

**GS & EA 15<sup>th</sup> December 2018 AN (2-4 PM)**

1. Consider the following statements regarding '*data structures*':
  1. In Hash table, access time is independent of the size  $n$  of the collection
  2. In Search tree, elements are accessible in their natural order

Which of the above statements is/are correct?

- (a) 1 only
  - (b) 2 only
  - (c) Both 1 and 2
  - (d) Neither 1 nor 2
- 
2. Consider the following statements with reference to '*Open Market Operations*' (OMO):
    1. OMO makes the bank rate policy more effective
    2. OMO can be used to bear out seasonal shocks
    3. OMO helps in stabilizing the prices of securities

Which of the above statements are correct?

- (a) 1 and 2 only
- (b) 1 and 3 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

3. Which of the following shells are found in the '*UNIX operating system*'?
1. Bourne shell
  2. C shell
  3. Korn shell
  4. Restricted shell

Select the correct answer using the codes given below:

- (a) 1, 2 and 3 only
  - (b) 1, 2 and 4 only
  - (c) 1, 3 and 4 only
  - (d) 1, 2, 3 and 4
4. A '*Brouter*' combines the features of a:
- (a) Router and a Gateway
  - (b) Bridge and a Gateway
  - (c) Router and a Bridge
  - (d) Bridge and a Repeater
5. Which Microsoft *TCP/ IP* (Transfer Control Protocol) / (Internet Protocol) can be used over the Internet to create a secure virtual network?
- (a) SLIP (Serial Line Internet Protocol)
  - (b) PPTP (Point-to-Point Tunneling Protocol)
  - (c) TCP (Transfer Control Protocol)
  - (d) HTTP (Hyper Text Transfer Protocol)

6. ' *Mahila Udyog Nidhi* ' is a special scheme for promoting women entrepreneurship and operated through:
- (a) Reserve Bank of India and State Bank of India
  - (b) State Financial Corporations and Scheduled Commercial Banks
  - (c) State Ministry of Women and Child Welfare
  - (d) Central Ministry of Women and Child Welfare
7. Which one of the following is *not* covered under the rules framed by ' *World Trade Organization* ' (WTO)?
- (a) General Agreement on Tariffs and Trade (GATT)
  - (b) General Agreement on Trade in Services (GATS)
  - (c) General Agreement on International Collaboration (GAIC)
  - (d) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS)
8. ' *Hutton Theory* ' explains the origin of ' *Untouchability* ' due to:
- (a) People doing certain dirty professions are excluded from mixing with others
  - (b) Partly racial, partly religious and partly a matter of social customs
  - (c) Idea of Purity and Impurity
  - (d) People occupying dirty occupations are condemned, considered as dirty and untouchables

9. Which one of the following statements is correct regarding '*Sukanya Samridhi Yojana*' (SSY)?
- (a) It is a Government of India backed saving Scheme targeted at the parents of girl children
  - (b) The Scheme was launched in January 2016 as a part of '*Beti Bachao, Beti Padhao*' campaign
  - (c) Parents can open a minimum of two accounts for each of their children (exception allowed for twins and triplets)
  - (d) A girl can operate her account after she reaches the age of 20 years
10. Macroeconomics is also known as theory of:
- (a) Income and Employment
  - (b) General Level Price and Inflation
  - (c) Economic Growth
  - (d) Distribution
11. In a race, *A* beats *B* by 40 metres and *C* by 62.5 metres. *B* beats *C* by 3 seconds. *A* takes 2 minutes to finish. Which one of the following statements is correct?
- (a) *C* takes 2 minutes and 8 seconds to finish the race
  - (b) *B* beats *C* by 20 metres
  - (c) *A* beats *B* by 3 seconds
  - (d) *B* takes 2 minutes and 4 seconds to finish the race

12. A manufacturer of TV sets produced 600 *units* in the 3<sup>rd</sup> year and 700 *units* in the 7<sup>th</sup> year. Assuming that the production increases uniformly by a fixed number every year, production of TV units on 10<sup>th</sup> year will be:
- (a) 725 *units*
  - (b) 750 *units*
  - (c) 775 *units*
  - (d) 825 *units*
13. A dealer sells a toy for Rs. 24 and gains as much percent as the cost price of the toy. The cost price of the toy will be:
- (a) Rs. 32
  - (b) Rs. 28
  - (c) Rs. 24
  - (d) Rs. 20
14. In a circle of radius 21 *cm*, an arc subtends an angle of 60° at the centre. Then the area of the sector formed by the arc will be:
- (a) 231 *cm*<sup>2</sup>
  - (b) 233 *cm*<sup>2</sup>
  - (c) 235 *cm*<sup>2</sup>
  - (d) 237 *cm*<sup>2</sup>

15. A cube having 6 *cm* side is painted yellow on two opposite faces, blue on two other faces and green on rest of the faces. It is then cut into 216 *cubes* of 1 *cm* side. The number of small cubes without any face painted will be:
- (a) 16
  - (b) 24
  - (c) 42
  - (d) 64
16. A path has to be laid around a rectangular ( $20\text{ m} \times 10\text{ m}$ ) building. The area of the path is  $136\text{ m}^2$ . The width of the path will be:
- (a) 4 *m*
  - (b) 3 *m*
  - (c) 2 *m*
  - (d) 1 *m*
17. Prashant ranked 8<sup>th</sup> from the top and 38<sup>th</sup> from the bottom in a class. The number of students in the class was:
- (a) 43
  - (b) 44
  - (c) 45
  - (d) 46

18. By how many degrees the Earth rotates in one minute?
- (a)  $2^\circ$
  - (b)  $4^\circ$
  - (c)  $6^\circ$
  - (d)  $8^\circ$
19. In a town 65 % people read Hindustan Times (HT), 40 % people read Economic Times (ET) and 25 % people read both (HT) and (ET). People neither read (HT) or (ET) will be:
- (a) 05 %
  - (b) 10 %
  - (c) 15 %
  - (d) 20 %
20. A shop keeper gives discount of 10 % on the marked price of a book, but in the bargain makes a profit of 10 %. If the marked price of the book is Rs. 330, the cost price of the book is:
- (a) Rs. 220
  - (b) Rs. 270
  - (c) Rs. 320
  - (d) Rs. 380

21. The rank of the matrix  $A = \begin{bmatrix} 1 & 2 & 3 \\ 1 & 4 & 2 \\ 2 & 6 & 5 \end{bmatrix}$  is:
- (a) 0
  - (b) 1
  - (c) 2
  - (d) 3
22. Maximum value of the function  $f(x) = \sin x (1 + \cos x)$  is at a point  $x$  equal to:
- (a)  $\frac{\pi}{6}$
  - (b)  $\frac{\pi}{4}$
  - (c)  $\frac{\pi}{3}$
  - (d)  $\frac{\pi}{2}$
23. The value of integral  $\int_0^{\pi} \theta \sin^2 \theta \cos^4 \theta d\theta$  is equal to:
- (a)  $\frac{\pi^2}{16}$
  - (b)  $\frac{\pi^2}{32}$
  - (c)  $\frac{\pi^2}{42}$
  - (d)  $\frac{\pi^2}{64}$



24. The expression  $\frac{(\cos \theta + i \sin \theta)^8}{(\sin \theta + i \cos \theta)^4}$  is equal to:

- (a)  $\cos 12 \theta + i \sin 12 \theta$
- (b)  $\cos 12 \theta - i \sin 12 \theta$
- (c)  $-\cos 12 \theta + i \sin 12 \theta$
- (d)  $-\cos 12 \theta - i \sin 12 \theta$

25. Consider the following data:

Age(years)	0-6	6-12	12-18	18-24	24-30	30-36	36-42
Frequency	6	11	25	35	18	12	6

The mode is:

- (a) 22.44
- (b) 21.22
- (c) 20.22
- (d) 18.66

26. For the regression equations:

$$x = 0.4 y + 6.4 \quad \text{and} \quad y = -0.6 x + 4.6$$

Then  $r^2$  is given as:

- (a) 0.49
- (b) 0.38
- (c) 0.24
- (d) 0.16

27. Recurrence formula for Poisson distribution is:

(a)  $P(r) = \frac{1}{r+1} P(r+1)$

(b)  $P(r+1) = \frac{m}{r+1} P(r)$

(c)  $P(r) = \frac{m}{r+1} P(r+1)$

(d)  $P(r+1) = \frac{1}{r+1} P(r)$

28. The diameter of an electric cable is assumed to be continuous random variable with Probability density function:

$$f(x) = 6x(1-x), \quad 0 \leq x \leq 1$$

Its mean will be:

(a) 0

(b) 1

(c)  $\frac{1}{2}$

(d)  $\frac{1}{20}$

29. The mean for normal distribution is:

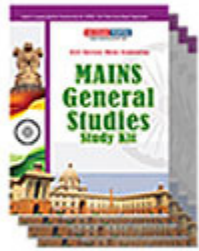
(a) 3

(b) 2

(c) 1

(d) 0

# UPSC MAINS General Studies KIT (Combo)



- 100% NEW UPSC MAINS GS Syllabus Covered
- 2400+ Pages with Questions
- Online Coaching Access
- 1 Year Gist of The Hindu, Yojana, Pib Etc. (PDF Copy)
- 1 Year Weekly, Monthly Current Affairs (PDF Copy)

**SPECIAL  
OFFER**

₹ 15,000/-  
₹ **4999/-**  
Only

for Exam Help Call Us at: +91 8800734161

IAS EXAM PORTAL

## What you will get:

- 100% G.S. Mains Syllabus Covered
- Total 04 Booklets on GS Mains (All four papers)
- More Than 1500+ Pages
- Gist of Yojana, Kurushetra, Science Reporter and The Hindu (pdf)
- Practice papers for GS Mains papers I,II,III & IV (PDF Copy)
- Model Answers for GS Mains Papers I,II,III & IV (PDF Copy)
- Weekly Current Affairs – One year (PDF Copy)
- GS Mains Categorized Papers of last 3 years (PDF Copy)
- With Guidance & Support from Experts
- 3 Years UPSC General Studies Mains Solved Papers
- Guidance & Support from Our Experts

Price of the Kit:

~~Rs. 15,000~~

**Rs. 4,999/-**

(Limited time Offer)



Net Banking

**Order Online (100% Safe)**

[Click here for Other Payment Options \(Cash/NEFT/etc\)](#)

**FOR MORE DETAILS VISIT:**

<http://iasexamportal.com/SK-105>

**50%  
OFF**

**CLICK HERE**

30. What is the type of the following partial differential equation?

$$x^2 \frac{\partial^2 u}{\partial y^2} + 2xy \frac{\partial^2 u}{\partial x \partial y} + y^2 \frac{\partial^2 u}{\partial x^2} = 0$$

- (a) Hyperbolic
  - (b) Parabolic
  - (c) Elliptic
  - (d) Circular
31. Which of the following are the basic types of scaffolds?
- (a) Double scaffold, Steel scaffold and Tower scaffold
  - (b) Tower scaffold, Cantilever scaffold and Patented scaffold
  - (c) Tower scaffold, Cantilever scaffold and Mechanical Aid
  - (d) Double scaffold, Steel scaffold and Mechanical Aid
32. Which one of the following methods of projection is now recommended by the 'Bureau of Indian Standards'?
- (a) First-angle projection method
  - (b) Second-angle projection method
  - (c) Third-angle projection method
  - (d) Fourth-angle projection method

33. Which one of the following is the correct instruction regarding preliminary evacuation?
- (a) Review evacuation instructions posted in hallways
  - (b) Review exit locations and emergency travel routes
  - (c) Outline fire emergency response procedures
  - (d) Instruct employees not to reenter the building until the 'all clear' signal is given by a designated individual

34. Consider the following statements with reference to Traces:

1. When a plane is perpendicular to reference plane, its projections on that plane is a straight line
2. When the plane is parallel to reference plane, its projections on that plane shows its true shape and size

Which of the above statements is/are correct?

- (a) 1 only
  - (b) 2 only
  - (c) Both 1 and 2
  - (d) Neither 1 nor 2
35. Imagine a cuboid is placed in front of a vertical plane on the H.P. The method of projections in which the visual rays (edges) make an angle of  $60^\circ$  with the plane of projection is known as:
- (a) Isometric projections
  - (b) Orthographic projections
  - (c) Oblique projections
  - (d) Perspective projections

36. Which one of the following systems is recommended for the general rules of dimensioning?
- (a) Unidirectional system
  - (b) Bidirectional system
  - (c) Aligned system
  - (d) Both unidirectional system and aligned system
37. A sectional plane is perpendicular to both the reference planes, the true shape of the section will be shown on the:
- (a) Sectional top view
  - (b) Sectional front view
  - (c) Sectional side view
  - (d) Auxiliary side view
38. Consider the following statements regarding CAD:
- 1. CAD increases the accuracy and productivity of designer
  - 2. CAD improves the quality of drawings produced
  - 3. In CAD, the transfer of drawings is cheaper
  - 4. CAD requires more storage space

Which of the above statements are correct?

- (a) 1, 2 and 4 only
- (b) 2, 3 and 4 only
- (c) 1, 3 and 4 only
- (d) 1, 2 and 3 only

39. When the section plane is inclined to the axis and is parallel to one of the generators, the section is known as:
- (a) Ellipse
  - (b) Parabola
  - (c) Hyperbola
  - (d) Epicycloid
40. A diagonal scale of  $RF = \frac{1}{250}$  is constructed to read upto 1 km and to read meters on it. The length of the scale is:
- (a) 8 cm
  - (b) 40 cm
  - (c) 80 cm
  - (d) 400 cm
41. In which one of the following stages of the process of quality improvement, the employees are convinced to focus the efforts and costs on producing very little non-conformities?
- (a) Introduction stage
  - (b) Consolidation stage
  - (c) Commitment stage
  - (d) Maturity stage

42. A leader in *TQM* focus on:

1. Quest for excellence
2. Creating the right attitudes
3. Controls to make prevention of defects possible
4. Optimize customer satisfaction

Which of the above statements are correct?

- (a) 1, 2 and 3 only
- (b) 1, 2 and 4 only
- (c) 3 and 4 only
- (d) 1, 2, 3 and 4

43. *TQM* application of scientific principles and artistic skills is to improve which areas of the organization?

1. Product supplies to an organization
2. Service supplies to an organization
3. All the processes within an organization

Which of the above statements are correct?

- (a) 1, 2 and 3
- (b) 1 and 2 only
- (c) 1 and 3 only
- (d) 2 and 3 only



44. A vendor goes through several levels of acceptance before being indentified as a long term partner:

1. Preferred vendors
2. Approved vendors
3. Certified vendors

What is the correct sequence of order of levels?

- (a) 1, 2 and 3
- (b) 2, 3 and 1
- (c) 1, 3 and 2
- (d) 2, 1 and 3

45. In which of the following categories the Total Customer Satisfaction (TCS) teams are awarded the points?

1. Remedies
2. Brand extension
3. Analysis Techniques
4. Training

Select the correct answer using the codes given below:

- (a) 1 and 4 only
- (b) 2 and 4 only
- (c) 1 and 3 only
- (d) 2 and 3 only

46. Consider the following statements regarding Deming's principles of vendor selection:
1. The gap between vendor and buyer must be closed to choose methods and material that improve customer satisfaction
  2. In selecting a vendor, the procurement cost should be taken into account
  3. A company buys not only vendors products but also its process

Which of the above statements are correct?

- (a) 1 and 2 only
  - (b) 1 and 3 only
  - (c) 2 and 3 only
  - (d) 1, 2 and 3
47. Which of the following are the disadvantages to the organization moving towards multiple-supplier items?
1. A price-dependent relationship develops in between buyer and vendor
  2. There is increased variability in incoming quality even if individual vendor's processes are stable
  3. A long term relationship with a quality conscious vendor is developed
  4. Vendors have no motivation to change their process to meet the buyer's specifications

Select the correct answer using the codes given below:

- (a) 1, 2 and 4 only
- (b) 1, 2 and 3 only
- (c) 1, 3 and 4 only
- (d) 1, 2, 3 and 4

48. Consider the following stages of maturity in Crosby's quality management grid:

1. Awakening
2. Enlightenment
3. Wisdom
4. Uncertainty
5. Certainty

What is the correct sequence of order of stages?

- (a) 5, 3, 2, 1 and 4
- (b) 4, 3, 2, 1 and 5
- (c) 5, 1, 2, 3 and 4
- (d) 4, 1, 2, 3 and 5

49. Consider the following various functions of a quality systems audit based on standards specified in *ISO 9001*:

1. Design
2. Staffing
3. Management
4. Inspection
5. Marketing

Which of the above functions are correct?

- (a) 1, 3, 4 and 5 only
- (b) 1, 2, 4 and 5 only
- (c) 2, 3 and 5 only
- (d) 1, 2, 3 and 4 only

50. Which of the following factors affect the '*Quality of Conformance*'?

1. Site construction methods
2. Technical specifications
3. Supervision and control
4. Inspection

Select the correct answer using the codes given below:

- (a) 1, 2 and 3 only
- (b) 1, 2 and 4 only
- (c) 1, 3 and 4 only
- (d) 2, 3 and 4 only

51. For a steady state system, the law of conservation of mass states that:

- (a) Input rate – output rate = Decay rate
- (b) Input rate + output rate = Decay rate
- (c) Input rate – output rate = 0
- (d) Input rate + output rate = 0

52. A critical point in a river occurs where:

- (a) The withdrawal rate of dissolved oxygen is faster than the reaeration rate
- (b) The withdrawal rate of dissolved oxygen is slower than the reaeration rate
- (c) The withdrawal and reaeration rates are equal
- (d) The dissolved oxygen reaches a minimum at a particular location and time

# Gist of **NCERT** Books Study Kit



- All NCERT Books for UPSC Exams in single place
- Concise and to the point
- Page: 800+
- With Practice MCQ
- Old and New NCERT (Class XI - XII) Compilation

**50%**  
OFF

₹ ~~3,000/-~~  
**₹ 1,499/-**



for Exam Help Call Us at: +91 8800734161, 9958790414

IAS EXAM PORTAL

## What you will get:

- 800+ Pages (5 Books)
- All Old and new NCERT Important Material for UPSC Exam
- From Class-6 to Class-12 Compilation
- The Gist of NCERT History (Old & New)
- The Gist of NCERT Indian Polity (Old & New)
- The Gist of NCERT Geography (Old & New)
- The Gist of NCERT General Science (Old & New)
- The Gist of NCERT Indian Economy (Old & New)
- Practice MCQ included in every Booklet
- IAS Planner (PDF Copy)
- UPSC PRE 10 Year Solved Papers (PDF Copy)

Price of the Kit:  
~~Rs. 3,000~~

**Rs. 1,499/-**  
(Limited time Offer)



Net Banking

**Order Online (100% Safe)**

[Click here for Other Payment Options \(Cash/NEFT/etc\)](#)

**FOR MORE DETAILS CLICK HERE**



53. The air quality for nitrogen dioxide ( $NO_2$ ) in Delhi is  $470 \mu g/m^3$  at  $25^\circ C$  and 1 atm of pressure. The concentration of ( $NO_2$ ) will be:
- (a) 0.18 ppm
  - (b) 0.20 ppm
  - (c) 0.22 ppm
  - (d) 0.25 ppm
54. The ozone which resides in:
- (a) Stratosphere protect life by absorbing long-wave length ultraviolet radiations
  - (b) Atmosphere protect life by absorbing short-wave length ultraviolet radiations
  - (c) Atmosphere protect life by absorbing long-wave length ultraviolet radiations
  - (d) Stratosphere protect life by absorbing short-wave length ultraviolet radiations
55. The permissible limit of fluoride in drinking water as per *ISI* standard (*IS: 10500-2003*) is:
- (a) 2.0 ppm
  - (b) 1.5 ppm
  - (c) 1.0 ppm
  - (d) 0.5 ppm

56. *EL-Nino phenomenon* occurs due to a major shift in the atmospheric pressure as the reversal of trade winds direction over the central equatorial pacific ocean that leads to the spread of warm water towards:
- (a) North
  - (b) South
  - (c) East
  - (d) West
57. The complex level of biodiversity is:
- (a) Species biodiversity
  - (b) Ecosystem biodiversity
  - (c) Genetic biodiversity
  - (d) Genus biodiversity
58. The substance which is primarily responsible for raising *pH* of rainwater is:
- (a) Carbon dioxide
  - (b) Sulphur dioxide
  - (c) Ammonia
  - (d) Carbon monoxide
59. The main constituents of photochemical smog are:
- (a) Sulphur dioxide, Nitrogen dioxide and Nitric oxide
  - (b) Nitrogen dioxide, Ozone and Nitric oxide
  - (c) Sulphur dioxide, Ozone and Hydroflurocarbons
  - (d) Nitrogen dioxide, Ozone and Hydroflurocarbons

60. Due to heavy traffic in the morning, the concentration of:
- (a)  $NO$  is more than  $NO_2$
  - (b)  $NO_2$  is more than  $NO$
  - (c)  $NO$  and  $NO_2$  are almost identical
  - (d)  $SO_2$  is more than  $NO_2$
61. Which can be represented as a network, that shows the elements of a functioning system and the way they are interrelated or linked?
- 1. System structure
  - 2. Subsystem structure
- (a) 1 only
  - (b) 2 only
  - (c) Both 1 and 2
  - (d) Neither 1 nor 2
62. Which one of the following ratios are computed on the basis of projected figures of current assets and current liabilities?
- (a) Liquidity ratios
  - (b) Debt-equity ratios
  - (c) Stock turnover ratios
  - (d) Profitability ratios



63. In the method of evaluation of the project profitability, the ratio of original investment to annual income is said to be:
- (a) Return on Investment (*ROI*)
  - (b) Pay Back Period (*PBP*)
  - (c) Net Present Value (*NPV*)
  - (d) Initial Rate of Return (*IRR*)
64. Reconciliation report is a form of:
- (a) Inventory report
  - (b) Capacity utilization report
  - (c) Financial report
  - (d) Sales report
65. Generally in Disaster project:
- (a) Capital cost is high and project time is low
  - (b) Capital cost is low and project time is low
  - (c) Capital cost is high and project time is high
  - (d) Capital cost is low and project time is high
66. What is *PEP* in Project Management?
- (a) Project Evaluation Plan
  - (b) Project Execution Plan
  - (c) Project Exercise Plan
  - (d) Performance Evaluation Plan

67. The economic interpretation of the rate of return on the unrecovered investment balance in the project is:
- (a) Internal Rate of Return (*IRR*)
  - (b) External Rate of Return (*ERR*)
  - (c) Minimum Acceptable Rate of Return (*MARR*)
  - (d) Rate of Interest (*ROI*)
68. The analysis to know what will happen to the viability of the project when some variable like sales or investment deviates from the expected value?
- (a) Break-Even -Analysis
  - (b) Case Analysis
  - (c) Scenario Analysis
  - (d) Sensitivity Analysis
69. 3 'R's of contracting are:
- (a) Responsibility, Reimbursement and Risk
  - (b) Responsibility, Right and Risk
  - (c) Reimbursement, Right and Risk
  - (d) Reimbursement, Responsibility and Right
70. The expression which is used to represent the variance between the original sanctioned cost and the final cost incurred is:
- (a) Cost turn over
  - (b) Cost overrun
  - (c) Capital cost
  - (d) Project Sickness

71. In tensile stress, the engineering stress corresponding to the maximum load is termed as:
- (a) Upper yield stress
  - (b) Lower yield stress
  - (c) Yield strength
  - (d) Tensile strength
72. Ductile-Brittle transition temperature for steel depends on:
- (a) Strain rate
  - (b) Tensile strength
  - (c) Grain size
  - (d) Shear modulus
73. The property of materials that resist penetration or indentation by means of abrasion or scratching is known as:
- (a) Strength
  - (b) Toughness
  - (c) Hardness
  - (d) Brittleness
74. The crime that is committed by either commission or omission is:
- (a) Employee crime
  - (b) White collar crime
  - (c) Embezzlement and fraud
  - (d) Trade secrets

75. An equilibrium defect in which Frenkel and Schottky defects are likely to form:
- (a) Vacancies
  - (b) Dislocations
  - (c) Stacking faults
  - (d) Grain boundaries
76. Which one of the following Crystal Systems is having an Interaxial Angles of  $\alpha = \gamma = 90^\circ \neq \beta$ ?
- (a) Hexagonal
  - (b) Tetragonal
  - (c) Rhombohedral
  - (d) Monoclinic
77. Consider the following data regarding *BCC* iron for the (220) set of planes:

$$a = 0.2866 \text{ nm (Lattice parameter for Fe)}$$

$$h = 2$$

$$k = 2$$

$$l = 0$$

The interplanar spacing will be:

- (a) 0.3239 nm
- (b) 0.2126 nm
- (c) 0.1013 nm
- (d) 0.0866 nm

78. For a binary system, when 3 phases are present, the number of degrees of freedom will be:
- (a) 0
  - (b) 1
  - (c) 2
  - (d) 3
79. A 305 mm long copper piece is pulled in tension with a stress of 276 MPa and with its modulus of elasticity  $E$  of 110 GPa. If the deformation is entirely elastic, the resultant elongation will be:
- (a) 0.45 mm
  - (b) 0.57 mm
  - (c) 0.65 mm
  - (d) 0.77 mm
80. Which one of the following factors affects the selection of materials regarding 'thermal conductivity'?
- (a) Manufacturing process
  - (b) Functional requirement
  - (c) Cost consideration
  - (d) Operating parameter

81. The art of breaking of ciphers is called:
- (a) Cryptanalysis
  - (b) Cryptography
  - (c) Cryptology
  - (d) Cipherology
82. A digital signature is a mathematical technique used to check:
- (a) The authenticity, integrity and nonrepudiation of a message
  - (b) The clarity of the messages
  - (c) The attacks from the viruses
  - (d) The handwritten signatures
83. Which one of the following is a keyword in Java?
- (a) True
  - (b) Static
  - (c) False
  - (d) Null
84. Which of the following are the integer types of Java?
- (a) char, int, short, byte
  - (b) int, short, char, long
  - (c) byte, int, char, long
  - (d) int, short, byte, long

85. Which one of the following is more efficient multiway branch approach in Java?
- (a) switch
  - (b) if
  - (c) else if
  - (d) if-else-if
86. A technology which uses the hiding of the information in a picture is called:
- (a) Steganography
  - (b) Image Rendering
  - (c) Bitmapping
  - (d) Root kits
87. The presentation quality and the size of image storage depend on:
- (a) Resolution and color depth
  - (b) Color pallets
  - (c) Color models
  - (d) Color combinations
88. The server Replication is a technique for improving the performance of server side is called:
- (a) Caching
  - (b) Mirroring
  - (c) Flash crowds
  - (d) Proxy

89. Which one of the following is *not* belonging to the string class in Java?

- (a) boolean equals (*str*)
- (b) int indexOf (*str*)
- (c) int void ( )
- (d) char charAt(*index*)

90. Methods declared as '*static*' have following restrictions:

1. They can directly call only other '*static*' methods
2. They can directly access only '*static*' data
3. They do not have a '*this*' reference

Which of the above are correct?

- (a) 1 and 2 only
- (b) 1 and 3 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

91. 'It is better for a city to be governed by a good man than by good laws'.  
Who said this?

- (a) Plato
- (b) Aristotle
- (c) Socrates
- (d) Karl Marx



92. An exoteric care about a tribe is called:
- (a) Marginal care
  - (b) Communitarian care
  - (c) Peripheral care
  - (d) Respite care
93. The justice which is based on an integration of care, corrective justice and distributive justice is called:
- (a) Distributive justice
  - (b) Institutional justice
  - (c) Retributive justice
  - (d) Corrective justice
94. Cost and benefit will have to be measured in:
- (a) Ethical scale of reward and punishment
  - (b) Measurement of scale of reward and punishment
  - (c) Likert scale of reward and punishment
  - (d) Normal scale of reward and punishment

95. Consider the following:
1. Competitive negotiation
  2. Principled negotiation
  3. Avoidance
  4. Collective bargaining

Which of the above are the basic styles of conflict management?

- (a) 1, 2 and 4 only
  - (b) 1, 3 and 4 only
  - (c) 2, 3 and 4 only
  - (d) 1, 2 and 3 only
96. A profession has its specific fulfillment and final cause is:
- (a) Logos
  - (b) Telos
  - (c) Mamos
  - (d) Ethos
97. Work ethics related to certain norms and a set of values that a worker considers are essential in his view while doing a work is:
- (a) Organizational culture
  - (b) National culture
  - (c) Work culture
  - (d) Political culture

98. Which one of the following serves as the formal basis for investigating unethical conduct?
- (a) Support codes
  - (b) Deterrence and discipline codes
  - (c) Inspiration and guidance
  - (d) Education and mutual understanding

99. Consider the following statements regarding Engineering Ethics deals with:
1. The moral issues and decisions confronting individual and organizations engaged in engineering
  2. Ethics deals with conduct and not with motives
  3. Related questions about the moral ideals, character, policies and relationships of people and corporations involved in technological activities

Which of the above statements are correct?

- (a) 1 and 2 only
  - (b) 1 and 3 only
  - (c) 2 and 3 only
  - (d) 1, 2 and 3
100. Prearranged payments made by contractors to companies or their representatives if they exceed the amount for contracts actually granted are:
- (a) Extortion
  - (b) Conflict of interest
  - (c) Substantial
  - (d) Kickbacks



# UPSC PRINTED STUDY NOTES

<a href="#">Study Material for IAS (UPSC) General Studies Pre. Cum Mains (Combo)</a>	English	<a href="#">CLICK HERE</a>
<a href="#">UPSC - IAS PRE (GS+CSAT) Solved Papers &amp; Test Series</a>	English	<a href="#">CLICK HERE</a>
<a href="#">UPSC सामान्य अध्ययन प्रारंभिक एवं मुख्य परीक्षा (Combo) Study Kit</a>	Hindi	<a href="#">CLICK HERE</a>
<a href="#">Study Material for IAS Prelims: GS Paper -1 + CSAT Paper-2</a>	English	<a href="#">CLICK HERE</a>
<a href="#">Study Kit for IAS (Pre) GENERAL STUDIES Paper-1 (GS)</a>	English	<a href="#">CLICK HERE</a>
<a href="#">Study Kit for IAS (Pre) CSAT Paper-2(Aptitude)</a>	English	<a href="#">CLICK HERE</a>
<a href="#">Public Administration Optional for UPSC Mains</a>	English	<a href="#">CLICK HERE</a>
<a href="#">सामान्य अध्ययन (GS) प्रारंभिक परीक्षा (Pre) पेपर-1</a>	हिन्दी	<a href="#">CLICK HERE</a>
<a href="#">आई. ए. एस. (सी-सैट) प्रारंभिक परीक्षा पेपर -2</a>	हिन्दी	<a href="#">CLICK HERE</a>
<a href="#">Gist of NCERT Study Kit For UPSC Exams</a>	English	<a href="#">CLICK HERE</a>
<a href="#">यूपीएससी परीक्षा के लिए एनसीईआरटी अध्ययन सामग्री</a>	हिन्दी	<a href="#">CLICK HERE</a>
<a href="#">COMPLETE STUDY MATERIAL FOR IAS PRELIMS EXAM</a>	English	<a href="#">CLICK HERE</a>
<a href="#">COMPLETE STUDY MATERIAL FOR IAS PRE+MAINS+INTERVIEW EXAM</a>	English	<a href="#">CLICK HERE</a>
<a href="#">UPSC, IAS सिविल सेवा परीक्षा संपूर्ण अध्ययन सामग्री (प्रारंभिक, मुख्य, साक्षात्कार)</a>	हिन्दी	<a href="#">CLICK HERE</a>