Plan B. Outline Development Plan
C. Master Plan
D. City Development Plan
9. The full form of TDR which can be exercised by local Authority for

Urban
Development is
A. Time-domain Reflectometry
B.Ticket Deposit Receipt
C.Transferable Development Rights
D.Tranfer Development Rates
10. Which city is designed based on the Vastu Sashtra and planned like Vastu Purusha Mandala?
A. Udaipur
B. Jaipur
C. Bhopal
D. Nagpur
11. Shalimar Bagh is located in
A. Lahore
B. Dhaka
C. Agra
D. Srinagar
12. The book 'The Gardens of the Great Mughals ' was written by
A. Jonas Benzion Lehrman
B. D. Fairchild Ruggles
C. James L Wescoat
D. C. M. Villiers-Stuart
13. The scientific method of dating based on the analysis of pattern of tree rings is
A. Dendrochronology
B. Paleoecology
C. Dendrology
D. Acanthochronology
14. The general site design strategy for hot humid regions is to:
A. Avoid tall solid walls that block winds
B. Use moisture conserving plants
C. Avoid large exposed glass
D. Trap cool air for convection
15. The garden city movement was initiated by
A. Kevin Lynch
B. Ebenezer Howard
C. Frederic Osborn
D.Gordon Cullen
16. The Hazen -Williams equation used to calculate the pipe diameter for water supply is dependent on the following variables:
a. C : Roughness coefficient
b. R : Hydraulic radius in mm
c. $\quad \mathrm{S}:$ Head loss per in $\mathrm{m} / \mathrm{m}$
d. $\quad \mathrm{V}$ : Velocity in $\mathrm{m} / \mathrm{sec}$
e. $\quad \mathrm{P}$ : population of the area
A: C,R,V
B. $\mathrm{C}, \mathrm{S}, \mathrm{V}$
C. $R, S, P$
D. $\mathrm{S}, \mathrm{P}, \mathrm{V}$
17. Which of the following is not yet recognized as UNESCO World Heritage site ?
A. Humayun's Tomb Delhi
B.Red FortComplex, Delhi
C. Group of Monuments at Hampi
D.Temples at Bishnupur
18. Which of the following is not a green Building Rating System ?
A. LEED
B. BREEAM
C. CASBEE
D. BEE
19. The book 'Urban Pattern' is written by
A. Gallion
B. Jacobs Jane
C. Frederick Gibberd
D. Gordon Cullen
20. MDG is
A. Millennium Development Gazette
B. Millennium Development Goals
C. Mega Development Goal
D. Mumbai Development Gazette
21. Yamuna Apartments, New Delhi is the work of
A. Charles Correa
B. B.V.Doshi
C. Ajoy Choudhury
D. Le Corbusier
22. The upper part of an Order of architecture supported by a colonnade is
A.Entablature
B. Frieze
C. Pedestal
D. Pediment
23. The lowest unit or voussoir of an arch ,occurring just above the springing line
A. Keystone
B.Springer
C. Archivolt
D. Extrados
24. Brickwork with alternate headers and stretchers in the same course A.English Bond B. Flemish Bond C. Rat-trap Bond D. Gothic Bond
25. A fine quality of plaster much used in Roman and Renaissance architecture for ornamental modeled work in low relief
A. Fresco
B. Terracotta
C. Stucco
D. Rendering
26. A window in a sloping roof , usually that of a sleeping apartment is
A. Clerestory
B. Rose
C. Casement
D. Dormer
27. The Order having no base to the column
A. Doric
B.Ionic
C. Corinthian
D. Tuscan
28. Chaitya is
A. An entrance hall B.a meeting hall C. a hall of Administration of justice D. a prayer hall
29. The Sydney Opera House was designed by
A. Alvar Alto
B.Jorn Utzon
C. Robert Matthew
D. Renzo Piano
30. In which city the dawn of building regulations is observed
A. Mohenjo-Daro \& Harappa
B. Old Babylon
C.Jerusalem D Taiwan
31. Ecclesiasteron is the
A. Assembly hall
B. council hall
C. council chamber
D. entrance hall
32. 'Tomorrow' was written by
A. Barry Parker
B. Patrick Geddes
C. Le Corbusier
D. Ebenezer Howard
33. The powdery substance formed on the surface of rocks is
A. Effloresce B. Effluence
C. Efflorescence
D. corrosion
34. Anemometer is used to measure
A. Humidity
B. Wind velocity
C. Temperature
D. Radiation
35. The Urban Heat Island Effect (UHI) is
A. a phenomenon whereby the concentration of structures results in a slightly warmer envelope of air over urbanised areas when compared to surrounding rural areas.
B. a phenomenon whereby the waste heat from human activity results in a slightly warmer envelope of air over urbanised areas when compared to surrounding rural areas.
C. Both A \& B
D. None of the above
36. The heat flow rate through a unit area of the body when the temperature difference between the two surfaces being $1 \operatorname{deg} \mathrm{C}$ is
A. Conductance
B. Radiation C. Convection
D.Transmittance
37. The component/s contributing to the Daylight Factor
A. sky component
B. externally reflected component
C. internally reflected component
D. all the above
38. Light incident on an object can be distributed through following ways
A. Reflected
B. absorbed
C. transmitted
D. all the above
39. The functions which are considered as ventilation
A. Supply of fresh air and convective cooling
B. Supply of fresh air and physiologicalCooling
C. Convective cooling and physiological cooling
D. None of the above
40.Sol-air temperature depends on
a) Outside air temperature
b) Radiation intensity
c) Absorbance of the surface
d) Surface conductance
A. $b, c, d$
B. $a, b, d$
C. all the above
D. none of the above

Read the instructions provided before each set of questions and answer them.
Identify the odd word in each of the following questions (41-43).
41. Identify the odd word
(A) Primeval
(B) Primitive
(C) Primary
(D) Precursor
42. Identify the odd word
(A) Oddball
(B) Remarkable
(C) Eccentric
(D) Crank
43. Identify the odd word
(A) Credo
(B) Belief
(C) Pledge
(D) Doctrine

In each of the following, arrange the words in a meaningful sequence (44-45).
44. A. Assembly
B. Raw Material
C. Quality Check
D. Sell
E. Packing
(A) BAECD
(B) BCAED
(C) BCDEA
(D) BACED
45.
A. Open B. Ring
C. Get up
D. Hear
E. Check
(A) BDCEA
(B) BDAEC
(C) BACED
(D) BADEC

In each of the following questions four pairs of synonyms are supplied, out of which three pairs are alike/similar in certain ways and the fourth one is different (not a pair of synonyms). Choose the ODD pair out (46-47).
46. Identify the odd pair
(A) Mingle: Join
(B) Chink: Crevice
(C) Crane: Winch
(D) Hulk: Shell
47. Identify the odd pair
(A) Relation: Kin
(B) Hither: Here
(C) Hammer: Thrash
(D) Hanker: Canker
48. A greatest possible number with which if we divide 37 and 58 , the remainders left are 2 and 3 respectively. Find this number.
(A) 3
(B) 4
(C) 5
(D) 6
49. A four digit smallest positive number if divided by $4,5,6$ or 7 , the remainder it always leaves is 3 . Find the number.
(A) 1154
(B) 1231
(C) 1043
(D) 1263
50. The average age of 10 persons is 20 years. If another person is added to the group, then the new average age of the whole group is increased by 1 year. What is the age of the new person?
(A) 30 years
(B) 31 years
(C) 32 years
(D) 33 years
51. The ratio of two numbers is $3: 5$. If one subtracts 9 from each, the new ratio becomes $12: 23$. Find the second number.
(A) 45
(B) 52
(C) 55
(D) 63
52. In a book fair, $60 \%$ books were from Economics stream, $60 \%$ of the remaining were from Management, and the rest of the books were from English Literature. If there were 3600 books in Management, find the number of books in English Literature.
(A) 2000
(B) 2100
(C) 2300
(D) 2400
53. If the floor price comes down by $20 \%$, a person can buy 6 kg more of floor for Rs 240 . Find the original price of floor per kg.
(A) Rs 10
(B) Rs 12
(C) Rs 14
(D) Rs 16
54. If a sum of money becomes 3 times in 12 years, in how many years will it become 5 times at the same rate of simple interest?
(A) 20 years
(B) 22 years
(C) 24 years
(D) 26 years
55. 25 workers can finish a work in 30 days. If the work needs to be completed in $2 / 3^{\text {rd }}$ of the actual time, after how many days should the strength of the workers be increased by 50 persons?
(A) 14
(B) 15
(C) 16
(D) 17
56. Two trains, Neelachal Express and Purushottam Express, leave Bhubaneswar station at a difference of 4 hours. Neelachal Express leaves at 8 am at $40 \mathrm{~km} / \mathrm{h}$. Purushottam Express leaves later in the same direction at $60 \mathrm{~km} / \mathrm{h}$. Find the time when Purushottam Express will overtake Neelachal Express.
(A) 6 pm
(B) 7 pm
(C) 8 pm
(D) 9 pm
57. The equal sides of an isosceles triangle are 5 cm each and the base is 6 cm . What is its area?
(A) $12 \mathrm{~cm}^{2}$
(B) $10 \mathrm{~cm}^{2}$
(C) $16 \mathrm{~cm}^{2}$
(D) $12 \sqrt{3} \mathrm{~cm}^{2}$
58. A plane figure is bounded by straight lines only. If K is the number of these lines, what is the least value of K ?
(A) 4
(B) 3
(C) 5
(D) 2
59. If the sum of 4 terms of an A.P. is 36 , what is the arithmetic mean of the A.P.?
(A) 6
(B) 8
(C) 9
(D) 10
60. A person has 3 belts, 4 pants and 6 shirts. Find the number of ways he can wear them.
(A) 36
(B) 13
(C) 39
(D) 72

