## VIDEO COURSES <br> for Government Exams

From the oldest and most trusted name in Exam Preparation which gave us Career Power, Bankersadda, Sscadda, here is the latest offering - Video Courses that are tailor-made for the Govt. Job aspirants of digital India. Various banking and SSC exams are conducted online with regular changes to exam pattern and level of questions. We understand the changing needs of the students and have devised a unique solution, making preparation easy, cost-effective and efficient.

Video courses for Banking and SSC consist of exhaustive video lectures for government exams. We offer these courses in three variants: Online Streaming, SD Card and Android Tab + SD-Card. The SD Card can be run on your personal android device as well. The video courses will run on the Adda247 mobile app, the number one App for Bank and SSC exam preparation.


## Banking Courses

IBPS PO PreIBPS PO Complete KitRRB Mains Complete Kit(D) IBPS PO Pre + Mains

IBPS PO: Quantitative Aptitude
D IBPS RRB Pre - Quant + Reasoning

## SSC Courses

IB ACIO (Tier I) + SSC Complete KIT
## Solutions

S1. Ans.(d)
Sol. $448 \div 28 \times 5$
$=16 \times 5=80$
S2. Ans.(d)
Sol. $1680 \div 15 \times 5$
$=112 \times 5=560$

S3. Ans.(d)
Sol. $5238-6630+7154-2205$
$=12392-8835=3557 \approx 3558$

S4. Ans.(e)
Sol. $\frac{460 \times 850}{100}+2.665 \times 6284-1486$
$=3910-1486+2.66 \times 6284$
$\approx 19140$

## S5. Ans.(d)

Sol. $(9321+5406+1001) \div(498+929+660)$
$=15728 \div 2087 \approx 7.5$

## S6. Ans. (e)

Sol. Total population of E in 2004
$1250 \times \frac{(100+30)}{100} \times \frac{(100+20)}{100}=1950$
Total population of A in 2002
$=3750 \times \frac{100}{125} \times \frac{100}{120}=2500$
required ratio $=\frac{1950}{2500}=39: 50$

CAREER POWER AN IIT/IIM ALUMNI CGMPANY

## वेणनटा बैंक

## CANARA BANK PO 2018

 SCALE-I
## 10 FULL LENGTH MOOKS

Bilingual

## S9. Ans. (e)

Sol. Total population of F in $2004=1200 \times \frac{125}{100} \times \frac{135}{100}=2025$
required percentage $=\frac{1200}{2025} \times 100=59.26 \%$

S10. Ans. (d)
Sol. Can't be determined as no information is given about population of D

## S11. Ans.(e)

Sol. The pattern of the number series is $+7^{2},+6^{2},+5^{2},+4^{2},+3^{2}$
? = 138

S12. Ans.(c)
Sol. The pattern of the number series is $\times 1+1, \times 2+2, \times 3+3, \times 4+4, \times 5+5$

$$
?=27
$$

## S13. Ans.(a)

Sol. The pattern of the number series is $\times 0.5+1, \times 1.5+2, \times 2.5+3, \times 3.5+4, \times 4.5+5$

$$
?=84.5
$$

## S14. Ans.(d)

Sol. The number series is $2^{3}, 4^{3}, 6^{3}, 8^{3}, 10^{3}, 12^{3}$
$?=1000$

S15. Ans.(c)
Sol.


## S16. Ans.(a)

Sol. Let in 2000, the strength was 100
$\therefore$ in 2001 strength $=110$
In 2002 strength $=110 \times \frac{90}{100}$
In 2003 strength $=110 \times \frac{90}{100} \times \frac{110}{100}$
$=108.9$
Required \% increment $=8.9 \%$
Hence, strength after 3 years will increase by $8.9 \%$

## S17. Ans.(d)

Sol. Total height $=192 \mathrm{~m}$
Distance climbed in second hour $=\frac{1}{8}$
$=192 \times \frac{(8-5)}{8} \times \frac{1}{8}$
$=192 \times \frac{3}{8} \times \frac{1}{8}=9 \mathrm{~m}$

SBI JUNIOR ASSOCIATES 2018
PRELIMS
With Video Solution
35 TOTAL TEST

- 20 FULL LENGTH MOCKS
- 15 PRACTICE SETS

Bilingual

400000 Units $=40000$
1 unit $=\frac{40000}{400000}=\frac{1}{10}$
Then $480249 \rightarrow 48024.9$
$=48025$ (approx.)

## S19. Ans.(c)

Sol. Total weight of all players initially $=68 \times 10=680 \mathrm{~kg}$
Total weight of players when 1 players left the team $=66.5 \times 9=598.5 \mathrm{~kg}$
Difference in weight $=$ weight of $X=(680-598.5) \mathrm{kg}=81.5$

## S20. Ans.(d)

Sol. Total weight of 11 players $(68 \times 11) \mathrm{kg}=748 \mathrm{~kg}$
Increase in weight $=(748-598.5) \mathrm{kg}=149.5$
From the given information we can easily say that both come from either D and J or from group $G$

## S21. Ans.(d)

Sol. Since the exact weight is not known, we cannot find out the average weight of all the players taken together.

S22. Ans.(d)
Sol. Exact weight of players are not known; hence, option (d) is the answer.

## S23. Ans.(b)

Sol. Let price in 2000 was Rs 100x
$\therefore$ Price in $2006=100 \mathrm{x} \times \frac{110}{100} \times \frac{110}{100} \times \frac{110}{100} \times \frac{90}{100} \times \frac{90}{100} \times \frac{90}{100}$
$=97.0299 x \simeq 97 x$
$\therefore$ Required percentage $=\frac{100 x-97 x}{100 x} \times 100$
$=3 \%$

## S24. Ans.(b)

Sol. Let he sells the remaining part for Rs $x$
$\therefore \frac{1}{3} \times \frac{80}{100} \times 72000+\frac{2}{3} \times \frac{2}{3} \times \frac{125}{100} \times 72000+x$
$=\frac{120}{100} \times 72000$
$\Rightarrow \mathrm{x}=86400-59200$
$\Rightarrow \mathrm{x}=$ Rs 27,200

## S25. Ans.(b)

Sol. Total CP of eggs $=80 \times 2+16$
$=176$ rupees
Total S.P. of remaining eggs $=70 \times 3.20$
$=224$ rupees
$\therefore$ Profit $/$ loss percentage $=\frac{224-176}{176} \times 100$
$=\frac{4800}{176}$
$=27 \frac{3}{11} \%$

## Solution (26-30):

From directions and graph
$(70-50) \%$ of maximum marks $=50$
$\Rightarrow$ Maximum marks of each paper $=\frac{50 \times 100}{20}=250$

S26. Ans.(c)
Sol. Marks obtained by Sameer $=(52+58) \%$ of 250
Marks obtained by Babu $=(65+60) \%$ of 250
$\therefore$ Required difference $=(125-110) \%$ of 250
$=\frac{15 \times 250}{100}=37.5$

S27. Ans.(d)
Sol. Required percentage $=\frac{58-56}{58} \times 100 \approx 3.4 \%$

S28. Ans.(b)
Sol. Total marks $=(56+70+62+50+58+65+60) \%$ of 250
$=\frac{421 \times 250}{100}$
$=1052.5$
$\therefore$ Required percentage $=\frac{1052.5}{1750} \times 100 \approx 60.14 \%$

SBI JUNIOR ASSOCIATES 2018
COMBO
With Video Solution

## 65 TOTAL TEST

- 30 FULL LENGTH MOCKS


## S29. Ans.(e)

Sol. Cutoff marks in Optional $\mathrm{I}=\frac{48}{100} \times 250+5=125$
Marks by Babu in GS II $=\frac{62}{100} \times 250=155$
$\therefore$ Requried percentage $=\frac{30}{155} \times 100 \approx 19.4 \%$

## S30. Ans.(a)

Sol. Required ratio $=\frac{(64+66+52) \% \text { of } 250}{(70+50+65) \% \text { of } 250}=\frac{182}{185}$

S31. Ans.(a)
Sol. Required percentage of water
$=\frac{\frac{12}{100} \times 2+\frac{7}{100} \times 3+0.5}{5.5} \times 100$
$=\frac{95}{5.5}$
$=\frac{190}{11}$
$=17 \frac{3}{11} \%$

## S32. Ans.(d)

Sol. Since acid in first tube $=$ water in second tube $=x$ l(let)
ATQ,
$(x-20)+\frac{2}{3}(x+20)=4\left[(x+20)-\frac{2}{3}(x+20)\right]$
$\Rightarrow 3 \mathrm{x}-60+2 \mathrm{x}+40=4 \times(\mathrm{x}+20)$
$\Rightarrow \mathrm{x}=1001$
$\therefore$ Initial quantity of water $=1001$

## S33. Ans.(c)

Sol. Initial quantity of acid $=2 \times 15=30 \ell$
Let x litre of second solution is added.
$\therefore \frac{30+0.3 x}{200+x}>\frac{20}{100} \quad \& \quad \frac{30+0.3 x}{200+x}<\frac{25}{100}$
$\Rightarrow \frac{30+0.3 x}{200+x}>\frac{1}{5} \quad \& \quad \frac{30+0.3 x}{200+x}<\frac{1}{4}$
$\Rightarrow 200+x<150+1.5 x \quad \& \quad 200+x>120+1.2 x$
$\Rightarrow x>100 \quad \& \quad x<400$
$\Rightarrow 100$ ८ $<x<400 \ell$

## S34. Ans.(d)

Sol. Let Rs. $x$ was lent at the rate of 10 per annum
$=\frac{x+10 \times 4}{100}+\frac{(6000-x) \times 20 \times 4}{100}=3400$
$\Rightarrow 4 \mathrm{x}=14000$
$\Rightarrow \mathrm{x}=$ Rs. 3500

## S35. Ans.(a)

Sol. Let initial amount of milk was x kg
$\therefore \frac{512}{1000}=\mathrm{x}\left(1-\frac{1}{5}\right)^{4}$
$\Rightarrow \frac{512}{1000}=\frac{256 x}{625}$
$\Rightarrow \mathrm{x}=1.25 \mathrm{~kg}$

## Solutions (36-40):

Test launched by Various institutes
Paramount $\rightarrow 28 \times 2500=70,000$
Career launcher $\rightarrow 8 \times 2500=20,000$
Mahindra $\rightarrow 18 \times 2500$
$=45000$
$K D \rightarrow 10 \times 2500=25,000$
Career power $\rightarrow 32 \times 2500=80,000$
The speed $\rightarrow 4 \times 2500=10,000$

## S36. Ans.(b)

Sol. Required no. of test series which remained unsold
$=\frac{35}{100} \times 70000+\frac{15}{100} \times 45000+\frac{20}{100} \times 25000$
$=24500+6750+5000$
$=36,250$

S37. Ans.(c)
Sol. Total no. of test series of career Launcher and the speed which were sold by both sites
$=\frac{75}{100} \times 20000+\frac{85}{100} \times 10000$
$=15000+8500$
$=23500$
No. of test series of Paramount which remained unsold
$=\frac{35}{100} \times 70,000$
$=24,500$
$\therefore$ Required percentage $=\frac{23500}{24500} \times 100$
$\simeq 96 \%$

## S38. Ans.(a)

Sol. Total no. of test series of career power sold by both sites
$=\frac{90}{100} \times 80000$
$=72000$
Total no. of series of all other institutes except career power sold by Flipcart
$=40 \times 700+45 \times 200+50 \times 450+40 \times 250+40 \times 100$
$=28000+9000+22500+10000+4000$
$=73500$
$\therefore$ Required percentage $=\frac{72000}{73500} \times 100 \simeq 98 \%$

## S39. Ans.(b)

Sol. Required ratio $=\frac{10 \times 800}{35 \times 700}$
$=\frac{16}{49}$

## S40. Ans.(e)

Sol. Total test series of Mahindra \& KD sold by Flipcart
$=50 \times 450+40 \times 250$
$=32,500$
No. of test series of career power sold by Amazon
$=50 \times 800$
$=40,000$
$\therefore$ Required percentage
$=\frac{40000-32500}{40000} \times 100$
$=18.75 \%$ less

## S41. Ans.(a)

Sol.
I. $x^{2}+6 x+4 x+24=0$
$x(x+6)+4(x+6)=0$
$(x+4)(x+6)=0$
$x=-4,-6$
II. $4 \mathrm{y}^{2}-8 \mathrm{y}-9 \mathrm{y}+18=0$
$4 y(y-2)-9(y-2)=0$
$(4 y-9)(y-2)=0$
$y=\frac{9}{4}, 2$
$x<y$

## S42. Ans.(b)

Sol.
I. $16 x^{2}+8 x+12 x+6=0$
$8 x(2 x+1)+6(2 x+1)=0$
$(8 x+6)(2 x+1)=0$
$x=\frac{-3}{4}, \frac{-1}{2}$
II. $10 \mathrm{y}^{2}+30 \mathrm{y}+8 \mathrm{y}+24=0$
$10 y(y+3)+8(y+3)=0$
$(10 y+8)(y+3)=0$
$\mathrm{y}=\frac{-4}{5},-3$
$x>y$

## S43. Ans.(a)

Sol.
I. $17 x^{2}+51 x-3 x-9=0$
$17 x(x+3)-3(x+3)=0$
$(17 x-3)(x+3)=0$
$x=\frac{3}{17},-3$
II. $13 y^{2}-13 y-19 y+19=0$
$13 y(y-1)-19(y-1)=0$
$y=1, \frac{19}{13}$
$x<y$


## S44. Ans.(a)

Sol. $4 x+7 y=209 \ldots \ldots$ (i) $x(-2)=-8 x-14 y=-418$
$12 x-14 y=-47$
Subtracting (i) from (ii) and solutions
$x=\frac{371}{20}=18.55, y=19.25$
$x<y$

S45. Ans.(c)
Sol. $x^{2}-729=0$
$(x-27)(x+27)=0$
$x=27,-27$
$\mathrm{y}=\sqrt{729}=27$
$x \leq y$

## S46. Ans.(a)

Sol. Let population of females and children in colony $A$ be $3 x$ and $7 x$ respectively.
$\therefore 10 x=\frac{75}{100} \times 2400$
$\mathrm{x}=180$
No. of females in colony A in year $2017=540 \times \frac{120}{100}$
$=648$
$\therefore$ Required no. of males and children together in colony A in 2017 $=2400-648$
$=1752$

## S47. Ans.(c)

Sol. Total no. of males in colony $C=\frac{50}{100} \times \frac{100}{30} \times 180$
$=300$
No. of males in colony $\mathrm{D}=\frac{1}{3} \times \frac{84}{100} \times 800$
$=224$
$\therefore$ Required difference $=300-224$
$=76$

S48. Ans.(b)
Sol. Total population of males in colony B
$=\frac{40}{100} \times \frac{2}{5} \times \frac{125}{100} \times 2400$
$=480$
And that of children in colony $C=\frac{30}{100} \times \frac{3}{5} \times \frac{125}{100} \times 2400$
$=540$
$\therefore$ Required ratio $=\frac{480}{540}=8: 9$

## S49. Ans.(d)

Sol. Let males in colony $\mathrm{D}=2 \mathrm{x}$
Females in colony A $=5 x$
Let population of children in colony $\mathrm{A}=\mathrm{a} \%$
$\therefore$ No. of children in colony A in $2017=\frac{6 a}{5} \%$
From here we cannot find the required answer

## S50. Ans.(e)

Sol. Let total population of colony $C=5 x$
\& that of colony $E=4 x$
Required Percent $=\frac{0.4 \times 4 x-0.3 \times 5 x}{0.3 \times 5 x} \times 100$
$=\frac{100}{15} \%=6.67 \%$

## Have a Coaching Institute?

Be a Adda247 Partner and take your institute to new heights.
partners.adda247.com


## VIDEO ${ }^{(1)}$ COURSE

Compliment your classroom with Banking Video Courses visit: videocourses.adda247.com

Study on the GO with the Adda247 App


Fulfill your Dream of Government Job visit: careerpower.in

