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ESE 2018: PRELIMS EXAM CLASSROOM TEST SERIES

GENERAL STUDIES &
ENGINEERING APTITUDE

Test No. 20

BOOKLET SERIES



Full Syllabus Test-4

Duration: 2 : 00 hrs.

Maximum Marks: 200

Read The Following Instructions Carefully

1. Immediately after the commencement of the examination, you should check that this booklet **does not** have any unprinted or torn or missing pages or items etc. If so, get it replaced by a complete test booklet.
2. Encode clearly the test booklet series **A, B, C or D** as the case may be in the appropriate place in the answer sheet. @ENGINEERSWORK
3. You have to enter your Roll Number on the Test Booklet in the Box provided alongside.
DO NOT write anything else on the Test Booklet.
4. There are four alternatives for the answer to every question. For each question for which a wrong answer has been given by the candidate, **one-third (0.33)** of the marks assigned to that question will be deducted as penalty.
5. Use of Calculator is not permitted.
6. This Test Booklet contains **100** items (questions). Each item comprises four responses (answers). You will select the response which you want to mark on the Answer Sheet. In case, you feel that there is more than one correct response, mark the response which you consider the best. In any case, choose **ONLY ONE** response for each item.
7. All items carry equal marks. Attempt **ALL** items. Your total marks will depend **Only** on the number of correct responses with corresponding reduction for wrong answers marked by you.
8. Before you proceed to mark in the Answer Sheet the response to various items in the Test Booklet, you have to fill in some particulars in the Answer Sheet as per instructions sent to you with your admission Certificate.
9. Sheets for rough work are appended in the Test Booklet at the end.
10. After you have completed filling in all your responses on the Answer Sheet and the examination has concluded, you should hand over to invigilator **Only the Answer Sheet**. You are permitted to take away with you the Test Booklet.

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE ASKED TO DO SO

Q.1 Consider the following statements regarding ecological niche:

1. Ecological niche is a description of all the biological, physical and chemical factors that a species needs to survive, stay healthy and reproduce.
2. Two species may or may not have exact identical niche.
3. It plays an important role in conservation of organisms.

Which of the above statements are CORRECT?

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

Q.2 Consider the following statements:

1. Smog is a combination of various pollutant gases with water-vapour and dust.
2. Ground-level ozone is formed through reactions involving hydrocarbons, nitrogen oxides and sunlight.
3. Heavy smog can result in the decrease of natural vitamin 'D' production leading to arise in the case of rickets.

Which of the above statements is/are CORRECT?

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

Q.3 Consider the following statements:

1. Conserving the animals and plants in their natural habitat is known as ex-situ conservation.
2. Seed banks, botanical gardens, zoological parks are examples of ex-situ conservation.

Which of the above statements is/are CORRECT?

- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2

Q.4 Consider the following statements regarding TRAFFIC – a wildlife trade monitoring network:

1. It has objective to ensure that trade in wild plants and animals is not a threat to the conservation of nature.
2. It is a joint conservation programme of World Wildlife Fund (WWF) and International Union for Conservation of Nature (IUCN).

Which of the above statements is/are CORRECT?

- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2

Q.5 Which one of the following projects is assessed for environmental impact?

- (a) Public investment
(b) Administration
(c) IT-based services
(d) Irrigation and power

Q.6 Consider the following statements:

1. Global Warming Potential (GWP) of a gas is the measure of the total energy that a gas absorbs over a particular period of time, compared to methane.
2. Among Greenhouse Gases, Hydrofluorocarbons (HFCs) have maximum global warming potential.

Which of the above statements is/are CORRECT?

- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2

Q.7 Consider the following statements regarding small hydropower projects:

1. These projects have short gestation period.
2. These have low operating and maintenance cost.
3. These are installed away from load centers, thus require long transmission line.

Which of the above statements are CORRECT?

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

- Q.8 The main constituents of LPG and CNG are
- (a) Methane and Butane respectively
 - (b) Butane and Methane respectively
 - (c) Ethane and Propane respectively
 - (d) Butane and Hexane respectively

- Q.9 Which of the following is NOT an abiotic component of environment?
- (a) Geologic substratum
 - (b) Symbionts
 - (c) Fire
 - (d) Gravity

- Q.10 Which of the following statements about Convention on Biological Diversity (CBD) is INCORRECT?
- (a) It is an International legally-binding treaty, adopted in 1992 in United Nations Conference on Environment and Development (UNCED).
 - (b) Cartagena and Nagoya Protocols are laid down under CBD.
 - (c) India has not yet ratified this convention.
 - (d) Aichi Targets were adopted by the CBD at its Nagoya conference in 2010.

- Q.11 Virtues are
1. Possessed by someone and exhibited by his/her actions.
 2. Expressed in thought.
 3. Lasting and permanent.
 4. Hypothetical constructs that are socially acceptable.

Select the correct answer using the codes given below:

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

- Q.12 Which of the following values an engineer must consider while working with the environment?

1. Accountability
2. Prudence
3. Efficiency

Select the correct answer using the codes given below:

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

- Q.13 Consider the following statements:

1. Consequentialism focuses on outcome of ethical decisions, not on moral principles.
2. Ethical egoism is the normative ethical position that one ought to do what is in his/her self-interest.

Which of the above statements is/are CORRECT?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

- Q.14 Which one of the following statements is correct regarding Meta-ethics?

- (a) Meta-ethics specifies about right and wrong.
- (b) Meta-ethics is analytical ethics which enquire about nature of morality, excellence, goodness, etc.
- (c) Meta-ethics primarily deals with contemporary ethical issues like live-in relationship.
- (d) Meta-ethics is a study of past and present ethical values.

- Q.15 Morality generally refers to

- (a) What is right or wrong course of action for an individual only.
- (b) Personal traits which make a person moral.
- (c) Making a right decision where there is a chance to do wrong.
- (d) What is right or wrong course of action for an individual or community.

- Q.16 Consider the following statements regarding Honesty:

1. Honesty should be reflected in act, belief and speech.

2. Honesty in belief is intellectual honesty.
3. Honesty in belief means forming one's belief without self-deception.

Which of the above statements is/are CORRECT?

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

Q.17 Human values do not include

- (a) Compassion
- (b) Vindictiveness
- (c) Forbearance
- (d) Honesty

Q.18 Jigyasa, a student-scientist connect programme has been conceptualised by which of the following organisations?

- (a) Council of Scientific and Industrial Research (CSIR) and Kendriya Vidyalaya Sangathan
- (b) Union Ministry of Human Resource Development and Kendriya Vidyalaya Sangathan
- (c) Council of Scientific and Industrial Research (CSIR) and Union Ministry of Human Resource Development
- (d) Indian Space Research Organisation and Union Ministry of Human Resource Development

Q.19 Consider the following statements:

1. Ujjawala scheme is a comprehensive scheme for prevention of trafficking and rescue, rehabilitation of victims of sexual exploitation.
2. Union Ministry of Law and Justice is nodal ministry to implement this scheme.

Which of the above statements is/are CORRECT?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Q.20 USTTAD, a scheme launched by the Union Ministry of Minority Affairs, is acronym for

- (a) Unskilled Traders and Traditional Armament Development
- (b) Upgradation of Schools and Traditional Teaching Associated Department
- (c) Upgrading the Skills and Training in Traditional Arts/Crafts for Development.
- (d) United Society for Traders and Traditional Association of Depressed classes.

Q.21 Consider the following statements regarding Wholesale Price Index (WPI):

1. It is the price of a representative basket of wholesale goods.
2. It is computed by the Office of the Economic Adviser in Union Ministry of Commerce and Industry.
3. The base year of WPI has been revised from 2004-05 to 2012-13.

Which of the above statements is/are CORRECT?

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

Q.22 Which of the following committee was given task to review the Fiscal Responsibility and Budget Management (FRBM) Act?

- (a) Arvind Panagariya Committee
- (b) N.K. Singh Committee
- (c) Shaktikanta Das Committee
- (d) A.K. Mathur Committee

Q.23 In April 2017, USA dropped Massive Ordnance Air Blast (MOAB) on the suspected hideouts of militants in which of the following countries?

- (a) Syria
- (b) Pakistan
- (c) Iraq
- (d) Afghanistan

Q.24 Let $M = \begin{bmatrix} \alpha & 1 & 1 \\ 1 & \beta & 1 \\ 1 & 1 & \gamma \end{bmatrix}$, $\alpha\beta\gamma = 1$, $\alpha, \beta, \gamma \in \mathbb{R}$ and

$x = \begin{bmatrix} x_1 \\ x_2 \\ x_3 \end{bmatrix}$. Then $Mx = 0$ has infinitely many

solutions, if trace of M is

- (a) 0 (b) 1
(c) 2 (d) 3

Q.25 If $P = \begin{bmatrix} 1 & 11 & 3 \\ 1 & 3 & 3 \\ 2 & 4 & 4 \end{bmatrix}$ is the adjoint of a 3×3

matrix A , then the value of $\det(A)$ is

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

Q.26 If X is a real random variable and $E[X]$ indicates an expectation operator, then select the correct one of the following relations.

- (a) $E[X^2] = (E[X])^2$
(b) $E[X^2] = 2E[X]$
(c) $E[X^2] \leq (E[X])^2$
(d) $E[X^2] \geq (E[X])^2$

Q.27 If $A = \begin{bmatrix} -5 & -3 \\ 2 & 0 \end{bmatrix}$ then the value of A^3 is

- (a) $31A + 30I$ (b) $17A + 15I$
(c) $19A + 30I$ (d) $17A + 21I$

Q.28 The value of the integral $\int_{-1}^1 \frac{x^3}{x^2 + 2|x| + 1} dx$

is

- (a) 1 (b) -1
(c) 0 (d) 2

Q.29 The value of $\int_0^1 \int_x^{\sqrt{x}} xy(x+y) dy dx$ is

- (a) $\frac{3}{56}$ (b) $\frac{1}{24}$
(c) $\frac{1}{12}$ (d) 24

Q.30 The value of $\int_0^1 \int_0^{1-x} \int_0^{x+y} e^z dz dy dx$

- (a) $\frac{1}{2}$ (b) 0
(c) $\frac{1}{4}$ (d) $\frac{1}{5}$

Q.31 Two Eigen values of $A = \begin{bmatrix} 3 & -1 & 1 \\ -1 & 5 & -1 \\ 1 & -1 & 3 \end{bmatrix}$ are

3 and 6, then the Eigen values of A^{-1} are

- (a) $\frac{1}{2}, \frac{1}{3}, \frac{1}{6}$ (b) $1, \frac{1}{3}, \frac{1}{6}$
(c) $2, \frac{1}{3}, \frac{1}{6}$ (d) $0, \frac{1}{3}, \frac{1}{6}$

Q.32 If $\left| z - \frac{4}{z} \right| = 2$, then the maximum value of

$|z|$ is equal to

- (a) $\sqrt{3} + 1$ (b) $\sqrt{5} + 1$
(c) 2 (d) $y + \sqrt{2}$

Q.33 The value of $\int_C e^z dz$ is

(where C is $|z| = 1$)

- (a) 0 (b) πi
(c) $2\pi i$ (d) 3

Q.34 Individuals who have no role in quality management are

- (a) Government regulators
(b) Workers
(c) ISO 9000 trainers
(d) Vendors

Q.35 In which of the following operations great deal of variations can occur?

- (a) Distribution (b) Manufacturing
(c) Purchasing (d) Selling

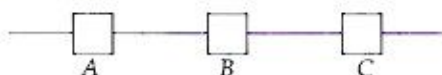
Q.36 Most significant period of reliability prediction by exponential distribution in bathtub curve is

- (a) Infant mortality
(b) Useful life
(c) Wear out life
(d) All of the above

Q.37 The following costs are usually involved in inventory decision except

- (a) Cost of ordering
(b) Carrying cost
(c) Cost of shortage
(d) Machining cost

Q.38 Consider the following system



Reliability of A = 0.95

Reliability of B = 0.85

Reliability of C = 0.75

System reliability is

- (a) 0.40 (b) 0.50
(c) 0.60 (d) 0.70

Q.39 In double sampling, if C_1 and C_2 are the acceptance number where $C_2 > C_1$, then what is the minimum number of defect that lot will reject in the first sample only?

- (a) C_1 (b) C_2
(c) $C_1 + 1$ (d) $C_2 + 1$

Q.40 Which of the following is not an example of an attempt to reduce design complexity?

- (a) Diversification
(b) Communalities
(c) Standardization
(d) Modularization

Q.41 Which type of design is not more than an idea?

- (a) conceptual (b) logical
(c) physical (d) None of these

Q.42 Consider the following statements:

1. Science is concerned with creating knowledge about man-made phenomena and objects.
2. Engineering design is concerned with creating knowledge about naturally occurring phenomena and objects.

Which of the above statements is/are CORRECT?

- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2

Q.43 When assessing your organization safety performance, what are the key areas that OSHA suggests you to focus?

- (a) Management leadership and employee participation.
(b) Hazard preparation and control.
(c) Safety and health training
(d) All of the above

Q.44 A line AB inclined at 30° to the HP and its top view makes an angle of 60° to the VP then its inclination with the VP will be

- (a) Equals to 60° (b) Greater than 60°
(c) Less than 60° (d) None of these

Q.45 If the top view of a plane is rhombus, the object may be

1. Rhombus 2. Square

Select the correct answer using the codes given below:

- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2

Q.46 The recommended symbol for indicating the angle of projection shows two views of the frustum of a

- (a) square pyramid
(b) triangular pyramid
(c) cone
(d) None of the above

- Q.47 Eye protection is required for which of the following hazards?
- Flying particles
 - Molten metal
 - Liquid chemicals, acids or caustic liquids
 - All of the above

- Q.48 As a part of an EAP, which of the following is required in every organization to alert occupants of an evacuation?
- Employee alarm system
 - Floor plan of the building
 - Draft of evacuation procedures
 - Training document

- Q.49 Consider the following statements:

- Parametric design is establishing the approximate dimensions and tolerances of parts and components.
- Decision about material and manufacturing processes are taken only in stage of parametric design of parts.

Which of the above statements is/are CORRECT?

- 1 only
- 2 only
- Both 1 and 2
- Neither 1 nor 2

- Q.50 Consider the following statements regarding design problem:

- Design problem is gap between actual situation and desired situation.
- Describing the problem ensures that any confusion about the problem is identified and resolved.

Which of the above statements is/are CORRECT?

- 1 only
- 2 only
- Both 1 and 2
- Neither 1 nor 2

- Q.51 A sphere in isometric projection is drawn as

- A circle with diameter 0.816 times the sphere diameter
- A circle with diameter greater than the sphere diameter

- An ellipse with major axis as sphere diameter
- A circle with diameter equal to the sphere diameter

- Q.52 The method by which the development of surface of an oblique solid is obtained is
- radial line method
 - parallel line method
 - triangulation method
 - approximation method

- Q.53 Find the odd number out:

445, 221, 109, 46, 25, 11, 4

- 221
- 109
- 46
- 25

- Q.54 All natural numbers having 4 digits can be formed by using first six natural numbers such that the number should be divisible by 4. How many such numbers are there? (repetitions of digit is not allowed)

- 72
- 48
- 96
- 56

- Q.55 There is a road beside a river, two friends started from a place A, moved to a temple situated at another place B and then returned to A. One of them moves on a cycle at a speed of 12 km/hr. While the other sails on a boat at a speed of 10 km/hr. If the river flows at the speed of 4 km/hr, which of the two friends will return to place A first?

- Cyclist
- Sailor
- Both cyclist and sailor
- Data inadequate

- Q.56 The average age of a group of 9 students is 20 years. When 6 more students joined the group the average age falls by 2 years. Then the average age of new student is

- 20 years
- 18 years
- 19 years
- None of these

Q.57 Find the unit digit of $32^{64^{128}}$

- (a) 2 (b) 4
(c) 8 (d) None of these

Q.58 Given quadratic equation

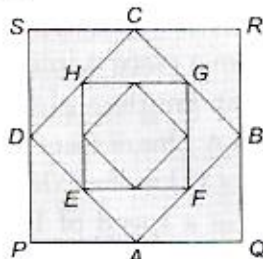
$x^2 - (\alpha - 2)x + (\alpha - 5) = 0$, where α is (+ve).
Then the minimum value of sum of squares of roots of this equation

- (a) 2 (b) 5
(c) 0 (d) can't be determined

Q.59 Two articles are sold at a common SP of Rs. 910 each. One is sold at a profit of 30% and another at a loss of 30%. Then effective value of loss

- (a) 0 (b) 200
(c) 180 (d) 220

Q.60 Mid points of sides of square PQRS are joined and ABCD square is formed and subsequently its midpoint are joined and square EFGH is formed and the process is repeated several times. Then the ratio of 16th such square is to 18th such square formed is



- (a) 4 : 1 (b) 2 : 1
(c) $\sqrt{2} : 1$ (d) None of these

Q.61 $1 \times 1! + 3 \times 3! + 5 \times 5! + 6 \times 6! + \dots + 96 \times 96!$ is divided by 24 remainder equals

- (a) 17 (b) 19
(c) 23 (d) 11

Q.62 At what time between 4 and 8 O'clock hands of clock make right angle?

- (a) $4:5\frac{5}{11}$
(b) $4:38\frac{2}{11}$

- (c) Both (a) and (b)
(d) None of the above

Q.63 Consider the following statements about free float:

- Free float is that duration by which an activity can be delayed without delaying any other succeeding activity.
- Free float is a portion of total float.

Which of the above statements is/are CORRECT?

- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2

Q.64 Consider the following statements regarding contract:

- In unit price contract, the cost per unit of each item is bid by the contractor and the estimated quantity of these items is given by the owner.
- As with the design-build method, turn-key construction utilize a single contract for all functions.

Which of the above statements is/are CORRECT?

- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2

Q.65 Consider the following statements regarding advantages of network diagram:

- The network diagram clearly shows the inter-relationship between the milestones (events).
- Network diagram can be used even for highly complicated projects consisting of a large number of activities.
- It directly indicates the time required in between two milestones.
- Wherever there are uncertainties, network diagrams allow the uses of probability theory for time estimation.

Which of the above statements are CORRECT?

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

Q.66 Consider the following statements regarding Beta distribution in PERT:

1. The distribution should have a small probability of reaching the most optimistic time (shortest time).
2. The distribution should have a large probability of reaching the most pessimistic time (longest time).
3. Variance is the measure of uncertainty.

Which of the above statements is/are CORRECT?

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

Q.67 Consider the following statements:

1. Risk management is the function of avoiding, reducing and controlling the risks and losses.
2. Insurance is the guarantee of indemnity against the actual financial losses resulting from the impact of risks when they culminate in loss producing events.

Which of the above statements is/are CORRECT?

- (a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Q.68 The Internal Rate of Return (IRR) of a project is the discount rate which makes its NPV equal to

- (a) zero (b) greater than 1
(c) 1 (d) None of the above

Q.69 Consider the following statements:

1. The shadow price of a traded good is simply its border price.
2. Social Cost Benefit Analysis (SCBA) is a methodology for evaluating projects from the social point of view.
3. SCBA often tend to differ from the costs incurred in monetary terms and benefits earned in monetary terms by the project.

Which of the above statements are CORRECT?

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

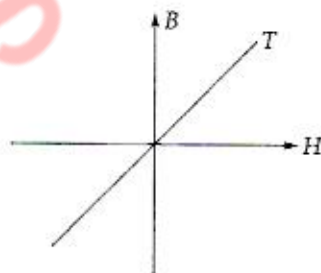
Q.70 The key factors in determining the debt-equity ratio for a project are:

1. Cost
2. Nature of assets
3. Business risk
4. Market condition

Select the correct answer using the codes given below:

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

Q.71 For a magnetic material, Hysteresis curve merges and becomes straight line at a temperature T .



Then which of the given below condition is true?

- (a) $T > \theta$ (b) $T < \theta$
(c) $T = \theta$ (d) $T \geq \theta$

where, θ = Curie Temperature

Q.72 If a dielectric material is placed in an AC - field, average power absorbed per unit volume per cycle of AC-field is proportional to

- (a) Real part of ϵ_r
(b) Imaginary part of ϵ_r
(c) Both real and imaginary part of ϵ_r
(d) Doesn't depend on ϵ_r

where, ϵ_r = Complex dielectric constant of material

Q.73 γ -iron is an example of

- (a) Simple cubic
- (b) Body centered cubic
- (c) Face centered cubic
- (d) Hexagonal closed packing

Q.74 Which of the following is NOT a Natural Organic Matter (NOM)?

- (a) Rubber (b) Plastic
- (c) Wood (d) All of these

Q.75 Which of the following is/are the properties of tool steel?

1. Good toughness.
2. Good wear resistance.
3. Good resistance to softening during heating.

Select the correct answer using the codes given below:

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

Q.76 Which thermoplastic polymer is used in making fluorescent light reflectors?

- (a) Polyvinyl chloride
- (b) Polystyrene
- (c) Polymethyl methacrylate
- (d) None of the above

Q.77 Which of the following is not a thermosetting polymer?

- (a) Silicon (b) Phenolic
- (c) Epoxies (d) Nylons

Q.78 Which type of bond is predominant in silicon dioxide?

- (a) Metallic bond (b) Covalent bond
- (c) Ionic bond (d) Van der Waals

Q.79 Which web-portal was launched by Ministry of Human Resource Development to Monitor elementary education scheme "Sarva Shiksha Abhiyan"?

- (a) SSA kid (b) SSA StudyGood
- (c) SSA ShaGun (d) None of these

Q.80 Which of the following statement is incorrect about Digital India Program?

(a) It is kept in the ambit of Ministry of Human Resource Development (MHRD).

(b) Prime Minister is the Chairman of its Monitoring Committee.

(c) 1st July to 7th July is taken as Digital India Week.

(d) Minister for Ministry of Electronics and Information Technology (MeitY) is Chairman of Digital India Advisory Group.

Q.81 Which of the following purposes can be served by m-Aadhaar (Mobile Aadhaar)?

1. Abolishing the need for e-KYC being carried out in Telecom Sector for Mobile Connections.
2. Carrying Identity Proof on the Mobile Phone.

Select the correct answer using the codes given below:

- (a) 1 only (b) 2 only
- (c) Both 1 and 2 (d) Neither 1 nor 2

Q.82 The name given to a software vulnerability in Microsoft's Windows operating system because of which tens of thousands of computers were hit by two major ransomware attacks is

- (a) Blue whale (b) EternalBlue
- (c) Peta (d) Cyberleak

Q.83 Which of the following objectives are included by the Department of Electronics and Information Technology (DeiTY) in its draft for IoT Policy?

1. To develop IoT products specific to Indian needs in all possible domains.
2. To undertake capacity development (Human & Technology) for IoT specific skill-sets for domestic and international markets.
3. To create an IoT industry in India of USD 15 billion by 2020.

Select the correct answer using the codes given below:

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

Q.84 Which of the following are the economic benefits of the 5G technology as per the OECD (Organization for Economic Cooperation and Development) Committee on Digital Economic Policy?

1. Increasing GDP
2. Creating Employment
3. Digitizing the economy

Select the correct answer using the codes given below:

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

Q.85 Consider the following statements about mission plan of National Telecom Policy 2012:

1. To reposition the mobile device as an instrument of socio-economic empowerment of Citizens.
2. To create an inclusive knowledge society through proliferation of affordable and high quality broadband services across the nation.
3. Generating related Intellectual Property Rights (IPRs) and developing new standards with international partnership of India.
4. It explicitly mentions launch-strategy of Flagship Digital India Program of the Government.

Which of the above are included in the mission plan?

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

Q.86 In the word "Super AMOLED" which is generally associated with the smartphone

screen type, the word "AMOLED" is an acronym for?

- (a) Advance Mould of Light Emitting Diode
(b) Active Module Organic Light Emitting Diode
(c) Active Matrix Organic Light Emitting Diode
(d) None of the above

Q.87 Which of the following statements are true about Blockchain Technology?

1. It is based on the concept of decentralised consensus.
2. It uses the distributed computing system.
3. It was invented by Satoshi Nakamoto.
4. Recently, SBI has announced the use of Blockchain technology for KYC.

Select the correct answer using the codes given below:

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

Q.88 Which of the following memory has the shortest access time?

- (a) Magnetic memory
(b) Main memory
(c) Secondary memory
(d) Cache memory

Directions: Each of the next items consists of two statements, one labelled as the 'Statement (I)' and the other as 'Statement (II)'. You have to examine these two statements carefully and select the answers to these items using the codes given below:

Codes:

- (a) Statement (I) and Statement (II) both are individually true and Statement (II) is the correct explanation of Statement (I).
(b) Statement (I) and Statement (II) both are individually true but Statement (II) is not the correct explanation of Statement (I).

- (c) Statement (I) is true but Statement (II) is false.
 (d) Statement (I) is false but Statement (II) is true.

Q.89 Statement (I): The multilingual portal Vikaspedia aimed at creating a versatile collective knowledge repository with a specific focus on domains relevant to social and economic development.

Statement (II): Vikaspedia was launched by the Department of Electronics & Information Technology (DeitY), Ministry of Communications & IT, then.

Q.90 Statement (I): "Meri Sadak" is a versatile mobile application to empower citizens to give their critical feedback.

Statement (II): Citizens cannot upload photos of the site but can submit a written feedback in the "Meri Sadak" application.

Q.91 Statement (I): Chemical deterioration is a progressive process and can occur in the absence of an electric field.

Statement (II): Some materials oxidize under the presence of air or ozone.

Q.92 Statement (I): The Vickers hardness number of a given material is dependent of the applied load.

Statement (II): The test involves indentation by a pyramid shaped diamond tool with an angle of 136° between opposite faces.

Q.93 Statement (I): A PPP (Public Private Partnership) does not mean that the government is absolved of its responsibility.

Statement (II): Government is accountable for the quality of service and reasonableness of price.

Q.94 Statement (I): The cost curve may have more than one cost slope.

Statement (II): The single or multiple cost slope will depend upon the non-linearity of the direct cost curve.

Q.95 Statement (I): Residual Current Devices (RCD) remove all risk of electric shock.

Statement (II): RCD are designed to disconnect the circuit if there is a leakage current.

Q.96 Statement (I): In deterministic inventory control model, one needs to carry safety stock to prevent stock out.

Statement (II): In deterministic inventory control model, demand and lead time are known with certainty and are constant.

Q.97 Statement (I): The activities related to appraisal costs are inspection costs, checking costs, auditing costs, surveying costs, prototype testing costs, vendor surveillance costs, etc.

Statement (II): Cost of Conformance comprises of Appraisal costs only.

Q.98 Statement (I): UN-Habitat is an agency of United Nations which is responsible for sustainable urban development and human settlements.

Statement (II): New Urban Agenda comes under UN-Habitat, which is a framework that lays out how cities should be planned and managed to promote sustainable urbanisation.

Q.99 Statement (I): Managers can use influence to encourage workers to action.

Statement (II): People derive influence from their higher qualification.

Q.100 Statement (I): The most common causes of development of harmful algal blooms are nutrient enrichment and warm waters.

Statement (II): Harmful algal blooms can deplete oxygen in water.

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