

## National Testing Agency

**Question Paper Name:** WATER SCIENCE AND TECHNOLOGY 1st July 2019 Shift2  
**Subject Name:** WATER SCIENCE AND TECHNOLOGY  
**Creation Date:** 2019-07-01 18:50:31  
**Duration:** 150  
**Total Marks:** 640  
**Display Marks:** Yes  
**Share Answer Key With Delivery Engine:** Yes  
**Actual Answer Key:** Yes

### WATER SCIENCE AND TECHNOLOGY

**Group Number :** 1  
**Group Id :** 55317222  
**Group Maximum Duration :** 0  
**Group Minimum Duration :** 150  
**Revisit allowed for view? :** No  
**Revisit allowed for edit? :** No  
**Break time:** 0  
**Group Marks:** 640

### Part A : WATER SCIENCE AND TECHNOLOGY

**Section Id :** 55317230  
**Section Number :** 1  
**Section type :** Online  
**Mandatory or Optional:** Mandatory  
**Number of Questions:** 160  
**Number of Questions to be attempted:** 160  
**Section Marks:** 640  
**Display Number Panel:** Yes  
**Group All Questions:** No

**Sub-Section Number:** 1  
**Sub-Section Id:** 55317252  
**Question Shuffling Allowed :** Yes

**Question Number : 1 Question Id : 5531723555 Question Type : MCQ Option Shuffling : No Display Question Number : Yes**  
**Single Line Question Option : No Option Orientation : Vertical**  
**Correct Marks : 4 Wrong Marks : 1**

Find the order and degree of the differential equation

$$y''' + 2(y'')^2 - y' + y = 0$$

$$\text{(where } y' = \frac{dy}{dx}, y'' = \frac{d^2y}{dx^2}, y''' = \frac{d^3y}{dx^3}\text{)}$$

1. 2 and 2
2. 3 and 1
3. 1 and 3
4. 2 and 3

Options :

55317214161. 1  
55317214162. 2  
55317214163. 3  
55317214164. 4

Question Number : 2 Question Id : 5531723556 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

It is known that if the interest is compounded continuously, the principal changes at the rate equal to the product of the rate of bank interest per annum and the principal. If the interest is compounded continuously at 5 percent per annum, in how many years will Rs. 100/- double itself?

1.  $20 \log_e 2$
2.  $5 \log_e 20$
3.  $5 \log_e 50$
4.  $2 \log_e 5$

Options :

55317214165. 1  
55317214166. 2  
55317214167. 3  
55317214168. 4

Question Number : 3 Question Id : 5531723557 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The differential equation representing the family curves  $y = a \cos(x + b)$ ; where  $a, b$  are arbitrary constants, is

1.  $\frac{dy}{dx} + y^2 = 0$
2.  $\left(\frac{dy}{dx}\right)^2 + y = 0$
3.  $\frac{d^2y}{dx^2} + y = 0$
4.  $\frac{d^2y}{dx^2} + y^2 = 0$

Options :

- 55317214169. 1
- 55317214170. 2
- 55317214171. 3
- 55317214172. 4

Question Number : 4 Question Id : 5531723558 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Solve the initial value problem  $\frac{dy}{dx} = 2xy, y(0) = 1$

1.  $y = x^2$
2.  $y = 2x^3$
3.  $y = \frac{x^3}{3}$
4.  $y = e^{x^2}$

Options :

- 55317214173. 1
- 55317214174. 2
- 55317214175. 3
- 55317214176. 4

Question Number : 5 Question Id : 5531723559 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1



Two marbles are drawn successively from a box containing 3 black and 4 white marbles. The probability that both marbles are black if the first marble is not replaced before the second drawing, is

1.  $\frac{1}{7}$
2.  $\frac{3}{7}$
3.  $\frac{3}{49}$
4.  $\frac{12}{49}$

Options :

55317214177. 1  
55317214178. 2  
55317214179. 3  
55317214180. 4

Question Number : 6 Question Id : 5531723560 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The diagrammatic representation more suited for frequency distributions with continuous classes is

1. Histogram
2. Histogram
3. Mass curve
4. Pictogram

Options :

55317214181. 1  
55317214182. 2  
55317214183. 3  
55317214184. 4

Question Number : 7 Question Id : 5531723561 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The arithmetic mean of two numbers is 13 and their geometric mean is 12, then harmonic mean of these two numbers is

1. 14.09
2. 1.06
3. 12.04
4. 11.08

Options :

55317214185. 1  
55317214186. 2  
55317214187. 3



55317214188. 4

Question Number : 8 Question Id : 5531723562 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

For an asymmetrical frequency distribution, if mean and mode of a set observations are 10 and 4, respectively, then median of those observation is

1.  $26 / 3$
2. 9
3. 11
4. 8

Options :

55317214189. 1  
55317214190. 2  
55317214191. 3  
55317214192. 4

Question Number : 9 Question Id : 5531723563 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The measure of variability was given by

1. Karl Pearson
2. Francis Galton
3. R. A. Fisher
4. A. L. Boddington

Options :

55317214193. 1  
55317214194. 2  
55317214195. 3  
55317214196. 4

Question Number : 10 Question Id : 5531723564 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The range of regression coefficient is

1. 0 to  $\infty$
2. 0 to 1
3. -1 to 1
4.  $-\infty$  to  $\infty$

Options :

55317214197. 1  
55317214198. 2  
55317214199. 3  
55317214200. 4

Question Number : 11 Question Id : 5531723565 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

If both X and Y variables are continuous and normally distributed, but one is reduced to a dichotomy for some reason, then which of the following correlation is used for the analysis?

1. Rank correlation
2. Biserial correlation
3. Tetrachoric correlation
4. Point biserial correlation

Options :

55317214201. 1

55317214202. 2

55317214203. 3

55317214204. 4

Question Number : 12 Question Id : 5531723566 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The value of relative density of mercury is

1. 13600 kg/m<sup>3</sup>
2. 13.6
3. 1
4. 1000 kg/m<sup>3</sup>

Options :

55317214205. 1

55317214206. 2

55317214207. 3

55317214208. 4

Question Number : 13 Question Id : 5531723567 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Surface tension has the same units as

1. Force per unit volume
2. Force per unit area
3. Force per unit length
4. Force per unit time

Options :

55317214209. 1

55317214210. 2

55317214211. 3

55317214212. 4



Question Number : 14 Question Id : 5531723568 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Pascal's law states that pressure at a point is equal in all directions in a

1. laminar flow
2. turbulent flow
3. critical flow
4. fluid at rest

Options :

55317214213. 1

55317214214. 2

55317214215. 3

55317214216. 4

Question Number : 15 Question Id : 5531723569 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which of the following measures discharge in both open channel and pipe?

1. Venturi meter
2. Orifice meter
3. Current meter
4. Pitot tube

Options :

55317214217. 1

55317214218. 2

55317214219. 3

55317214220. 4

Question Number : 16 Question Id : 5531723570 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

A hot wire anemometer is a device used for measuring

1. Viscosity
2. Pressure of gases
3. Velocity of gases
4. Wind velocity

Options :

55317214221. 1

55317214222. 2

55317214223. 3

55317214224. 4

Question Number : 17 Question Id : 5531723571 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical



Correct Marks : 4 Wrong Marks : 1

Two horizontal plates are placed 1.25 cm apart, the space between them being filled with oil of viscosity 14 poises. If upper plate is moved with a velocity of 2.5 m/s then the shear stress in oil is

1. 280 N/m<sup>2</sup>
2. 28 N/m<sup>2</sup>
3.  $7 \times 10^{-4}$  N/m<sup>2</sup>
4.  $7 \times 10^{-3}$  N/m<sup>2</sup>

Options :

- 55317214225. 1
- 55317214226. 2
- 55317214227. 3
- 55317214228. 4

Question Number : 18 Question Id : 5531723572 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

If the Froude number in open channel flow is less than 1.0, the flow is called

1. Critical flow
2. Super critical flow
3. Sub-critical flow
4. Steaming flow

Options :

- 55317214229. 1
- 55317214230. 2
- 55317214231. 3
- 55317214232. 4

Question Number : 19 Question Id : 5531723573 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

A pump is defined as a device which converts

1. Hydraulic energy into mechanical energy
2. Mechanical energy into hydraulic energy
3. Kinetic energy into mechanical energy
4. Electrical energy into mechanical energy

Options :

- 55317214233. 1
- 55317214234. 2
- 55317214235. 3
- 55317214236. 4

Question Number : 20 Question Id : 5531723574 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Cavitation can take place in case of

1. Pelton wheel
2. Krishak bandhu pump
3. Reciprocating pump
4. Centrifugal pump

Options :

55317214237. 1

55317214238. 2

55317214239. 3

55317214240. 4

Question Number : 21 Question Id : 5531723575 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The theory of unsteady flow towards a well in a confined aquifer  
was developed by

1. Theim
2. De Glee
3. Walton
4. Theis

Options :

55317214241. 1

55317214242. 2

55317214243. 3

55317214244. 4

Question Number : 22 Question Id : 5531723576 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Sensitivity analysis is used in

1. Appraisal
2. Forecasting / Evaluation
3. Implementation
4. Preparation of project

Options :

55317214245. 1

55317214246. 2

55317214247. 3

55317214248. 4

Question Number : 23 Question Id : 5531723577 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1



Arrange the following Government Schemes in increasing order of their date of launching

- a. Soil Health Card Scheme
- b. Solar Charkha Mission
- c. HRIDAY
- d. National Nutrition Mission

Correct order is

1. a, b, c, d
2. b, d, c, a
3. c, a, d, b
4. d, b, c, a

Options :

55317214249. 1  
55317214250. 2  
55317214251. 3  
55317214252. 4

Question Number : 24 Question Id : 5531723578 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which of the following is NOT an objective of Pradhan Mantri Krishi Sinchai Yojana ?

1. *Har khet ko pani*
2. Watershed management
3. Per drop more crop
4. Accelerated irrigation detriment programme

Options :

55317214253. 1  
55317214254. 2  
55317214255. 3  
55317214256. 4

Question Number : 25 Question Id : 5531723579 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The resource use efficiency in agriculture is measured by

1. Regression coefficient
2. Least cost combination
3. Summation of production elasticities
4. Ratio of opportunity cost to marginal value product

Options :

55317214257. 1  
55317214258. 2  
55317214259. 3



55317214260. 4

Question Number : 26 Question Id : 5531723580 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The line of same crop yield is known as

1. Isostere
2. Isohels
3. Isoquant
4. Isotech

Options :

55317214261. 1  
55317214262. 2  
55317214263. 3  
55317214264. 4

Question Number : 27 Question Id : 5531723581 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which of the following may probably be the better option to reduce excessive use of water in agriculture?

1. Rationalization of water pricing structure
2. Volumetric water supply only
3. Number of hours each farmer is permitted to use water from a water course only
4. Fixing up of area-cum-crop linked water rates only

Options :

55317214265. 1  
55317214266. 2  
55317214267. 3  
55317214268. 4

Question Number : 28 Question Id : 5531723582 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which of the following instruments is NOT used to decide when to irrigate?

1. Infrared thermometer
2. TDR
3. Tensiometer
4. Water meter

Options :

55317214269. 1  
55317214270. 2  
55317214271. 3

55317214272. 4

Question Number : 29 Question Id : 5531723583 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The moisture content at different depths of soil in the root zone at the start of irrigation was 10 cm. The field capacity of the soil of the root zone depth was 20 cm. Irrigation efficiency was 70%.

Peak period consumptive use rate was 0.5 cm/day. The design irrigation interval will be

1. 25 days
2. 20 days
3. 36 days
4. 29 days

Options :

55317214273. 1  
55317214274. 2  
55317214275. 3  
55317214276. 4

Question Number : 30 Question Id : 5531723584 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Among the following crops which one has the highest evapotranspiration (ET)?

1. Berseem
2. Rice
3. Potato
4. Peas

Options :

55317214277. 1  
55317214278. 2  
55317214279. 3  
55317214280. 4

Question Number : 31 Question Id : 5531723585 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Ratio of directly available water to the crop and water received at the field inlet is known as

1. Field application efficiency
2. Project efficiency
3. Water use efficiency
4. Water storage efficiency

Options :

55317214281. 1



55317214282. 2

55317214283. 3

55317214284. 4

Question Number : 32 Question Id : 5531723586 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

In siphon tube, if the effective head causing flow increased by four times then the discharge from the siphon tubes will

1. increase by 4 times
2. increase by 2 times
3. not change
4. increase by  $4^{\frac{3}{2}}$  times

Options :

55317214285. 1

55317214286. 2

55317214287. 3

55317214288. 4

Question Number : 33 Question Id : 5531723587 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Earthen channels should NOT ordinarily have side slopes steeper than

1. 0.5 : 1 (H : V)
2. 1 : 0.5 (H : V)
3. 1.5 : 1.5 (H : V)
4. 2 : 1 (H : V)

Options :

55317214289. 1

55317214290. 2

55317214291. 3

55317214292. 4

Question Number : 34 Question Id : 5531723588 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The commonly used method NOT adopted for measuring seepage loss in an existing canal is

1. Ponding
2. Inflow-outflow
3. Seepage Meter
4. Auger-hole

Options :

55317214293. 1

55317214294. 2



55317214295. 3

55317214296. 4

Question Number : 35 Question Id : 5531723589 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

If the depth of water in a stream is 1.5 m and velocities at different depths of flow were measured by current meter, then the mean velocity in a vertical plane can be determined through which of the following formulas?

1.  $\frac{1}{2} (V_{0.2} + V_{0.8})$

2.  $\frac{1}{3} (V_{0.2} + V_{0.6} + V_{0.8})$

3.  $\frac{1}{4} (V_{0.2} + 2V_{0.6} + V_{0.8})$

4.  $\frac{1}{6} (3V_{0.2} + 2V_{0.6} + V_{0.8})$

Options :

55317214297. 1

55317214298. 2

55317214299. 3

55317214300. 4

Question Number : 36 Question Id : 5531723590 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Among all kinds of rocks or subsoil, the best aquifers are deposits of

1. Gravel

2. Sand

3. Sandstone

4. Clay

Options :

55317214301. 1

55317214302. 2

55317214303. 3

55317214304. 4

Question Number : 37 Question Id : 5531723591 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which one of the following wells is NOT considered as a tube well?

1. Cavity type well
2. Strainer type well
3. Jetted well
4. Shrouded well

**Options :**

55317214305. 1  
55317214306. 2  
55317214307. 3  
55317214308. 4

**Question Number : 38 Question Id : 5531723592 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Which one of the following is NOT a common difficulty in rotary drilling?

1. Lost circulation
2. Straight holes
3. Bailing up
4. Stuck-up drill pipe

**Options :**

55317214309. 1  
55317214310. 2  
55317214311. 3  
55317214312. 4

**Question Number : 39 Question Id : 5531723593 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

To keep the sand movement and head losses to the minimum, the velocity through the individual openings of a well screen should be

1. 1 to 2.5 cm/sec
2. 3 to 7.5 cm/sec
3. 8.5 to 12.7 cm/sec
4. 15 to 18.5 cm/sec

**Options :**

55317214313. 1  
55317214314. 2  
55317214315. 3  
55317214316. 4

**Question Number : 40 Question Id : 5531723594 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**



Which one of the following indigenous water lifts found in southern and eastern India has maximum optimum lift?

1. Swing basket
2. Counter-poise bucket lift
3. Circular two bucket lift
4. Rope and bucket lift

Options :

55317214317. 1  
55317214318. 2  
55317214319. 3  
55317214320. 4

Question Number : 41 Question Id : 5531723595 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Friction factor in a pipe is how many times of coefficient of friction?

1. 2
2. 4
3.  $\frac{1}{2}$
4.  $\frac{1}{4}$

Options :

55317214321. 1  
55317214322. 2  
55317214323. 3  
55317214324. 4

Question Number : 42 Question Id : 5531723596 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which one of the following is NOT an expression for duty of irrigation water?

1. Area per unit rate of flow
2. Depth of water
3. Depth over unit area
4. Rate of flow

Options :

55317214325. 1  
55317214326. 2  
55317214327. 3  
55317214328. 4

Question Number : 43 Question Id : 5531723597 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The uniform longitudinal gradient with clay loam soil in border irrigation is kept as

1. 0.15 – 0.3 %
2. 0.40 – 0.65 %
3. 0.70 – 0.90 %
4. 0.95 – 1.0 %

Options :

55317214329. 1  
55317214330. 2  
55317214331. 3  
55317214332. 4

Question Number : 44 Question Id : 5531723598 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Operating pressure of rotating type sprinklers varies from

1. 2 to 7 kg / cm<sup>2</sup>
2. 7.5 to 10 kg / cm<sup>2</sup>
3. 11 to 13 kg / cm<sup>2</sup>
4. 14 to 18 kg / cm<sup>2</sup>

Options :

55317214333. 1  
55317214334. 2  
55317214335. 3  
55317214336. 4

Question Number : 45 Question Id : 5531723599 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Drip irrigation CANNOT be suitably used in soils with

1. Low intake rate
2. High intake rate
3. High void ratio
4. Low void ratio

Options :

55317214337. 1  
55317214338. 2  
55317214339. 3  
55317214340. 4

Question Number : 46 Question Id : 5531723600 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1



Discharge rate of emitters in drip usually varies from

1. 2 to 10 l / sec
2. 2 to 10 l / hr
3. 2 to 10 l / min
4. 2 to 10 l / day

Options :

- 55317214341. 1
- 55317214342. 2
- 55317214343. 3
- 55317214344. 4

Question Number : 47 Question Id : 5531723601 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Sub-surface drains remove

1. Capillary water only
2. Gravitational water only
3. Hygroscopic water only
4. Both gravitational and hygroscopic water

Options :

- 55317214345. 1
- 55317214346. 2
- 55317214347. 3
- 55317214348. 4

Question Number : 48 Question Id : 5531723602 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Drainage coefficient is the depth of water to be removed from an area in a period of

1. 12 hour
2. 6 hour
3. 24 hour
4. 10 hour

Options :

- 55317214349. 1
- 55317214350. 2
- 55317214351. 3
- 55317214352. 4

Question Number : 49 Question Id : 5531723603 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Interceptor drains are constructed

1. Perpendicular to the direction of surface flow
2. Across the field boundary
3. Along the direction of surface flow
4. Along the field slope

Options :

- 55317214353. 1
- 55317214354. 2
- 55317214355. 3
- 55317214356. 4

Question Number : 50 Question Id : 5531723604 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

For surface drainage, the maximum bed length can be from

1. 100 to 300 m
2. 100 to 300 cm
3. 100 to 300 km
4. 0 to 50 m

Options :

- 55317214357. 1
- 55317214358. 2
- 55317214359. 3
- 55317214360. 4

Question Number : 51 Question Id : 5531723605 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which of the following is NOT an essential micro-nutrient?

1. Boron
2. Silicon
3. Iron
4. Nickel

Options :

- 55317214361. 1
- 55317214362. 2
- 55317214363. 3
- 55317214364. 4

Question Number : 52 Question Id : 5531723606 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1



Which of the following rice varieties is suitable for rainfed shallow low lands?

1. Rasi
2. Kalinga - 3
3. Mahalakshmi
4. Khandagiri

**Options :**

- 55317214365. 1
- 55317214366. 2
- 55317214367. 3
- 55317214368. 4

**Question Number : 53 Question Id : 5531723607 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The number of chromosome pairs in durum wheat is

1. 7
2. 14
3. 21
4. 28

**Options :**

- 55317214369. 1
- 55317214370. 2
- 55317214371. 3
- 55317214372. 4

**Question Number : 54 Question Id : 5531723608 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The optimum seed rate of timely sown bold-seeded chickpea is

1. 80 – 85 kg/ha
2. 50 – 60 kg/ha
3. 100 – 120 kg/ha
4. 65 – 75 kg/ha

**Options :**

- 55317214373. 1
- 55317214374. 2
- 55317214375. 3
- 55317214376. 4

**Question Number : 55 Question Id : 5531723609 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The nutrient required for pollen germination and pollen tube growth is

1. Copper
2. Manganese
3. Iron
4. Boron

Options :

- 55317214377. 1
- 55317214378. 2
- 55317214379. 3
- 55317214380. 4

Question Number : 56 Question Id : 5531723610 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

White-rust in rapeseed-mustard is caused by

1. *Albugo candida*
2. *Alternaria brassicae*
3. *Plasmodiphora brassicae*
4. *Lipaphis erysim*

Options :

- 55317214381. 1
- 55317214382. 2
- 55317214383. 3
- 55317214384. 4

Question Number : 57 Question Id : 5531723611 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The terminology *Eksali* is used in which crop?

1. Sugar beet
2. Jute
3. Sugarcane
4. Cotton

Options :

- 55317214385. 1
- 55317214386. 2
- 55317214387. 3
- 55317214388. 4

Question Number : 58 Question Id : 5531723612 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1



For small drainage projects, the value of drainage coefficient is taken as

1. 6 to 25 mm / day
2. 10 to 15 mm / day
3. 6 to 25 cm / day
4. 10 to 15 cm / day

**Options :**

- 55317214389. 1
- 55317214390. 2
- 55317214391. 3
- 55317214392. 4

Question Number : 59 Question Id : 5531723613 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The safe moisture storage of groundnut is

1. 8 – 9 %
2. 12 – 15 %
3. 25 – 30 %
4. 17 – 22 %

**Options :**

- 55317214393. 1
- 55317214394. 2
- 55317214395. 3
- 55317214396. 4

Question Number : 60 Question Id : 5531723614 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Khaira disease of rice is due to

1. Iron deficiency
2. Zinc deficiency
3. Sulphur deficiency
4. Calcium deficiency

**Options :**

- 55317214397. 1
- 55317214398. 2
- 55317214399. 3
- 55317214400. 4

Question Number : 61 Question Id : 5531723615 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Wavelength of photosynthetically active radiator ranged between

1. 600 – 900 nm
2. 900 – 1500 nm
3. 200 – 400 nm
4. 400 – 700 nm

Options :

- 55317214401. 1
- 55317214402. 2
- 55317214403. 3
- 55317214404. 4

Question Number : 62 Question Id : 5531723616 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which of the following is a C<sub>3</sub> plant?

1. Maize
2. Soybean
3. Sugarcane
4. Sorghum

Options :

- 55317214405. 1
- 55317214406. 2
- 55317214407. 3
- 55317214408. 4

Question Number : 63 Question Id : 5531723617 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The powerhouse of the cell is

1. Vacuole
2. Plasma membrane
3. Mitochondria
4. Golgi body

Options :

- 55317214409. 1
- 55317214410. 2
- 55317214411. 3
- 55317214412. 4

Question Number : 64 Question Id : 5531723618 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1



Which organelle is also known as 'suicide bag' of the cell?

1. ER
2. Vacuole
3. Lysosome
4. Plastid

**Options :**

- 55317214413. 1
- 55317214414. 2
- 55317214415. 3
- 55317214416. 4

**Question Number : 65 Question Id : 5531723619 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following scientist/scientists proposed the cell theory?

1. Robert Brown
2. Leeuwenhoek
3. Schleiden and Schwann
4. Schleiden, Schwann and Virchow

**Options :**

- 55317214417. 1
- 55317214418. 2
- 55317214419. 3
- 55317214420. 4

**Question Number : 66 Question Id : 5531723620 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

PURA was proposed by

1. Dr. APJ Abdul Kalam
2. Sh. Atal Bihari Vajpayee
3. Dr. Manmohan Singh
4. Mahatma Gandhi

**Options :**

- 55317214421. 1
- 55317214422. 2
- 55317214423. 3
- 55317214424. 4

**Question Number : 67 Question Id : 5531723621 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Pusa Ujwal is a variety

1. Brinjal
2. Carrot
3. Bitter Gourd
4. Ash Gourd

Options :

55317214425. 1

55317214426. 2

55317214427. 3

55317214428. 4

Question Number : 68 Question Id : 5531723622 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Golden revolution refers to

1. Fruit production
2. Bio-diesel production
3. Overall production
4. Potato production

Options :

55317214429. 1

55317214430. 2

55317214431. 3

55317214432. 4

Question Number : 69 Question Id : 5531723623 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which of the following is a source of vitamin A?

1. Pea
2. Chilli
3. Tomato
4. Carrot

Options :

55317214433. 1

55317214434. 2

55317214435. 3

55317214436. 4

Question Number : 70 Question Id : 5531723624 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1



The name of soil test that is most frequently used to estimate micronutrient cations in soils is

1. OLSEN'S method
2. DTPA method
3. Bray's method
4. Hot-water soluble method

**Options :**

- 55317214437. 1
- 55317214438. 2
- 55317214439. 3
- 55317214440. 4

**Question Number : 71 Question Id : 5531723625 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Post emergence herbicide used for controlling weeds in Rice is

1. Bispyribac-sodium
2. Pendimethalin
3. Imazethapyr
4. Atrazine

**Options :**

- 55317214441. 1
- 55317214442. 2
- 55317214443. 3
- 55317214444. 4

**Question Number : 72 Question Id : 5531723626 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following machines is NOT good for zero-till planting of crops under surface residue conditions?

1. Turbo Happy Seeder
2. Rotary powered disc drill
3. Tyne opener zero-till drill
4. Double disc opener drill

**Options :**

- 55317214445. 1
- 55317214446. 2
- 55317214447. 3
- 55317214448. 4

**Question Number : 73 Question Id : 5531723627 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Any substance in a herbicide formulation to improve herbicidal activity is called

1. Active ingredient
2. Adjuvant
3. Acid equivalent
4. Antidote

**Options :**

- 55317214449. 1
- 55317214450. 2
- 55317214451. 3
- 55317214452. 4

**Question Number : 74 Question Id : 5531723628 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

In neem coated urea, the quantity of neem oil used per tonne of urea is

1. 30 gm
2. 500 gm
3. 1800 gm
4. 3000 gm

**Options :**

- 55317214453. 1
- 55317214454. 2
- 55317214455. 3
- 55317214456. 4

**Question Number : 75 Question Id : 5531723629 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Which one of the following machines is suitable for sowing dryland areas?

1. Aqua-ferti seed drill
2. Happy seeder
3. Hydro-tiller
4. Rotary powered disc drill

**Options :**

- 55317214457. 1
- 55317214458. 2
- 55317214459. 3
- 55317214460. 4

**Question Number : 76 Question Id : 5531723630 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**



Soil matrix is also known as

1. Soil pores
2. Soil air
3. Soil solids
4. Soil water

Options :

55317214461. 1

55317214462. 2

55317214463. 3

55317214464. 4

Question Number : 77 Question Id : 5531723631 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which of the following elements become toxic to plants under water logged conditions?

1. N and K
2. N and P
3. B and Mo
4. Fe and Mn

Options :

55317214465. 1

55317214466. 2

55317214467. 3

55317214468. 4

Question Number : 78 Question Id : 5531723632 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which of the following is NOT a 1 : 1 type clay mineral ?

1. Kaolinite
2. Vermiculite
3. Halloysite
4. Anauxite

Options :

55317214469. 1

55317214470. 2

55317214471. 3

55317214472. 4

Question Number : 79 Question Id : 5531723633 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Ripening of mango fruit is hastened by the use of

1. Gibberellic acid
2. I.B.A.
3. Ethrel
4. N.A.A.

Options :

55317214473. 1  
55317214474. 2  
55317214475. 3  
55317214476. 4

Question Number : 80 Question Id : 5531723634 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The new Indian Agricultural Research Institute was recently inaugurated at

1. Ranchi
2. Varanasi
3. Jhansi
4. Jorhat

Options :

55317214477. 1  
55317214478. 2  
55317214479. 3  
55317214480. 4

Question Number : 81 Question Id : 5531723635 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The day-to-day activities of a watershed development project are carried out by the

1. Watershed development team
2. Watershed committee
3. Panchayat
4. User group

Options :

55317214481. 1  
55317214482. 2  
55317214483. 3  
55317214484. 4

Question Number : 82 Question Id : 5531723636 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1



Community based watershed development programme in India was initially undertaken by the Government of India with the launch of

1. Drought Prone Area Programme
2. Desert Development Programme
3. NWDPR
4. Flood Prone Rivers Project

**Options :**

- 55317214485. 1
- 55317214486. 2
- 55317214487. 3
- 55317214488. 4

**Question Number : 83 Question Id : 5531723637 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

Sukhomajri Watershed is located at

1. Chandigarh
2. Dehradun
3. Bellary
4. Kota

**Options :**

- 55317214489. 1
- 55317214490. 2
- 55317214491. 3
- 55317214492. 4

**Question Number : 84 Question Id : 5531723638 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

Which one of the following is NOT a correct statement?

1. Watershed is a topographically delineated hydrological unit of area which drains runoff resulting from precipitation passed through a predetermined point
2. Watershed degradation is the loss of production potential of the land and water in a watershed
3. Administrative boundaries may not always coincide with watershed boundaries
4. The workable size of a watershed is decided on the basis of the topography of an area

**Options :**

- 55317214493. 1
- 55317214494. 2
- 55317214495. 3
- 55317214496. 4

Question Number : 85 Question Id : 5531723639 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1

Which one of the following options is the correct chronological order of implementation of programs given below?

- a. National Rainfed Area Authority
- b. Desert Development Programme
- c. NWDPPRA
- d. Integrated Watershed Development Programme

- 1. b, c, d, a
- 2. b, d, c, a
- 3. a, d, c, b
- 4. d, a, b, c

Options :

- 55317214497. 1
- 55317214498. 2
- 55317214499. 3
- 55317214500. 4

Question Number : 86 Question Id : 5531723640 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1

The shape of natural grass water ways is

- 1. Trapezoidal
- 2. Triangular
- 3. Parabolic
- 4. Rectangular

Options :

- 55317214501. 1
- 55317214502. 2
- 55317214503. 3
- 55317214504. 4

Question Number : 87 Question Id : 5531723641 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1

Gully Erosion is the advance stage of

- 1. Sheet Erosion
- 2. Rill Erosion
- 3. Raindrop Erosion
- 4. Splash Erosion

Options :

- 55317214505. 1
- 55317214506. 2
- 55317214507. 3



55317214508. 4

Question Number : 88 Question Id : 5531723642 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Kinetic energy of raindrop depends on

1. Rainfall Intensity only
2. Terminal velocity of raindrop only
3. Drop diameter only
4. All above factors

Options :

55317214509. 1

55317214510. 2

55317214511. 3

55317214512. 4

Question Number : 89 Question Id : 5531723643 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Shoulder bund is provided on bench terraces

1. Sloping Inward
2. Sloping Outward
3. Level Top
4. None of these

Options :

55317214513. 1

55317214514. 2

55317214515. 3

55317214516. 4

Question Number : 90 Question Id : 5531723644 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Chute spillways are used in

1. Flat slope only
2. Mild slope only
3. Steep slope only
4. All type of slopes

Options :

55317214517. 1

55317214518. 2

55317214519. 3

55317214520. 4

Question Number : 91 Question Id : 5531723645 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1

Clay Minerals having highest C.E.C. are

1. Vermiculite
2. Mica
3. Montmorillonite
4. Chlorite

Options :

- 55317214521. 1
- 55317214522. 2
- 55317214523. 3
- 55317214524. 4

Question Number : 92 Question Id : 5531723646 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1

Most suitable water evaporation inhibitor is

1. Sulphuric acid
2. Cetyl alcohol
3. Ethyl alcohol
4. Methyl alcohol

Options :

- 55317214525. 1
- 55317214526. 2
- 55317214527. 3
- 55317214528. 4

Question Number : 93 Question Id : 5531723647 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1

According to ISSS, the size of clay particles in mm should be

1.  $< 0.002$  mm
2.  $> 0.002$  mm
3.  $0.02 - 0.002$  mm
4.  $< 0.0002$  mm

Options :

- 55317214529. 1
- 55317214530. 2
- 55317214531. 3
- 55317214532. 4

Question Number : 94 Question Id : 5531723648 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1



Infiltration rate is lowest in

1. Silty soil
2. Clayey soil
3. Sandy soil
4. Loamy soil

Options :

55317214533. 1

55317214534. 2

55317214535. 3

55317214536. 4

Question Number : 95 Question Id : 5531723649 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Infiltration rate curve after a long time becomes

1. Horizontal
2. Vertical
3. Asymptotic to time axis
4. Asymptotic to rate axis

Options :

55317214537. 1

55317214538. 2

55317214539. 3

55317214540. 4

Question Number : 96 Question Id : 5531723650 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The movement of water takes place through the soil, when

1.  $\frac{d\phi}{dx} = 0$
2.  $\frac{d\phi}{dx} \neq 0$
3.  $\frac{d\phi}{dx} > 0$
4.  $\frac{d\phi}{dx} < 0$

Options :

55317214541. 1

55317214542. 2

55317214543. 3

55317214544. 4

Question Number : 97 Question Id : 5531723651 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1

Atterberg limit is associated with

1. Soil consistency
2. Soil Fertility
3. Irrigation
4. Crop yield

Options :

- 55317214545. 1
- 55317214546. 2
- 55317214547. 3
- 55317214548. 4

Question Number : 98 Question Id : 5531723652 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1

Mechanical analysis of soil makes use of

1. Fick's law
2. Ohm's law
3. Newton's law
4. Stoke's law

Options :

- 55317214549. 1
- 55317214550. 2
- 55317214551. 3
- 55317214552. 4

Question Number : 99 Question Id : 5531723653 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1

Humic acid is soluble

1. in alkali but not in acid
2. in both alkali and acid
3. in acid but not in alkali
4. neither in acid nor in alkali

Options :

- 55317214553. 1
- 55317214554. 2
- 55317214555. 3
- 55317214556. 4

Question Number : 100 Question Id : 5531723654 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1



The element which is not considered as fertilizer nutrient is

1. Sulphur
2. Nitrogen
3. Carbon
4. Zinc

**Options :**

- 55317214557. 1
- 55317214558. 2
- 55317214559. 3
- 55317214560. 4

**Question Number : 101 Question Id : 5531723655 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Isobaths are

1. lines joining places having same evapotranspiration depth
2. lines joining places having equal water depth
3. lines having equal rainfall depth
4. lines having equal evaporation

**Options :**

- 55317214561. 1
- 55317214562. 2
- 55317214563. 3
- 55317214564. 4

**Question Number : 102 Question Id : 5531723656 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The consumptive use represents

1. Evaporation
2. Transpiration
3. Evapotranspiration
4. Evapotranspiration and minor quantity required for plant metabolism

**Options :**

- 55317214565. 1
- 55317214566. 2
- 55317214567. 3
- 55317214568. 4

**Question Number : 103 Question Id : 5531723657 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Irrigation water requirement is minimum in

1. Border Irrigation
2. Drip Irrigation
3. Furrow Irrigation
4. Ring basin Irrigation

Options :

55317214569. 1  
55317214570. 2  
55317214571. 3  
55317214572. 4

Question Number : 104 Question Id : 5531723658 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Sorption refers to

1. Reduction of water content in the soil
2. Rising of water content in the soil
3. Increase in infiltration
4. Decrease in infiltration

Options :

55317214573. 1  
55317214574. 2  
55317214575. 3  
55317214576. 4

Question Number : 105 Question Id : 5531723659 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The ratio of actual-evapotranspiration to potential-  
evapotranspiration is in the range of

1. 6.0 – 8.0
2. 3.0 – 5.0
3. 0.4 – 1.2
4. 1.8 – 2.5

Options :

55317214577. 1  
55317214578. 2  
55317214579. 3  
55317214580. 4

Question Number : 106 Question Id : 5531723660 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1



Desorption indicates

1. rising of water content in soil
2. decrease in infiltration rate
3. increase in infiltration rate
4. falling of water content in soil

Options :

- 55317214581. 1
- 55317214582. 2
- 55317214583. 3
- 55317214584. 4

Question Number : 107 Question Id : 5531723661 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The indicator plant for determining permanent wilting is

1. Cauliflower
2. Safflower
3. Sunflower
4. Jowar

Options :

- 55317214585. 1
- 55317214586. 2
- 55317214587. 3
- 55317214588. 4

Question Number : 108 Question Id : 5531723662 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Available moisture is moisture

1. At field capacity
2. At wilting point
3. In between field capacity and permanent wilting point
4. At time of irrigation

Options :

- 55317214589. 1
- 55317214590. 2
- 55317214591. 3
- 55317214592. 4

Question Number : 109 Question Id : 5531723663 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

At field capacity, the value of pF is

1. 2.5
2. 1.5
3. 4.5
4. 2.0

**Options :**

- 55317214593. 1
- 55317214594. 2
- 55317214595. 3
- 55317214596. 4

**Question Number : 110 Question Id : 5531723664 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

The soil psychrometer does not work well, if soil is

1. cracked
2. wetter than 5 kpa
3. dryer than about -5000 kpa
4. dryer than about -1000 kpa

**Options :**

- 55317214597. 1
- 55317214598. 2
- 55317214599. 3
- 55317214600. 4

**Question Number : 111 Question Id : 5531723665 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

Single grain structure is present in

1. Sandy soil
2. Silty soil
3. Clayey soil
4. Clay-loam soil

**Options :**

- 55317214601. 1
- 55317214602. 2
- 55317214603. 3
- 55317214604. 4

**Question Number : 112 Question Id : 5531723666 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**



Red colour of soil is due to

1. Hematite
2. Goethite
3. Glauconite
4. Maghemite

**Options :**

- 55317214605. 1
- 55317214606. 2
- 55317214607. 3
- 55317214608. 4

**Question Number : 113 Question Id : 5531723667 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Soil structure in which natural cleavage planes are absent or indistinct

1. Simple structure
2. Granular structure
3. Subangular structure
4. Angular structure

**Options :**

- 55317214609. 1
- 55317214610. 2
- 55317214611. 3
- 55317214612. 4

**Question Number : 114 Question Id : 5531723668 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

If bulk density of the soil is 1.3 g/cc and its porosity is 40%, then its particle density would be

1. 2.17 g/cc
2. 3.25 g/cc
3. 0.75 g/cc
4. 5.2 g/cc

**Options :**

- 55317214613. 1
- 55317214614. 2
- 55317214615. 3
- 55317214616. 4

**Question Number : 115 Question Id : 5531723669 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

If kinematic viscosity of a fluid is 0.067 Stokes and its dynamic viscosity is 0.08 Poise, then its density (in g/cc) will be

1. 2.4
2. 1.2
3. 1.8
4. 4.2

**Options :**

- 55317214617. 1
- 55317214618. 2
- 55317214619. 3
- 55317214620. 4

**Question Number : 116 Question Id : 5531723670 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Upper limit of available moisture range in soil water - plant relation is

1. Field capacity
2. Moisture equivalent
3. Saturation capacity
4. Radially available moisture

**Options :**

- 55317214621. 1
- 55317214622. 2
- 55317214623. 3
- 55317214624. 4

**Question Number : 117 Question Id : 5531723671 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The dielectric constant of water is

1. 4-8
2. 81
3. 1
4. 51

**Options :**

- 55317214625. 1
- 55317214626. 2
- 55317214627. 3
- 55317214628. 4

**Question Number : 118 Question Id : 5531723672 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**



Darcy's law is valid for

1. Any flow
2. Laminar flow
3. Turbulent flow
4. Varied flow

Options :

55317214629. 1

55317214630. 2

55317214631. 3

55317214632. 4

Question Number : 119 Question Id : 5531723673 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

At 25°C temperature, the surface tension coefficient of air water interface is about

1. 13.6 N/m
2. 13.6 dyne/cm
3. 72.1 dyne/cm
4. 75.6 N/m

Options :

55317214633. 1

55317214634. 2

55317214635. 3

55317214636. 4

Question Number : 120 Question Id : 5531723674 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Intrinsic permeability

1. Depends on properties of fluid
2. Is independent of properties of fluid
3. Is independent of properties of porous media
4. Is independent of properties of fluid and porous media

Options :

55317214637. 1

55317214638. 2

55317214639. 3

55317214640. 4

Question Number : 121 Question Id : 5531723675 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The value of equivalent hydraulic conductivity for horizontal flow through layered soil having thickness  $d_1$ ,  $d_2$  &  $d_3$  and hydraulic conductivity  $K_1$ ,  $K_2$  &  $K_3$  respectively is

1.  $\frac{K_1d_1 + K_2d_2 + K_3d_3}{d_1 + d_2 + d_3}$

2.  $\frac{K_1d_1 + K_3d_3}{d_1 + d_3}$

3.  $\frac{d_1 + d_2 + d_3}{\frac{d_1}{K_1} + \frac{d_2}{K_2} + \frac{d_3}{K_3}}$

4.  $\frac{d_1 + d_2 + d_3}{K_1 + K_2 + K_3}$

Options :

55317214641. 1

55317214642. 2

55317214643. 3

55317214644. 4

Question Number : 122 Question Id : 5531723676 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Crop least tolerant to moisture stress is

1. Wheat

2. Okra

3. Potato

4. Maize

Options :

55317214645. 1

55317214646. 2

55317214647. 3

55317214648. 4

Question Number : 123 Question Id : 5531723677 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

For Irrigation water, RSC must be

1. Less than 2 ds/m

2. Less than 1.25 meq/l

3. More than 1.25 meq/l

4. More than 2 ds/m

Options :

55317214649. 1

55317214650. 2



55317214651. 3

55317214652. 4

**Question Number : 124 Question Id : 5531723678 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The moisture content (%) at field capacity for clayey soil is

1. 25-40
2. 80-90
3. 50-60
4. 5-10

**Options :**

55317214653. 1

55317214654. 2

55317214655. 3

55317214656. 4

**Question Number : 125 Question Id : 5531723679 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Which out of the following is longest stage of crop growth?

1. Early stage
2. Mid stage
3. Late stage
4. Harvesting stage

**Options :**

55317214657. 1

55317214658. 2

55317214659. 3

55317214660. 4

**Question Number : 126 Question Id : 5531723680 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

India is blessed with a large network of rivers comprising

1. 12 major and 48 medium river basin
2. 26 major and 44 medium river basin
3. 30 major and 30 medium river basin
4. 40 major and 30 medium river basin

**Options :**

55317214661. 1

55317214662. 2

55317214663. 3

55317214664. 4

Question Number : 127 Question Id : 5531723681 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1

The utilizable ground water potential of India is

1. 43.2 M ha m
2. 83.2 M ha m
3. 63.2 M ha m
4. 93.2 M ha m

Options :

- 55317214665. 1
- 55317214666. 2
- 55317214667. 3
- 55317214668. 4

Question Number : 128 Question Id : 5531723682 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1

The total ground water potential of India is

1. 385 M ha m
2. 185 M ha m
3. 285 M ha m
4. 85 M ha m

Options :

- 55317214669. 1
- 55317214670. 2
- 55317214671. 3
- 55317214672. 4

Question Number : 129 Question Id : 5531723683 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1

Owing to topographic, hydrologic and other constraints, the utilizable resource is

1. 10 M ha m
2. 160 M ha m
3. 70 M ha m
4. 80 M ha m

Options :

- 55317214673. 1
- 55317214674. 2
- 55317214675. 3
- 55317214676. 4

Question Number : 130 Question Id : 5531723684 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1



Total Irrigation potential in India is

1. 220 M ha m
2. 140 M ha m
3. 420 M ha m
4. 620 M ha m

Options :

- 55317214677. 1
- 55317214678. 2
- 55317214679. 3
- 55317214680. 4

Question Number : 131 Question Id : 5531723685 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The water use efficiency in Indian irrigation projects is about

1. 12%
2. 5%
3. 95%
4. 45%

Options :

- 55317214681. 1
- 55317214682. 2
- 55317214683. 3
- 55317214684. 4

Question Number : 132 Question Id : 5531723686 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The rates of water charged for different projects within a state are fixed by

1. Central Government
2. State Government
3. Both Central and State Government
4. Gram Panchayats

Options :

- 55317214685. 1
- 55317214686. 2
- 55317214687. 3
- 55317214688. 4

Question Number : 133 Question Id : 5531723687 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Orographic precipitation is associated to

1. Equator region
2. Gangetic delta
3. Coastal areas
4. Mountainous region

Options :

- 55317214689. 1
- 55317214690. 2
- 55317214691. 3
- 55317214692. 4

Question Number : 134 Question Id : 5531723688 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

India adopted National Water Policy in

1. 1990
2. 1995
3. 1980
4. 1987

Options :

- 55317214693. 1
- 55317214694. 2
- 55317214695. 3
- 55317214696. 4

Question Number : 135 Question Id : 5531723689 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

For estimating peak rate of flood for design of structures, in absence of any data, the value of  $\phi$ -index is taken as

1. 1.0 cm/hr
2. 0.1 m/hr
3. 0.1 mm/hr
4. 0.1 cm/hr

Options :

- 55317214697. 1
- 55317214698. 2
- 55317214699. 3
- 55317214700. 4

Question Number : 136 Question Id : 5531723690 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1



Irrigation type in which water is applied below ground surface by maintaining an artificial water table at some depth, depending upon the soil texture and the depth of the plant roots is

1. Surface irrigation
2. Sub irrigation
3. Border irrigation
4. Check Basin irrigation

**Options :**

- 55317214701. 1
- 55317214702. 2
- 55317214703. 3
- 55317214704. 4

**Question Number : 137 Question Id : 5531723691 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

A plot of rainfall intensity versus time is called

1. Hydrograph
2. Man Curve
3. Hyetograph
4. Isohyet

**Options :**

- 55317214705. 1
- 55317214706. 2
- 55317214707. 3
- 55317214708. 4

**Question Number : 138 Question Id : 5531723692 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

Soil erodibility is a

1. Dynamic process
2. Static process
3. Both Dynamic & Static processes
4. None of these

**Options :**

- 55317214709. 1
- 55317214710. 2
- 55317214711. 3
- 55317214712. 4

**Question Number : 139 Question Id : 5531723693 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

Volume of 20-ha-m means

1.  $2 \times 10^{11} \text{ cm}^3$
2.  $2 \times 10^{09} \text{ cm}^3$
3.  $2 \times 10^{13} \text{ cm}^3$
4.  $2 \times 10^{20} \text{ cm}^3$

Options :

55317214713. 1  
55317214714. 2  
55317214715. 3  
55317214716. 4

Question Number : 140 Question Id : 5531723694 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The discharge Q over rectangular weir is calculated by

1.  $Q = 1.77 \times L \times H^{\frac{3}{2}}$
2.  $Q = 1.77 / (L \times H^{\frac{3}{2}})$
3.  $Q = (1.77 - L) / H^{\frac{3}{2}}$
4.  $Q = (1.77 + L) / H^{\frac{3}{2}}$

Options :

55317214717. 1  
55317214718. 2  
55317214719. 3  
55317214720. 4

Question Number : 141 Question Id : 5531723695 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Soil detachment is dependent upon

1. Soil roughness
2. Soil slope
3. Organic matter
4. Soil pH

Options :

55317214721. 1  
55317214722. 2  
55317214723. 3  
55317214724. 4

Question Number : 142 Question Id : 5531723696 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1



1 cm rainfall excess over 1 sq.km basin area, forms the direct runoff volume equal to

1.  $10^4 \text{ m}^3$
2.  $10^3 \text{ m}^3$
3.  $10^6 \text{ m}^3$
4.  $10^2 \text{ m}^3$

**Options :**

55317214725. 1  
55317214726. 2  
55317214727. 3  
55317214728. 4

**Question Number : 143 Question Id : 5531723697 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The shape of falling limb is dependent on

1. Rainfall characteristics only
2. Watershed characteristics
3. Rainfall & watershed characteristics
4. Quantity of rainfall

**Options :**

55317214729. 1  
55317214730. 2  
55317214731. 3  
55317214732. 4

**Question Number : 144 Question Id : 5531723698 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The base flow is separated from hydrograph to obtain

1. Direct runoff
2. Interflow
3. Excess runoff
4. Base line slope

**Options :**

55317214733. 1  
55317214734. 2  
55317214735. 3  
55317214736. 4

**Question Number : 145 Question Id : 5531723699 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

What kind of effect on the runoff coefficient can be noticed by the imperviousness of drainage basin?

1. It increases
2. It decreases
3. It remains constant
4. It may increase or decrease depending upon the type of the rain

Options :

- 55317214737. 1
- 55317214738. 2
- 55317214739. 3
- 55317214740. 4

Question Number : 146 Question Id : 5531723700 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Hydrologic simulation is the representation of a hydrologic processes by

1. a set of mathematical equations solved on a computer
2. a scale model in the field
3. analog model in the lab
4. photography of study area

Options :

- 55317214741. 1
- 55317214742. 2
- 55317214743. 3
- 55317214744. 4

Question Number : 147 Question Id : 5531723701 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Basin lag is the distance measured from the outlet to the

1. opposite point of the basin centroid along the main stream
2. remotest point of drainage basin
3. ridge point
4. diagonal direction of basin

Options :

- 55317214745. 1
- 55317214746. 2
- 55317214747. 3
- 55317214748. 4

Question Number : 148 Question Id : 5531723702 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1



Curve number method was developed by assuming initial abstraction equal to

1. 0.5 S
2. 0.4 S
3. 0.1 S
4. 0.2 S

**Options :**

- 55317214749. 1
- 55317214750. 2
- 55317214751. 3
- 55317214752. 4

**Question Number : 149 Question Id : 5531723703 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Direct runoff is equal to

1. Surface runoff
2. Surface runoff + inter flow
3. Subsurface runoff + interflow
4. Rainfall + Base flow

**Options :**

- 55317214753. 1
- 55317214754. 2
- 55317214755. 3
- 55317214756. 4

**Question Number : 150 Question Id : 5531723704 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

A rainy day is defined as the day when

1. 2.5 mm or more rainfall is recorded
2. Less than 2.5 mm rainfall is recorded
3. 25 mm or more rainfall is recorded
4. Less than 25 mm rainfall is recorded

**Options :**

- 55317214757. 1
- 55317214758. 2
- 55317214759. 3
- 55317214760. 4

**Question Number : 151 Question Id : 5531723705 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

From a given method which method is not used for estimation of missing rainfall record?

1. Arithmetic mean method
2. Ratio method
3. Arithmetic unweighted mean method
4. Normal ratio method

**Options :**

- 55317214761. 1
- 55317214762. 2
- 55317214763. 3
- 55317214764. 4

**Question Number : 152 Question Id : 5531723706 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Drop structures are designed to handle the peak discharge rate for the return period of

1. 25 to 50 years
2. 10 to 15 years
3. 100 years
4. 200 years

**Options :**

- 55317214765. 1
- 55317214766. 2
- 55317214767. 3
- 55317214768. 4

**Question Number : 153 Question Id : 5531723707 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

5-days antecedent rainfall under growing season for AMC-II is

1. from 1.4 to 2.1
2. Less than 0.5
3. More than 3.0
4. from 1.1 to 1.3

**Options :**

- 55317214769. 1
- 55317214770. 2
- 55317214771. 3
- 55317214772. 4

**Question Number : 154 Question Id : 5531723708 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**



Drop-inlet spillways are constructed for

1. Water detention along the gully bed
2. Controlling water velocity
3. Creating silt deposit
4. Both, water detention along the gully bed and controlling water velocity

**Options :**

- 55317214773. 1
- 55317214774. 2
- 55317214775. 3
- 55317214776. 4

**Question Number : 155 Question Id : 5531723709 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

For cloud formation, cooling of moist air mass is carried out by the process of

1. Non adiabatic cooling
2. Adiabatic cooling
3. Conduction cooling
4. Convection cooling

**Options :**

- 55317214777. 1
- 55317214778. 2
- 55317214779. 3
- 55317214780. 4

**Question Number : 156 Question Id : 5531723710 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Relief aspect of drainage basin pertains to

1. Channel gradient
2. Drainage density and stream frequency
3. Both, channel gradient and drainage density and stream frequency
4. Runoff potential

**Options :**

- 55317214781. 1
- 55317214782. 2
- 55317214783. 3
- 55317214784. 4

**Question Number : 157 Question Id : 5531723711 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Stream order

1. is a dimensionless term
2. has dimension "L"
3. has dimension "%"
4. is both a dimensionless term and has dimension as %

Options :

- 55317214785. 1
- 55317214786. 2
- 55317214787. 3
- 55317214788. 4

Question Number : 158 Question Id : 5531723712 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The flow contributing area of 2nd order stream is

1. Higher than 3rd order stream
2. Higher than 4th order stream
3. Less than 1st order stream
4. Less than 3rd order, but higher than 1<sup>st</sup> order stream

Options :

- 55317214789. 1
- 55317214790. 2
- 55317214791. 3
- 55317214792. 4

Question Number : 159 Question Id : 5531723713 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The value of elongation ratio is

1. 0.1 to 0.5
2. 0.6 to 1.0
3. 1.1 to 1.5
4. 2.0 to 2.1

Options :

- 55317214793. 1
- 55317214794. 2
- 55317214795. 3
- 55317214796. 4

Question Number : 160 Question Id : 5531723714 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1



Drought associated with the effect of period of precipitation shortfalls on surface or subsurface water supply refers to

1. Meteorological drought
2. Hydrological drought
3. Socio-economic drought
4. Agricultural drought

**Options :**

55317214797. 1

55317214798. 2

55317214799. 3

55317214800. 4