

FINAL ANSWER KEY

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Question1:-Which State Government's initiative of planting 10 lakh saplings in a span of 8 hours has entered the Guinness Book of World Records?

- A:-Uttar Pradesh
- B:-Rajasthan
- C:-Madhya Pradesh
- D:-Jharkand

Correct Answer:- Option-A

Question2:-International Day for the Elimination of Violence against Women was observed on _____

- A:-28 November
- B:-25 November
- C:-25 December
- D:-28 December

Correct Answer:- Option-B

Question3:-Who wrote the book 'What Happened to Netaji'?

- A:-Anuj Khar
- B:-Aravind Adiga
- C:-Soni Sohal
- D:-Gangaram

Correct Answer:- Option-A

Question4:-Which movie bagged the Golden Crow Pheasant Award of 2015?

- A:-Cinemawallah
- B:-The Tribe
- C:-Ottal
- D:-Refujiado

Correct Answer:- Option-C

Question5:-'Do Not Evil' is the tagline of _____

- A:-Opera
- B:-Bing
- C:-Yahoo
- D:-Google

Correct Answer:- Option-D

Question6:-Who introduced Oral Polio Vaccine?

- A:-Albert Sabin
- B:-JE Salk
- C:-Joseph Lister
- D:-Alexander Fleming

Correct Answer:- Option-A

Question7:-Which amendment is known as 'Mini Constitution'?

- A:-93rd Amendment
- B:-42nd Amendment
- C:-43rd Amendment
- D:-44th Amendment

Correct Answer:- Option-B

Question8:-Kerala network for organ sharing by Health Department is known as _____

- A:-Amrithavahini
- B:-Karunodayini
- C:-Dharmavahini
- D:-Mrithasanjeevani

Correct Answer:- Option-D

Question9:-In which year Indian Parliament Food Security Act?

A:-2011

B:-2012

C:-2013

D:-2014

Correct Answer:- Option-C

Question10:-The head quarters of Right to Information Act is _____

A:-Vidya Sadan

B:-Vikas Bhavan

C:-August Kranti Bhavan

D:-Mukti Sadan

Correct Answer:- Option-C

Question11:-The primary function of a surge tank is to

A:-Store excess water from tail race

B:-Increase power output from the turbine

C:-Act as container for surge arrester

D:-Prevent pressure wave due to water hammer in penstock

Correct Answer:- Option-D

Question12:-A universal joint allow the propeller shaft to

A:-bend sideways

B:-change length

C:-transfer torque at an angle

D:-change inclination

Correct Answer:- Option-C

Question13:-The function of an economizer in a steam power plant is to

A:-increase the temperature of supply air

B:-increase the temperature of feed water

C:-condense the exhaust steam from the turbine

D:-preheat the fuel

Correct Answer:- Option-B

Question14:-The compression ignition engines are governed by

A:-Hit and miss governing

B:-Quantity governing

C:-Quality governing

D:-Combination of (2) and (3)

Correct Answer:- Option-C

Question15:-The speed ratio between crankshaft and camshaft is

A:-2 : 1

B:-4 : 1

C:-1 : 2

D:-1 : 4

Correct Answer:- Option-A

Question16:-The inverse of $\begin{bmatrix} 2 & 5 \\ 1 & 3 \end{bmatrix}$ is

A:- $\begin{bmatrix} 3 & -1 \\ -5 & 2 \end{bmatrix}$

B:- $\begin{bmatrix} 3 & -5 \\ -1 & 2 \end{bmatrix}$

C:- $\begin{bmatrix} -3 & 1 \\ 5 & -2 \end{bmatrix}$

D:- $\begin{bmatrix} 3 & 1 \\ 5 & 2 \end{bmatrix}$

Correct Answer:- Option-B

Question17:-If $A = \begin{bmatrix} 12 & 17 & 23 \\ 3 & 6 & 9 \\ 12 & 24 & 36 \end{bmatrix}$, then $\det A$ is

A:-74

B:-74

C:- $(1)/(74)$

D:-0

Correct Answer:- Option-D

Question18:- $\sum_{r=0}^n nC_r = \dots$

A:-1

B:-0

C:- 2^n

D:- n^2

Correct Answer:- Option-C

Question19:- $\sin(180 + \theta) = \dots$

- A:- $\sin \theta$
- B:- $-\sin \theta$
- C:- $\cos \theta$
- D:- $-\cos \theta$

Correct Answer:- Option-B

Question20:-The equation of any line perpendicular to $Ax + By + C = 0$ is

- A:- $Bx - Ay + K = 0$
- B:- $Ax - By + K = 0$
- C:- $Bx + Ay + K = 0$
- D:- $Ax + By + K = 0$

Correct Answer:- Option-A

Question21:- $\lim_{x \rightarrow \frac{\pi}{4}} (\log \tan x) / ((\frac{\pi}{4}) - x) = \dots$

- A:-0
- B:- $\frac{1}{2}$
- C:-2
- D:- $-\frac{1}{2}$

Correct Answer:- Option-C

Question22:-Find $\frac{dy}{dx}$ if $y = \sqrt{f(x) + \sqrt{f(x) + \sqrt{f(x) + \dots}}}$

- A:- $\frac{f'(x)}{2y-1}$
- B:- $\frac{2y-1}{f'(x)}$
- C:- $\frac{f'(x)}{2y+1}$
- D:- $\frac{2y+1}{f'(x)}$

Correct Answer:- Option-A

Question23:- $\int_{-\pi}^{\pi} x^3 \cos x dx = \dots$

- A:- 2π
- B:- $-\frac{\pi}{2}$
- C:- $+\frac{\pi}{2}$
- D:-0

Correct Answer:- Option-D

Question24:- $\int \frac{dx}{\sqrt{a^2-x^2}} = \dots$

- A:- $\sin^{-1} \left(\frac{x}{a}\right) + C$
- B:- $\cos^{-1} \left(\frac{x}{a}\right) + C$
- C:- $\sin^{-1} \left(\frac{a}{x}\right) + C$
- D:- $\cos^{-1} \left(\frac{a}{x}\right) + C$

Correct Answer:- Option-A

Question25:-Integrating factor for the differential equation $\frac{dy}{dx} + \frac{3y}{x} = \frac{1}{x^2}$ is

- A:- y^3
- B:- $e^{\{y^3\}}$
- C:- x^3
- D:- $e^{\{x^3\}}$

Correct Answer:- Option-C

Question26:-The aggregate is called fine aggregate if it is completely retained on

- A:-0.15 mm sieve
- B:-0.16 mm sieve
- C:-0.17 mm sieve
- D:-0.18 mm sieve

Correct Answer:-**Question Cancelled**

Question27:-The minimum depth for all foundations below the natural ground level is

- A:-500 mm
- B:-1200 mm
- C:-250 mm
- D:-100 mm

Correct Answer:- Option-A

Question28:-A projected stone in masonry wall provided to joist or truss is known as

- A:-cornice
- B:-corbel
- C:-coping
- D:-cramp

Correct Answer:- Option-B

Question29:-The sag correction for chain line will be when `W` is the weight of the chain, `L` is the span and `P` is the tension or pull

A:- $\frac{W^2 L^2}{24P^2}$

B:- $\frac{W^2 L}{24P}$

C:- $\frac{W^2 L}{24P^2}$

D:- $\frac{W^2 L^2}{24P}$

Correct Answer:- Option-C

Question30:-Natural error in levelling is caused due to

A:-Wind vibration

B:-Atmospheric refraction

C:-Temperature variation

D:-All the above

Correct Answer:- Option-D

Question31:-Find the time taken for a sinusoidal alternating current of maximum value 20A to reach 15A for the first time, after being instantaneously zero, the supply frequency being 40 Hz

A:-2.35 ms

B:-3.37 ms

C:-4.44 ms

D:-1.23 ms

Correct Answer:- Option-B

Question32:-The voltage across a 20 μ F capacitor is given by $V_c = 10.75 - 1.5e^{-1000t} + 0.75e^{-2000t}$. What is the current through the capacitance.

A:- $0.03(e^{-1000t} - e^{-2000t})$

B:- $0.3(e^{-1000t} - e^{-2000t})$

C:- $3(e^{-1000t} - e^{-2000t})$

D:- $0.003(e^{-1000t} - e^{-2000t})$

Correct Answer:- Option-A

Question33:-Two coils having equal resistance but different inductances are connected in series. The time constant of the series combination is

A:-Sum of the time constant of individual coils

B:-Average of the time constant of individual coils

C:-Geometrical mean of the time constant of individual coils

D:-Product of the time constant of individual coils

Correct Answer:- Option-B

Question34:-A network contains linear resistor and ideal voltage sources. If value of all the resistors are doubled, then voltage across each resistor is

A:-Halved

B:-Doubled

C:-Not changed

D:-Increase 4 times

Correct Answer:- Option-C

Question35:-The current $i(t)$ through a 10 ohm resistance in series with an inductance is given by $i(t) = 3 + 4 \sin(100t + 45^\circ) + 4 \sin(300t + 60^\circ)$ A. The rms value of current and power dissipated in the circuit are

A:- $\sqrt{41}$ A, 410 W respectively

B:- $\sqrt{35}$ A, 380 W respectively

C:-5 A, 250 W respectively

D:-11 A, 1210 W respectively

Correct Answer:- Option-C

Question36:-In full wave rectification, if the input frequency is 50 Hz, then the output frequency will be

A:-50 Hz

B:-75 Hz

C:-100 Hz

D:-200 Hz

Correct Answer:- Option-C

Question37:-A fully charged 12 V, 100 Ah battery is connected to a 1.2 Ω load. The expected time for which the battery can supply power to load is

A:-10 hours

B:-12 hours

C:-1.2 hours

D:-144 hours

Correct Answer:- Option-A

Question38:-A microcontroller normally has which of the following devices on chip?

A:-RAM

B:-ROM

C:-I/O ports

D:-All of the above

Correct Answer:- Option-D

Question39:-GaAs LED's emit radiation in the

A:-Ultraviolet region

B:-Blue-green region of visible region

C:-Orange-red range of visible region

D:-Infra red region

Correct Answer:- Option-D

Question40:-The function of Network and Switching Subsystem (NSS) in GSM is to

A:-Provide and manage radio transmission path between the mobile stations and the Mobile Switching Centre (MSC)

B:-Manage the switching functions of the system and allows the Mobile Switching Centre (MSC) to communicate with other networks

C:-Supports the operation and maintenance of GSM

D:-Manage the radio interface between the mobile station and all other subsystems of GSM

Correct Answer:- Option-B

Question41:-The water manes are created using _____

A:-Dancing roll

B:-Dampening roll

C:-Dandy roll

D:-Distributed roll

Correct Answer:- Option-C

Question42:-The splitting property of an ink film is called _____

A:-Viscosity

B:-Thixotrophy

C:-Ink fly

D:-Tack

Correct Answer:- Option-D

Question43:-Blanket hardness is measured using _____

A:-Shore hardness meter

B:-Gauge hardness tester

C:-Feeler gauge tester

D:-Screw gauge

Correct Answer:- Option-A

Question44:-Kaizen is known as

A:-the continuous improvement process

B:-production tracking

C:-plan do check

D:-quality assurance

Correct Answer:- Option-A

Question45:-The term hydrophilic means

A:-ability to printing ink to dissolved during printing process

B:-characteristic of printing solutions to dissolve in special chemicals under high temperatures

C:-having a tendency to mix with, dissolve in, or be wetted by water

D:-measurement of level of water content in printing inks

Correct Answer:- Option-C

Question46:-What is the term given to the trouble-free interaction between the ink and the press, the paper and the press and finally, the ink and paper?

A:-Smooth running

B:-High performance job

C:-Trouble shooting

D:-Runnability

Correct Answer:- Option-D

Question47:-Which of the following is FALSE about tack?

A:-It is the stickiness of an ink, or the force required to split an ink film between two surfaces

B:-Tack determines whether the ink will pick the surface of the paper

C:-Ink tack that is higher than the strength of the paper surface is highly recommended

D:-Tack affects whether ink will trap properly in multi-color printing

Correct Answer:- Option-C

Question48:-IGT printability tester is to test

A:-Ink fly

B:-Ink mist

C:-Hickins

D:-Pick resistance

Correct Answer:- Option-D

Question49:-Copper is good affinity to

A:-Water

B:-Ink

C:-Buffer solution

D:-Phosphoric acid

Correct Answer:- Option-B

Question50:-Resistance to flow

A:-Trap

B:-Tack

C:-Viscosity

D:-Scum

Correct Answer:- Option-C

Question51:-Brightness of paper substrates are measured at _____ in brightness tester.

A:-90°

B:-180°

C:-45°

D:-75°

Correct Answer:- Option-A

Question52:-The primary fibers are _____ pulp.

A:-Mechanical

B:-Recycled

C:-Reuse

D:-Grained

Correct Answer:- Option-A

Question53:-San Serif is called

A:-with Serif

B:-Counter

C:-Stem

D:-Without serif

Correct Answer:- Option-D

Question54:-Line spacing is also referred as

A:-Ligatures

B:-Kerning

C:-Leading

D:-House style

Correct Answer:- Option-C

Question55:-Height of the type is

A:-0.791"

B:-0.918"

C:-0.189"

D:-0.819"

Correct Answer:- Option-B

Question56:-Frequency modulate screening is also referred as _____ screening.

A:-Stochastic

B:-Pattern

C:-Hybrid

D:-Autotypical

Correct Answer:- Option-A

Question57:-The difference in highlight and shadow area is called

- A:-Grayness
- B:-Lightness
- C:-Contrast
- D:-Hue

Correct Answer:- Option-C

Question58:-Resolution is referred as

- A:-dot per inch
- B:-pixel per inch
- C:-lines per inch
- D:-all of the above

Correct Answer:- Option-D

Question59:-The reverting a screen into a continuous - tone file is called as

- A:-copy dot
- B:-mixed mode
- C:-descreening
- D:-digitizing

Correct Answer:- Option-C

Question60:-Pixels are called

- A:-circle dots
- B:-elliptical dots
- C:-round dots
- D:-digital dots

Correct Answer:- Option-D

Question61:-PDF files are interpreted by _____

- A:-PPD
- B:-DCS
- C:-PS
- D:-RIP

Correct Answer:- Option-D

Question62:-CMYK colour ink is termed as

- A:-spot colour
- B:-process colour
- C:-fake colour
- D:-pentagon colour

Correct Answer:- Option-B

Question63:-Purity of colour is called

- A:-Saturation
- B:-Hue
- C:-Lightness
- D:-Grayness

Correct Answer:- Option-A

Question64:-6 pica is equal to

- A:- $\frac{1}{2}$ inch
- B:-1 inch
- C:- $1\frac{1}{2}$ inch
- D:-2 inch

Correct Answer:- Option-B

Question65:-Which colour space is perceptually uniform?

- A:-RGB
- B:-CMYK
- C:-Yxy
- D:-CIE Lab

Correct Answer:- Option-D

Question66:-If the angle of incident and angle of reflection is same then it is called as

- A:-Specular reflection
- B:-Diffused reflection
- C:-Refraction
- D:-Transparent

Correct Answer:- Option-A

Question67:-If the tristimulus value $X = 10$ $Y = 12$ $Z = 8$ find the x and y co-ordinates of Y_{xy} colour space

- A:-0.3, 0.4
- B:-0.4, 0.3
- C:-0.5, 0.3
- D:-0.3, 0.5

Correct Answer:- Option-A

Question68:-Ideal black body radiator is also referred as _____ radiator

- A:-Specular
- B:-Planckian
- C:-Refraction
- D:-All the above

Correct Answer:- Option-B

Question69:-The difference between numerical value of color are indicated as

- A:- Δ "E"
- B:- δ "E"
- C:- σ "E"
- D:-"E"

Correct Answer:- Option-A

Question70:-Which rendering intent is suitable for photographic image?

- A:-Saturation intent
- B:-Absolute colorimetric intent
- C:-Relative colorimetric
- D:-Perceptual intent

Correct Answer:- Option-D

Question71:-The colour exhibit special radiation effect depending on the illumination is called _____

- A:-Metamerism
- B:-Fluorescence
- C:-Opacity
- D:-Chromaticity

Correct Answer:- Option-A

Question72:-Identify the incorrect pre-press operation

- A:-Typesetting
- B:-Proofing
- C:-Imposition
- D:-Embossing

Correct Answer:- Option-D

Question73:-Identify the wrong statement about PDFs

- A:-It is a cross platform standard
- B:-PDFs are device independent
- C:-PDFs supports security
- D:-PDFs are portable

Correct Answer:-**Question Cancelled**

Question74:-Which of the following is not a common pre-press problem?

- A:-File defined with incorrect colour
- B:-Scan supplied in wrong file format
- C:-Missing graphics
- D:-Ghosting

Correct Answer:- Option-D

Question75:-Spot color printing is normally done by

- A:-4-colour printing
- B:-single colour printing
- C:-only by VDP
- D:-multi-colour printing

Correct Answer:-**Question Cancelled**

Question76:-In what form do imaging source like digital cameras provide images?

- A:-Colour PDFs
- B:-RGB mode
- C:-CMYK mode

D:-Gray scale

Correct Answer:- Option-B

Question77:-Why there is more number of distributor ink rolls in offset printing process?

A:-Ink milling

B:-Even distribution

C:-Dwell time setting

D:-Ink drying

Correct Answer:- Option-A

Question78:-Indirect laser engraving process uses _____ on the copper cylinders.

A:-Light sensitive black layer

B:-Emulsion layer

C:-Carbon layer

D:-Electrostatic layer

Correct Answer:- Option-A

Question79:-Electro formed screen are made from

A:-tin

B:-nickel

C:-antimony

D:-aluminium

Correct Answer:- Option-B

Question80:-Fanning the pile to reduce friction between the sheets are known as

A:-Loading

B:-Trimming

C:-Transporting

D:-Jogging

Correct Answer:- Option-D

Question81:-In cutting principle the knife work without counteracting tool

A:-knife cut

B:-sheet cut

C:-burst cut

D:-flat cut

Correct Answer:- Option-C

Question82:-Carousel screen printing machines are based upon

A:-cylinder bed principle

B:-rotational principle

C:-oblique motion

D:-stationery bed

Correct Answer:- Option-B

Question83:-What problem would be encountered when the gravure cylinder is not perfectly round within a cross section?

A:-static imbalance

B:-dynamic imbalance

C:-non static imbalance

D:-static balance

Correct Answer:- Option-A

Question84:-Which of these part is used for automatically positioning a new web to the tail end of the web being printed?

A:-Splicer

B:-Turner bar

C:-Web bar

D:-Folding bar

Correct Answer:- Option-A

Question85:-When the contact angle (θ) $<90^\circ$ is the measure of the wetting of solid by a liquid then it represents

A:-Poor wetting

B:-Very poor wetting

C:-Moderate wetting

D:-Good wetting

Correct Answer:- Option-D

Question86:-Which of these process are commonly used for destination of water in press?

A:-Reverse osmosis

B:-Distillation

- C:-Deionization
- D:-Osmosis process

Correct Answer:- Option-A

Question87:-Which of the following is NOT a non convention dampening?

- A:-Brush dampening
- B:-Ductor roll
- C:-Misting dampening
- D:-Dulherand dampening

Correct Answer:- Question Cancelled

Question88:-Oscillator roller is otherwise termed as

- A:-Nip roller
- B:-Transfer roller
- C:-Vibrator roller
- D:-Forme roller

Correct Answer:- Option-C

Question89:-Assembly process with the transition into a different processing dimension is called as _____

- A:-Collating
- B:-Gathering
- C:-Creasing
- D:-Folding

Correct Answer:- Question Cancelled

Question90:-Spine routing method is used in

- A:-Calligo binding
- B:-Perfect binding
- C:-Thermal binding
- D:-Combing binding

Correct Answer:- Option-B

Question91:-The measure of force required to bend a paper through a specific angle

- A:-Tensile strength
- B:-Stiffness
- C:-Burst strength
- D:-Folding endurance

Correct Answer:- Option-B

Question92:-Checking the sequences of pages before a book is bounded is termed as

- A:-Gathering
- B:-Collating
- C:-Inserting
- D:-Stitching

Correct Answer:- Option-B

Question93:-The use of lead and chrome based pigment is restricted for

- A:-Cosmetic packaging
- B:-Industrial packaging
- C:-Stationery packaging
- D:-Food packaging

Correct Answer:- Option-D

Question94:-Serval folds made parallel to each other is termed as

- A:-Fan fold
- B:-Cross fold
- C:-Accordion fold
- D:-Zig-zag fold

Correct Answer:- Option-C

Question95:-Corrugated boxes uses _____ liner board.

- A:-Art sheet
- B:-Kraft
- C:-Maplitho
- D:-All of the above

Correct Answer:- Option-B

Question96:-Which of the following are coming under anti-counterfeiting packaging?

- A:-Hologram

B:-Electronic tag

C:-RFID chip

D:-All the above

Correct Answer:- Option-D

Question97:-The package system that is designed to control the growth of microorganisms

A:-Active packaging

B:-Antimicrobial packaging

C:-Aerosal packaging

D:-Acrylic packaging

Correct Answer:- Option-B

Question98:-This measures the rigidity of flutes

A:-Burst strength test

B:-Flat crush test

C:-Tear test

D:-Tensile test

Correct Answer:- Option-B

Question99:-Clam shell is also called as

A:-Aerosol

B:-Blister

C:-Collapsible tube

D:-Carton

Correct Answer:- Option-B

Question100:-Which of the following are NOT coming in structural design of carton?

A:-End load

B:-Top load

C:-Display outer

D:-Collapsible

Correct Answer:- Option-C