ASSISTANT TOWN PLANNER,TOWN AND COUNTRY PLANNING

EXAM DATE:20-08-2015

1.The minimum value of camber provided for thin bituminous surface hill roads,is:

A.2.2%

B.2.5%\*

C.3%

D.3.5%

Ans:B

2.Maximum number of passenger cars that can pass a given point on a road during one hour under the most ideal road way and traffic conditions,is known as:

A.Traffic density

B.Basic capacity of traffic lane\*

C.Possible capacity of traffic lane

D.All the above

Ans:B

3.The safe stopping sight distance D,may be computed from the equation:

A.D=0.278Vt+V2/254f\*

B.D=0.254Vt+V2/278f

C.D=0.254Vt+V2/225f

D.D=0.225Vt+V2/254f

Ans:A

4.Extra widening required at a horizontal curbe on a single lane hill road of radius 80 m for a design speed of 50 im ph and for a vehicle with wheel base 6.0 m is:

A.0.225 m

B.0.589 m\*

C.1.250 m

D.None of these

Ans:B

5.Best ballast contains stones varying in size from:

A.1.5 cm to 3 cm

B.2.0 cm to 4 cm

C.2.0 cm to 5 cm\*

D.2.5 cm to 6 cm

Ans:C

6.Ryve’s formula for flood estimate in cumecs,is:

A.Q=CA3/4

B.Q=CA2/3\*

C.Q=CA1/2

D.Q=CA1/3

Ans:B

7.An inclined circular plate of diameter 2 m lies ubmerged in a liquid of specific grapvity 0.9.The depth of the centroid of plate below the free surface is 1 meter.The hydrostatic pressure on one side of the plate in KN is:

A.277.4

B.308.2

C.30.82

D.27.74\*

Ans:D

8.A rectangular open channel carries a flow of 2 m3/sec/m,what is the value of minimum specific energy?

A.0.74 m

B.1.11 m\*

C.1.48 m

D.1.85 m

Ans:B

9.A hydraulic model of a spill way is constructed with a scale 1:25.If the prototype discharge is 3125 cumec,then the corresponding discharge for which the model should be tested is:

A.1 cumec\*

B.2 cumec

C.4 cumec

D.8 cumec

Ans:A

10.High COD to BOD ratio of an organic pollutant represents:

A.High biodegradability of the pollutant

B.Low biodegradability of the pollutant\*

C.Presence of free oxygen for aerobic decomposition

D.Presence of Toxic material in the pollutant

Ans:B

11.Which is secondary air pollutant?

A.Photochemical smog

B.Sulphur dioxide

C.Nitrogen dioxide

D.Dust particles\*

Ans:D

12.Isopleth is a line which joins all the points having:

A.Equal depth of evapotranspiration\*

B.Equal depth of evaporation

C.Equal depth of rainfall

D.Equal depth of infiltration

Ans:A

13.A flood discharge is to be estimated for design of a bridge across a river.If the designer intends to accept 25% risk that a flood of that or higher magnitude will occur in the next 15 years,the return period that the designer must use in the estimation of flood discharge is:

A.53 years\*

B.45 years

C.68 years

D.76 years

Ans:A

14.A waste water sample contains 10-5.6mmoles/litre of hydroxyl ions at 250C.The pH of the sample is:

A.8.6

B.8.4

C.5.6

D.5.4\*

Ans:D

15.Faculative bacterias survive in:

A.The presence of oxygen

B.The absence of oxygen\*

C.Both cases(A)and (B)

D.Neither (A) nor(B)

Ans:B

16.ABCD is a regular parallelogram plot of land whose angle BAD is 600.If the bearing of the line AB is 300,the bearing of CD is:

A.900

B.1200

C.2100\*

D.2700

Ans:C

17.The radius of a simple circular curve is 300 m and length of its specified chord is 30 m.The degree of the curbe is:

A.5.730\*

B.5.370

C.3.570

D.3.750

Ans:A

18.The difference between the time avail-to do a job and the time required to do the job,is known as:

A.Event

B.Float\*

C.Duration

D.Constraint

Ans:B

19.A portion of an embankment having a uniform up-gradient 1 in 500 is circular with radius 1000 m of the centre line.It subtends 1800 at the centre.If the height of the bank is 1m at the lower end,and side slopes 2:1,the earth work involved:

A.26,000 m3

B.26,500 m3

C.27,000 m3

D.27,500 m3\*

Ans:D

20.The brick work is not measured in cu m in case of:

A.One or more than one brick wall

B.Brick work in arches

C.Reinforced brick work

D.Half brick wall\*

Ans:D

21.What annual sinking fund at 4.5% must be invested to produce Rs.1 at the end of 20 years?

A.0.0319\*

B.0.05

C.0.045

D.0.025

Ans:A

22.Under the straight line method of charging depreciation,depreciation:

A.Increase every year

B.Decrease every year

C.Is constant\*

D.Fluctuate every year

Ans:C

23.Which one of the following helps to identify the objects on the earth surface?

A.Atmospheric window

B.Signature\*

C.Radiometric error

D.None of these

Ans:B

24.Which one of the following relationship between the wave length,and frequency and the speed(C)of the electromagnetic wave is correct?

Ans:C=u\*Wavelength

25.If TL is the latest allowable event occurrence time,total activity slack(s),is equal to:

A.TL-EFT

B.LST-EST

C.LFT-EFT

D.All the above\*

Ans:D

26.The maximum twisting moment a shaft can resist,is the product of the permissible shear stress and :

A.Moment of Inertia

B.Polar moment of inertia

C.Polar modulus\*

D.Modulus of rigidity

Ans:C

27.A beam of length L is pinned at both ends and is subjected to a concentrated bending couple of moment M at its centre.The maximum bending moment in the beam is:

A.ML/2

B.M\*

C.M/3

D.M/2

Ans:B

28.In plastic analysis,the shape factor for a traiangular section is:

A.1.5

B.1.34

C.2.34\*

D.2.5

Ans:C

29.A single rolling load 8 kN rolls along a girder of 15 m span The absolute maximum bending moment will be:

A.8 KN-m

B.15 kN-m

C.30 kN-m\*

D.60 kN-m

Ans:C

30.A rectangular beam 250 mm wide,310 mm effective depth has 3 bars of 12 mm diameter HYSD grade Fe 415 steel bars.Concrete grade is M20.The ultimate moment of resistance of the beam is:

A.35 kN-m\*

B.40kN-m

C.45kN-m

D.55 kN-m

Ans:A

31.A cantilever steel beam of 3 m span carries a udl of 10kN/m inclusive of self weight.The beam comprises of ISMB200@198N/m.Web thickness=5.4 mm,Ixx=1696.6cm4 and Iyy=115cm4.The maximum bending stress and average shear stresses in Mpa are respectively:

A.66.3 and 55

B.265 and 27.78\*

C.390.8 and 54

D.132.5 and 27.78

Ans:B

32.In case of principal axez of a section:

A.Sum of moment of inertia is zero

B.Difference of moment inertia is zero

C.Product of moment of inertia is zero\*

D.None of these

Ans:C

33.In case of a beam of rectangular cross section simply supported over a span L and loaded with a central load W,length of elasto-plastic zone of the plastic hinge is:

A.L/2

B.L/3\*

C.L/4

D.L/8

Ans:B

34.The degree of static indeterminacy of a rigid-jointed space frame is:

A.m+r-2j

B.m+4=3j

C.3m+4-3j

D.6m+4=6j\*

Ans:D

35.For stable structures,one of the important properties of flexibility and stiffness matrices is that the elements on the main diagonal

(i)of a stiffness matrix must be positive

(ii)of a stiffness matrix must be negative

(iii)of a flexibility matrix must be positive

(iv)of a flexibility matrix must be negative

The correct answer is:

A.(i)and (iii)\*

B.(ii)and(iii)

C.(i)and(iv)

D.(ii)and(iv)

Ans:A

36.in SPT,the test uses a thick walled sample tube.with an outside diameter:

A.45 mm

B.53 mm

C.55 mm

D.50 mm\*

Ans:D

37.Unconfined compressive strength is given by 120 kN/m2,what will be the unconfined shear strength or cohesion?

A.60kN/m2\*

B.80kN/m2

C.90kN/m2

D.120kN/m2

Ans:A

38.If a soil is fully saturated having void ratio 0.67 what will be the porosity?

A.40%\*

B.42%

C.44%

D.46%

Ans:A

39.D60 is 9.6 mm,D30 is 2 mm and D30 is 0.16mm,what is the value of Cc(Coefficient of curvature)?

A.2.4

B.2.5

C.2.6\*

D.2.7

Ans:C

40.Black cotton soils are:

A.Residual Soils

B.Organic Soils\*

C.Expansive Soils

D.Ash Soils

Ans:B

41.According to Jane Jacobs which of the following will make a street lively:

A.Clear demarcation between the Public and Private space

B.Eyes on the streets

C.Constant use of the sidewalks and the streets

D.All the above\*

Ans:D

42.The first integrated District Development Plan(IDDP)in Kerala was prepared for:

A.Thiruvanathapuram

B.Kollam\*

C.Ernakulam

D.Kannur

Ans:B

43.The 12th Schedule of the 74th amendment of constitution deals with:

A.Functions of ULBs\*

B.Peoples participation

C.Constitution of Municipalities

D.Spatial planning process

Ans:A

44.Transit Oriented Development(TOD)has:

A.Low density residential areas with cul-de-sacs

B.Low density housing zones with Bus Rapid Transit System

C.Multi Modal Transit System connecting Single family residential accommodation

D.Mixed Use Commercial and Residential areas with access to public transport\*

Ans:D

45.Which of the following is true about a “Perspective Plan”?

A.It is an annual plan for immediate action

B.It is a five year plan for phased implementation

C.It is long term plan with vision and policy orientation\*

D.It is a group of project proposals with time frame

Ans:C

46.Which of the following acts was passed by the Indian Parliament in 2013?

A.Land Acquisition Act

B.Land Acquisition,Resettlement and Rehabilitation\*

C.Land Pooling Act

D.Urban Land Celing Act

Ans:B

47.Which of the following is not true about Transferable Development Rights?

A.It can be traded for money

B.It can be used for additional FAR in a plot

C.It is issued for the lifetime of the owner\*

D.It is a certificate issued to the owner of a property for the land acquired

Ans:C

48.Compact ,Pedestrianfriendly,Mixed land use development connected to other areas with public transport is proposed in:

A.Plug in City

B.New Urbanism\*

C.Broadcare city

D.Central Business district

Ans:B

49.Which of the following public housing scheme in the US was destroyed due to high crime rate?

A.Pruitt igoe\*

B.Las Vegas

C.North End

D.Weiwyn

Ans:A

50.According to Kevin Lynch which of the following groups of elements contributes to the image of the City?

A.CBD,Magnets,Fringes,Waterfronts,Roads

B.Nodes,Edges,Landmarks,Pathways,Districts\*

C.Landform,Urban Space,Generators,Ghettoes

D.Urban Mass,Skyline Vegetation,suburbs

Ans:B

51.Which of the following is the earliest Regional planning exercise in India?

A.Damodar Valley Project\*

B.Narmada Valley Project

C.Polavaram Irrigation Project

D.Ganga Action Plan

Ans:A

52.Which of the following is true about the Policy for urban street vendors?

A.It processes to ban street vendors

B.It proposes to make rehabilitation facilities and shopping malls for street vendors so that they will not hinder traffic flow

C.It recognizes the street vendors’s right to vend in any public space

D.It recognizes the need for regulation by designating restriction free vending,Restricted vending and no vending zones\*

Ans:D

53.A transition zone around a city where the urban and rural areas meet,mix and sometimes clash is called a:

A.Fringe\*

B.Satellite town

C.Suburb

D.Ribbon development

Ans:A

54.Which of the following areas is not part of the National Capital Region?

A.Faridabad in Haryana

B.Ghaziabad in Uttar Pradesh

C.Gurgaon in Haryana

D.Gorakhpur in Uttar Pradesh\*

Ans:D

55.The amount of biologically productive land and sea used by a given population or activity to produce the resources it consumes and to absorb the waste it generates is called the:

A.Biological footprint

B.Ecological footprint\*

C.Carbon footprint

D.Thermal footprint

Ans:B

56.A biogas plant treats waste by:

A.Aerobic digestion

B.Anaerobic digestion\*

C.Carbon fixation

D.Calcification

Ans:B

57.Which of the following is the most polluted city in the world in 2014?

A.Indore,India

B.Heisinki,Finland

C.Linfen,China\*

D.Calgary,Canada

Ans:C

58.A person aggrieved by an order of the National Green Tribunal of India can appeal within 90 days to:

A.The concerned High Court

B.The Supreme Court of India\*

C.The concerned District Court

D.The President of India

Ans:B

59.Which of the following is not a rating system for green buildings?

A.GRIHA

B.LEED

C.POSDCORB\*

D.Green Globes

Ans:C

60.Gently used water from bathroom sink,showers,tubs and washing machines which may contain traces of dirt,food,grease etc,is called:

A.Grey water\*

B.Brackish water

C.Black water

D.Hard water

Ans:A

61.The report”Our common Future”is also known as:

A.Rio Declaration

B.Kyoto Protocol

C.Brundtland Report\*

D.Habitat Agenda

Ans:C

62.A sea level rise of One meter will submerge which of the following countries?

A.Japan

B.Indonesia

C.Maldives\*

D.Java

Ans:C

63.Stepped wells(vavs)are traditional water harvesting and storing technique common in:

A.Rajasthan\*

B.Deccan Region

C.Israel

D.Middle East countries

Ans:A

64.Which of the following description is most suited to Sustainable development?

A.Development which does not harm any fellow beings

B.Development with equality of all human beings

C.Development which does not affect future prospects of present economic activities

D.Development which does not harm the development prospects of future generations\*

Ans:D

65.El-nino is a phenomenon in which:

A.Temperature of the earth’s surface goes up

B.Earthquake produces Tsunami and the thundershowers

C.Agricultural crops are produced in excess

D.Sea surface temperature\*

Ans:D

66.The Domus in Ancient Rome was

A.A group of building for public meetings

B.A single family occupation building\*

C.Three stories flats

D.A waiter supply system

Ans:B

67.Which of the following is not an Indua Valley Archeological site?

A.Kalibangan

B.Dholavira

C.Lothal

D.Chachaiguda\*

Ans:D

68.As per the 2011 census The Urban population in India is---------of the total Population:

A.19.81%

B.27.82%

C.31.16%\*

D.47.8%

Ans:C

69.India Awaz Yojana is a:

A.Rural Housing Program\*

B.Slum improvement program

C.Middle income Housing program

D.A housing program for women

Ans:A

70.Which of the following institutions was established under an act of parliament in 1988?

A.Housing and Urban Development corporation

B.Housing Development finance corporation

C.National Building Organization

D.National Housing Bank\*

Ans:D

71.The National Urban Housing and Habitat policy 2007 indicates that the Housing Shortage is:

A.34.5 lakh units

B.44.6 lakh units

C.24.7 million units\*

D.560083 units

Ans:C

72.The city of Ur was situated on the banks of the river:

A.Euphrates\*

B.Indus

C.Nile

D.Tiber

Ans:A

73.Which of the following is not a post independent planned city?

A.Ghandinagar

B.Naya Raipur

C.Rakhigarh\*

D.Chandigarh

Ans:C

74.According to Gideon Sjoberg acity is a community of substantial size and population density that shelters a variety of ------------------including a literate elite.

A.Specialists

B.Non agricultural specialists\*

C.Technical specialists

D.Labourers

Ans:B

75.2011 census was the first census where:

A.Slum blocks are delineated in all statutory towns\*

B.The caste of citizens is recorded

C.Condition of houses is recorded

D.People with special needs identified

Ans:A

76.Which of the following towns do not have predominant and iron system of stress?

A.Philadelphia

B.Siena\*

C.Priene

D.Miletus

Ans:B

77.Which of the following is the first Garden City as per the idea of Ebenezer Howard?

A.Bern

B.Priene

C.Greendale

D.Letchworth\*

Ans:D

78.Space syntax Laboratory is associated with:

A.Peter Calthorpe

B.David Harvey

C.Lewis Mumford

D.Bill Hillier\*

Ans:D

79.”Ville Radieuse”was proposed by:

A.Le Corbusier\*

B.Christopher Alexander

C.Patrick Geddes

D.Jane Jacobs

Ans:A

80.Which of the following books is written by Aldo Rossi?

A.Towards a new urbanism

B.The City Beautiful

C.The architecture of the city\*

D.Emerging concepts in Urban Design

Ans:C

81.Who was the founder of ‘Sadhu Jana Paripalana Sangham’?

A.Chattampi Swamikal

B.Dr.Palpu

C.A.K.Gopalan

D.Ayyankali\*

Ans:D

82.Which was known as ‘Magnacarta of Modern Travancore’?

A.Upper cloth revolts

B.Temple Entry Proclamation\*

C.Malayalee Memorial

D.Ezhava Memorial

Ans:B

83.The first press in Kerala

A.Manorama Press

B.Mathrubhoomi Press

C.CMS Press\*

D.Kerala Kaumudi Press

Ans:C

84.Which river known as the ‘Nile of Kerala’?

A.Bharatapuzha\*

B.Periyar

C.Pumpa

D.Bhavani

Ans:A

85.The first Chief Minister of Kerala

A.C.Achutha Menon

B.R.Sankar

C.Pattom Thanupillai

D.E.M.S.Namboothiripad\*

Ans:D

86.Which one of the following right was described by Dr.B.R.Ambedkar as ‘the heart and soul’of the constitution?

A.Right against exploration

B.Right to constitutional remedies\*

C.Right to equality

D.Right to property

Ans:B

87.In the absence of both President and the Vice-Presodent who acts as President

A.Attorney General of India

B.Prime Minister of India

C.The Chief Minister of India\*

D.Speaker of the Lok Sabha

Ans:C

88.From which constitution India borrowed the idea of ‘Fundamental Rights’

A.Constitution of the USA\*

B.Constitution of Canada

C.Constitution of the France

D.Constitution of the Britain

Ans:A

89.Who was the First Vice-President of SNDP?

A.Sree Narayana Guru

B.Kumaranasan

C.Sivadasa Iyer

D.Dr.Palpu\*

Ans:D

90.Who was the founder of ‘Prathyaksha Raksha Daiva Sabha’?  
A.V.K.Gurukkal

B.Pandit Karuppan

C.Kumara Guru\*

D.Vagbhadananda

Ans:C

91.Who was the founder of ‘Samathwa Samajam’?

A.Vaikunda Swamikal\*

B.Sahodaran Ayyappan

C.Thycaud Ayya

D.V.T.Bhattathirippad

Ans:A

92.Which rebellion related to ‘Wagan Tragedy’?

A.Attingal rebellion

B.Channar rebellion

C.Pazhassi rebellion

D.Malabar rebellion\*

Ans:D

93.Who was the leader of Guruvayoor Satyagraha?

A.T.K.Madhavan

B.K.Kelappan\*

C.C.Kesavan

D.K.P.Kesava Menon

Ans:B

94.Who conducted ‘Savarna Jatha’from Vaikom to thiruvanathapuram?

A.Gandhiji

B.C.P.Ramaswamy Iyyer

C.Mannathu Padmanabhan\*

D.N.P.Damodaran

Ans:C

95.Name the institution that is recently formed to replace planning commission

A.NITI Ayog\*

B.National Development Council

C.Inter State Council

D.National Institute of Planning

Ans:A

96.Who is popularly known as ‘Jhansi of Travancore’?

A.A.V.Kuttimalu Amma

B.Lalithambika Antharjanam

C.Akkamma Cherian\*

D.Lalitha Prabhu

Ans:C

97.First women judge in Kerala High Court?

A.Anna Chandi\*

B.Omana Kunjama

C.K.K.Usha

D.Sujatha Manohar

Ans:A

98.Who was the first chair person of Kerala women’s Commission?

A.K.C.Rosakutty

B.Sugathakumari\*

C.Lalitha Kumaramangalam

D.K.R.Gouri Amma

Ans:B

99.Which is the Mahakavyam of Kumarasan?

A.Veena Poovu

B.Karuna

C.Nalini

D.None of these\*

Ans:D

100.What is Numismatics?

A.Study of Fossils

B.Study of Coins\*

C.Study of Soils

D.Study of Caves

Ans:B